

**Implementation of a Same-Day Contraception Clinic in Primary Care at William
Beaumont Army Medical Center**

Lakia Stewart and Monique Vance

Daniel K. Inouye Graduate School of Nursing, Uniformed Services University of the Health
Sciences

NURS 5330: Doctor of Nursing Practice Project

Dr. Laura Taylor and CDR Kenneth Barber

April 24, 2023

DISCLAIMER: “The views expressed in this publication are those of the authors and do not reflect the official policy or position of William Beaumont Army Medical Center, Department of the Army, Defense Health Agency, or the US Government.”

We are military Service members. This work was prepared as part of our official duties.

Section 105 in Title 17, United States (U.S.) Code provides that copyright protection under this title is not available for any work of the U.S. Government.

- Section 101 of Title 17, U.S. Code defines U.S. Government work as work prepared by a military Service member or employee of the U.S. Government as part of that person’s official duties.

Distribution Statement

Distribution A: Public Release.

The views presented here are those of the author and are not to be construed as official or reflecting the views of the Uniformed Services University of the Health Sciences, the Department of Defense or the U.S. Government.

Copyright Acknowledgement Statement

"The author(s) hereby certify that the use of any original work by another author or copyrighted material used in the DNP project entitled: **Implementation of a Same-Day Contraception Clinic in Primary Care at William Beaumont Army Medical Center** is either appropriately cited within the manuscript or used with formal written permission of copyright release by the owner of the original work."

VANCE.MONIQUE. Digitally signed by
RENAE.124331039 VANCE.MONIQUE.RENAE.1243
310390
0 Date: 2023.04.26 22:45:23 -0600'

MAJ Monique R. Vance
Daniel K. Inouye Graduate School of Nursing
Uniformed Services University

STEWART.LAKIA.S Digitally signed by
HANTRELL.104658 STEWART.LAKIA.SHANTRELL.1
04658.2680
2680 Date: 2023.04.26 23:27:12 -0600'

CPT Lakia S. Stewart
Daniel K. Inouye Graduate School of Nursing
Uniformed Services University

Table of Contents

Abstract	6
.....	6
Implementation of a Same-Day Contraception Clinic in Primary Care at William Beaumont Army Medical Center	8
Problem Synthesis.....	8
Relevance to Military Nursing.....	10
Clinical Question	11
Search Strategy/Results	11
Solution Synthesis.....	12
Focus Areas.....	13
Business Case Analysis (BCA).....	14
Organizing Framework	16
Project Design.....	16
General Approach.....	16
Setting and Population	17
Procedural Steps (with Timeline)	17
Phase 1: Organization Assessment	17
Phase 2: Meeting Stakeholders	17
Phase 3: Primary Care Provider (PCP) education and vendor training	18
Phase 4: Marketing	18

Phase 5: Clinic Implementation	19
Phase 6: Data Analysis.....	20
Phase 7: Dissemination.....	20
Data Analysis Plan.....	20
Potential Barriers	21
Sustainment and Dissemination Plan.....	22
HIPAA Concerns/Ethical Considerations.....	22
Project Results	23
Analysis of the Results.....	26
Organizational Impact / Implications to Practice & Policy	27
Future Directions for Research and Practice	29
Conclusion	30
References.....	31
Appendix A: PRISMA Diagram	38
Appendix B: Evidence Synthesis Table.....	39
Appendix C: Data Analysis Table	40
Appendix D: Business Case Analysis (BCA) Worksheet.....	41
Appendix E: The Iowa Model (Revised).....	47
Appendix F: Procedural Steps with Timeline.....	48
Appendix G: Team Mentor (Committee Membership) Agreement Form.....	49

Appendix H: DNP Student CITI Certificates 51

Appendix I: USU (VPR) Form 3202N 52

Appendix J: WBAMC e-IRB Letter of Determination..... 53

Appendix K: PAO Clearance Memo 55

Appendix L: DNP Project Completion Verification Form (Signed) 57

Abstract

Background: The annual unintended pregnancy rate for all Active-Duty Servicewomen (ADSW) is 1.5% higher than the U.S. civilian population (6% vs 4.5%). Unintended pregnancies (UIP) in ADSW have far-reaching consequences in both garrison and deployed settings, negatively impacting operational readiness and force deployability. Evidence shows that same-day access to contraception services reduces unintended pregnancies. In 2022, only 28 of the 721 Military Treatment Facilities (MTFs) in the Military Health System (MHS) offered Walk-in Contraception Services (WiCS) clinics.

Purpose: Improve timely access to effective contraception and provide family planning counseling to reduce the risk of UIPs.

Project Design: Quadruple AIM and the Iowa Model were the foundation for the literature review, stakeholder engagement, and project implementation planning for this evidence-based quality improvement (QI) project. Retrospective and prospective data mining with analysis, using a multi-sampling method, was conducted from November 2022 through March 2023 to assess the impact of a primary care WiCS clinic's implementation centrally located on the Fort Bliss, Texas footprint.

Analysis of Results: For four hours weekly, the WiCS clinic served 127 patients for the months of January through March. A total of 77 contraception counseling, 33 Nexplanon and 39 intrauterine devices (IUD) procedures, and 50 short-acting reversible contraception (SARC) encounters were completed. Due to unanticipated data-retrieval system lags for February and March, the comparative analysis was limited to January 2023 and corresponding months (January 2020 through 2022). While there was a significant decrease in contraception encounters overall for the Department of Primary Care (DPC), SARC usage decreased while LARCs

doubled from January 2022 to January 2023. Access to contraception preferences and improved access to care are the inferred causes for the increase in LARCs (the most effective contraception).

Implications for Practice: Implementation of this project's same-day access WiCS clinic improves contraception options in primary care, facilitates provider training to perform (LARC) procedures independently, and promotes career autonomy for ADSW and female beneficiaries at Fort Bliss, TX. WiCS clinics positively impact Soldier availability for training, improving operational readiness and force deployability in the United States Armed Forces.

Keywords: LARC, UIP, Unplanned Pregnancy, Unintended pregnancy, Contraception Clinic, Same-day Access

Implementation of a Same-Day Contraception Clinic in Primary Care at William Beaumont Army Medical Center

Unintended pregnancies (UIPs) are defined as mistimed or unwanted pregnancy (Heitmann et al, 2016). Unintended pregnancy is significantly higher (72 per 1000 pregnancies vs 52 per 1000 pregnancies) in the U.S. military (Grindlay & Grossman, 2015; Seymour, 2019). Meadows (2022) found the Active-Duty Servicewomen (ADSW) UIP rate to be 1.5% higher than the U.S. civilian population (6% vs 4.5%).

Specifically, to the military, consequences of UIPs include missed workdays, missed essential training, reduction in deployable personnel, and increased financial costs. On the individual level, active-duty Servicewomen (ADSW) are faced with the immediate reprioritization of their personal and professional goals due to an unintended pregnancy. UIPs can have a major impact on operational preparedness given that 17% of the U.S. military's active-duty personnel are women (Barroso, 2019). Evidence shows that same-day access to contraception services reduces risk of UIP that can occur while completing referrals and additional appointments for long-acting reversible contraception (LARC) placement in specialty care clinics. To reduce the risk of UIPs for the Fort Bliss female beneficiary population, a primary care same-day access walk-in contraceptive clinic was established at a William Beaumont Army Medical Center (WBAMC) outlying clinic on Fort Bliss, Texas.

Problem Synthesis

The well-being of Servicemembers (SMs) directly influences unit readiness thus impacting the total force readiness of the U.S. military (Kamarck, 2016). The average cost of prenatal care, labor, and delivery for uncomplicated pregnancy via vaginal delivery is \$31,093 (Heitmann et al., 2014). The costs of UIPs on military readiness are also high. Female SMs

experience activity and training limitations throughout the pregnancy. Female SMs are allotted six weeks of maternity convalescent leave if they are the birth parent and an additional 12 weeks (3 months) for parental caregiver leave. They are also non-deployable for one year after delivery (Secretary of the Army, 2022). Servicemembers married to a birth parent are also entitled to up to 12 weeks of parental caregiver leave per the FY2022 National Defense Authorization Act (NDAA) (Kamarck & Donovan, 2021).

Unintended pregnancy is a significant life event that could trigger psychological and financial distress, leading to poor coping and suicidal ideation. The recent Dobbs decision negatively impacted female SMs' access to abortion services that are not covered under department policy. Abortion services may not be available based on laws in effect in the state where the Servicemember is stationed. As a result, "Servicemembers are now having to navigate additional challenges to access essential women's health care services" (Lopez, 2022). The decision to terminate the pregnancy can incur costs to the Servicemember and increase the risk of adverse health outcomes, as elective abortions are not provided within the military health system (MHS) (10 U.S. Code § 1093, 1984/2013; TriCare, 2020).

The access to care barriers that facilitate the high rate of UIPs combined with an increasing female population in the U.S. military are serious public health issues that have continued to challenge women's health, the MHS, and military operational readiness (Defense Health Board, 2020). The effectiveness of short-acting reversible contraception (SARC), such as contraceptive barriers and oral contraceptive pills, depends on compliance. The military lifestyle may present challenges to the use of short-acting reversible contraception (SARCs) if the patient does not have a disciplined regimen (Crabb, 2015).

Thirty-five to fifty-three percent of unintended pregnancies are the result of failed contraception (Erickson et al., 2017). Only thirty-eight percent of primary care providers (PCPs) self-reported providing family planning services “always or most of the time” compared to 89% of women’s health providers (WHPs) (Deans et al., 2018). Despite the known inconsistent/improper use of contraception alongside contraception failure, PCPs remain reluctant to offer long-acting reversible contraception (LARC) as an option during contraception counseling due to discomfort with performing the procedure for these methods of contraception (Carty et al., 2019; Deans et al., 2018; Erickson et al., 2017).

The Walk-in Contraception Services (WiCS) Clinic stood up in the Department of Women's Health (DoWH) at WBAMC in May 2022 and primarily served the postpartum population (M. Martinez (personal communication June 6, 2022)). Additionally, a formal marketing campaign was not conducted for the presence of the DoWH WiCS at WBAMC when they launched. The demand and volume of patients at the DoWH WiCS, even with limited marketing, supported the implementation of an additional WiCS clinic in primary care at Fort Bliss.

Relevance to Military Nursing

Limited LARC placements by PCPs has inadvertently created an access-to-care barrier in the MHS with multifactorial consequences. Active-duty Servicewomen cannot access the full extent of primary care services required for health promotion. A WiCS clinic promotes the autonomy of ADSW career progression, as these clinics have been shown to increase the utilization of LARCs and decrease the risk of UIPs. Implementation of a same-day WiCS clinic in primary care optimizes military operational and personnel medical readiness by reducing the missed training hours required for multiple specialty referral appointments and the risk of UIPs

for ADSW. The MHS healthcare model is currently undermined by inefficient processes and underutilization of PCP scope. With this proposal, PCPs will serve as a force multiplier by working at the top of their license, thereby eliminating the contraception burden in women's health specialty clinics.

Clinical Question

In female beneficiaries at Fort Bliss, how does the implementation of a Walk-in Contraception Services (WiCS) clinic in Primary Care compared to treatment as usual in the Department of Primary Care at WBAMC impact timely access to effective contraception, the rate of contraceptive counseling, LARC procedures (IUD/Nexplanon), and SARC prescribing?

Search Strategy/Results

The PICOT question that guided the literature search follows: In U.S. Servicewomen seeking long-term contraception, how does implementation of primary care LARC Clinic, compared to treatment as usual in Primary Care clinic, affect the number of completed LARCs placed in primary care?

Each search was initiated in the comprehensive Power Search interface of the Uniformed Services University of the Health Sciences (USUHS) remote Learning Resource Center (LRC). Power Search searches 18 different databases, which include the Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed, PsycINFO, JAMA Evidence, and LRC's print holdings. All searches were narrowed to full text online, available via interlibrary loan, scholarly/peer-reviewed, and journal articles.

The search for the problem began with the terms "unintended unplanned pregnancy AND contraception". This yielded 2,113 results. When the common filter "U.S. Servicewomen" was applied, 23 studies remained. U.S. Servicewomen as a filter significantly limited our literature

search and was removed. Initial results were limited to five years, which produced 16 articles. The date range was adjusted to ten years, producing 31 articles. After review, 14 were eliminated. Ten exclusions were made due to non-applicable populations (beneficiaries, adolescents, and foreign military). Four were non-scientific or had poor levels and quality of evidence. Seventeen articles remained for this search. See Appendix A for the PRISMA Diagram.

The Power Search for LARC Clinic used the following key terms: Walk-in Contraception; LARC placement in primary care; same-day LARC; and Non-Delayed Contraception. The exclusion criteria eliminated foreign studies, studies greater than ten years old, and abortion-focused articles. This yielded eight articles including veterans and adolescent populations due to poor yield. Adding “military” to the search reduced the number to one published peer-reviewed article.

The Johns Hopkins Nursing Evidence-based Practice (JHNEBP) Rating scale was used to rate the solution-based articles and critique select articles. This rating scale is based on the strength of evidence (Level I-V). Appendix B lists the Evidence Synthesis Table. Appendix C shows the data analysis of the highest-rated articles.

Solution Synthesis

The no-cost medical benefit of contraceptives has not prevented the disproportionately high UIP rate among U.S. Servicewomen. The remainder of the paper will cover applicable strategies available to address this public health and readiness concern at military treatment facilities (MTFs).

The effectiveness of contraception depends on the technique chosen, how it is used consistently, and how accurately (Curtis, 2016; Erickson et al., 2017). Low failure rates of long-

acting reversible contraception are recognized as being influenced by user accuracy and consistency factors (Christy, 2019). LARCs are consistently the least prescribed contraceptive method inside the MHS, despite an increase in usage among female SMs in recent years, from 21.9% to 23.9% from 2016 through 2019 (Lottridge et al., 2021; Stahlman et al., 2017).

Of the 721 MTFs in the DoD, only 4.1% (~ 32) of same-day, WiCS clinics exist within the MHS (MilSuite, 2022). Operation Process Improvement for Non-delayed Contraception (PINC) was the first military walk-in contraception clinic. Operation PINC significantly improved the Navy Service Women's risk for UIP, with LARC initiation increasing from 12% to 39% (Adams, 2017). Cost savings for the Navy are estimated at a potential \$15 million a year and recoupment of 2.7 million lost person-hours by preventing unintended pregnancy (Adams, 2017). Operation PINC demonstrated that both the volume of clinic visits and prescribed contraceptives steadily increased to as high as 400 active-duty SMs per month (Adams, 2017; Adirim, 2019).

This solution improves accessibility and eliminates the lag time that contributes to these high UIP rates (Bergin et al., 2012; Serpico, 2020). Limitations of this solution included personnel required to staff the clinic, the unpredictability of patient flow, and the policy needed to guide practice. Additional limitations of this proposed solution include the quantity of credentialed providers proficient in LARC placement to provide full-spectrum contraceptive options and leadership support for implementation for practice.

Focus Areas

The focus areas identified for successful clinic implementation were centered on the low utilization of LARCs and the high UIP rate in the military. LARC-credentialed providers were the (primary) means to achieve the end state of improved deployment readiness through reduced

risk for UIPs. Increasing the volume of PCPs credentialed to place LARCs was critical to the success of implementing a WiCS clinic in primary care. LARC manufacturer vendors performed initial/refreshers provider training to fulfill the initial step in the credentialing requirements. Once training was complete, the MTF's Centralized Credentials Quality Assurance System (CCQAS) was updated to request IUD or Nexplanon insertion/removal with supervision. Once the five proctored insertions/removals were completed, the PCP's CCQAS was again updated to reflect provider fully competent LARC capabilities in the primary care clinic.

Military readiness is the second focus area. At their first duty station, ADSW experienced 57% greater limited duty days than active-duty (AD) males (Tanielian & Farmer, 2019). Access to contraception care translates to fewer UIPs and improved symptom management for menstrual dysregulation and anemia (Lethaby et al., 2019). Fewer UIPs and fewer limited duty days for ADSW improves personnel availability for unit training, positively impacting deployment readiness. A primary care WiCS clinic will reduce access-to-contraception care barriers at Fort Bliss, Texas.

Business Case Analysis (BCA)

The implementation of a same-day walk-in contraception clinic increases available personnel for military unit training by providing ADSW with convenient access to contraception options and adequate menstrual suppression when in field and deployed settings. The better health effort under the MHS Quadruple AIM performance goals is aligned with increased military readiness by reducing missed workdays due to UIP, menstruation complaints, and hospitalization (See Appendix D for BCA Worksheet). Long-acting reversible contraception placement, if selected by the female, treats gynecologic disorders such as dysmenorrhea and anemia in women with menorrhagia that result in treatment costs and lost workdays. Blood

transfusions indicated for the treatment of anemia range from \$230-\$3,510 (Whitlock, 2020). Alternatively, the cost for iron infusions for anemia are \$243-\$1,057 per 1000mg (about the weight of a small paper clip) transfusion (Hambley et al., 2020). Better access to care is provided as PCPs become LARC credentialed to reduce the number of appointments required for ADSW.

Overall, the costs for LARC placement (\$800-\$2k per person) are significantly less than vaginal birth (\$31K) or C-section (\$51K). There are no added costs for staff and clinic, as the same-day WiCS clinic will be conducted during normal business hours. The potential annual cost savings amounts to \$3,387,107 to \$47,352,295 (Heitmann et al., 2014). Improved women's health, deployment readiness, and annual cost savings are tangible wins for the MHS that must be implemented immediately.

Figure 1

Business Case Analysis (Quad Table)

<p>Quadrant 1: Define the opportunity</p> <ul style="list-style-type: none"> • The Defense Health Board (DHB) (2020) reported UIPs of AD females are 50% higher in comparison to the civilian sector. • Unintended pregnancy causes missed workdays and at least 12 weeks of maternity leave. • A same-day, walk-in contraception clinic in primary care will improve military readiness by decreasing UIP rates of AD females. 	<p>Quadrant 2: Define the business opportunity</p> <ul style="list-style-type: none"> • Increase available personnel for military unit training. <ul style="list-style-type: none"> - Reduction in Chapter 8 Discharges - Reduction in Paternity and Maternity Leave for UIP • Provide AD females with convenient access to contraception options, while improving medical readiness to SM unit. • Provide adequate menstrual suppression in a deployed setting if needed.
<p>Quadrant 3: Define the measured impact of your solution</p> <p>Success Metrics:</p> <ul style="list-style-type: none"> • Reduction # of appointments required for contraception, including LARC placement • 2-week reduction in average wait times for contraception procedures (ie. LARC placements, removals, replacements) • 50% increased volume of same day LARC placements in primary care • Increased volume of family planning counseling documentation (coding) in primary care • 90% reduction of specialty referrals "lost to network" for contraception procedures 	<p>Quadrant 4: Define the overall impact of your solution</p> <ul style="list-style-type: none"> • Increased Readiness: Reduction in missed workdays associated with UIP, menstrual complaints, and hospitalization. • Better Care: Reduced risk of UIP while completing referrals and additional appointments for LARC placement in specialty care clinics. • Better Health: LARC placement also addresses menstrual complaints of dysmenorrhea and anemia in women with menorrhagia. • Lower Cost: Total cost for LARC placement: \$800-\$2k per person; Significantly less than \$31K for vaginal birth or \$51k for C-section • ANNUAL COST SAVINGS = \$3,387,107 to \$47,352,295 (Heitmann et al., 2014)

Organizing Framework

The framework selected for this project is the Iowa Model Revised: Evidenced-Based Practice to Promote Excellence in Healthcare. The Iowa Model guides clinicians and nurses in making clinical decisions and piloting changes that affect healthcare outcomes (Melnik & Fineout-Overholt, 2019). This project was guided by the steps of the Iowa Model, which included identifying triggering issues, research recommendations, and whether a practice change is indicated at each phase of clinic implementation. A key component of this suggested strategy is implementing significant organizational change. The Iowa framework was chosen to provide exceptional and sustainable clinical care through the development of this same-day WiCS clinic (Appendix E).

The second framework utilized was the Quadruple Aim. The Quadruple Aim strategy is used to improve care, encourage improved health, increase readiness, and lower total costs (Defense Health Agency [DHA], 2019). The Quadruple Aim was chosen as the second framework to help improve the health of reproductive female beneficiaries at Fort Bliss while reducing the costs associated with referrals for contraception care.

Project Design

General Approach

The time cost incurred by ADSW to access specialists for placement contributes to the U.S. Army having the lowest LARC utilization of all the military branches (Stahlman et al., 2017). The implementation of the same-day WiCS clinic is a problem-focused, quality improvement process. Quality improvement is defined as a “formal ongoing process by which the organization and stakeholders utilize objective measures to monitor and evaluate the quality of services, both clinically and operationally” (Health Resources Safety Administration [HRSA],

2011). Deployment and military readiness, PCP utilization, organizational savings, and patient access to comprehensive contraception are enhanced with the implementation of a WiCS clinic.

Setting and Population

Implementation of this project took place at Fort Bliss, Texas from January to March 2023. Fort Bliss is a vast post, spanning 1.12 million acres, and home to over 31,240 active-duty U.S. Army Soldiers (TriCare, n.d.). Fort Bliss has a 16.7% ADSW population (S. Boyd, personal communication March 15, 2023). The WiCS clinic was implemented in the Hugo V. Mendoza Soldier Family Care Center Clinic (SFCC). The Hugo V. Mendoza SFCC is one of WBAMC's patient-centered medical home (PCMH) primary care clinics. The population of interest for this project was reproductive-aged Fort Bliss female beneficiaries (both ADSW and civilian beneficiaries).

Procedural Steps (with Timeline)

Seven phases were developed to implement the same-day WiCS clinic: 1) organization assessment; 2) meeting stakeholders; 3) PCP education and vendor training; 4) marketing; 5) clinic implementation; 6) data analysis and; 7) dissemination. Appendix F depicts the procedural steps with timeline of this project.

Phase 1: Organization Assessment

Procedures and processes used in clinical practice at Fort Bliss Primary Care Clinic were compiled no later than April to June 2022. The assessment included gathering the volume of referrals to OB/GYN for LARC placement, the number of current LARC credentialed PCPs, and stakeholders' concerns regarding LARC clinic implementation. The expected level of benefit for Phase 1 was the familiarization of processes in place and population needs.

Phase 2: Meeting Stakeholders

Multiple meetings with the identified stakeholders of LARC Clinic (Phase 2) began in May 2022 and continued through September 2022. The fact-finding data from Phase 1 was shared with the stakeholders. The expected level of benefit was to address stakeholders' concerns and barriers to implementation while procuring buy-in. Another subset of stakeholder meetings was initiated with the Department of Primary Care (DPC) managers, providers, nurse staff roles and clinical operations and data analytic teams that would participate and/or facilitate the WiCs process flow. This subset of stakeholders assisted in inclusively reviewing the operating policy drafts.

Phase 3: Primary Care Provider (PCP) education and vendor training

To increase access to care for LARC procedure encounters, Phase 3 (education and training) aimed to increase provider training. Phase 3 involved approval and coordination of the provider and vendor availability and leadership approval for multiple iterations of training from September through December 2022. During this phase, a contraception brief for providers (NPs, PAs, and MDs) was developed. Starting in October 2022, this brief was conducted prior to each training session. The training sessions were as follows:

- 8 September 2022- First vendor training session- IUD (hormonal) conducted;
- 13 October 2022- Second vendor training session- IUD (hormonal) and Nexplanon conducted;
- 10 November 2022- Third vendor training session- IUD (hormonal) and Nexplanon conducted;
- 8 December 2022- Fourth vendor training session- Nexplanon conducted.

Phase 4: Marketing

Phase 4 (marketing) was initiated concurrently with Phase 5, clinic implementation (See Appendix D). Marketing via Public Affairs Office (PAO)-approved campaign materials was the primary method to inform potential participants of the contraception services, clinic location sites and days available. The PAO- approved campaign included flyers with embedded QR codes, social media (Fort Bliss and William Beaumont Army Medical Center Facebook, Instagram), the Digital Garrison app, and the MHS Genesis Patient Portal Outreach /Secure Messaging website.

To supplement the primary marketing methods, the Doctor of Nursing Practice (DNP) student team toured Fort Bliss' brigade and battalion units to engage with Division Holistic Health and Fitness System (H2F) to inform SMs directly of the same-day WiCS clinic. All SMs (male and female) were included in the information tours. This method served to simultaneously inform leadership teams of available options to share with their Soldiers, allowed SMs to inform civilian female beneficiaries of the newly available service, and informed female beneficiaries directly. Phase 4 could not be initiated until electronic institutional review board (e-IRB) approval was received from the Department of Clinical Inquiry (November 2022) and PAO approval (January 2023).

Phase 5: Clinic Implementation

Phase 5 (implementation) began January 4, 2023, marking the start of primary care WiCS clinic. The staff for the first month was one provider, two registered nurses, one LVN, two medics and one MSA. The clinic was open for four hours every Wednesday afternoon. Rolling data on quantity and type of SARCs, LARCs and corresponding procedure, and volume of family planning counseling was collected manually. Team huddles were performed at the end of each WiCS clinic day to assess the need for adjustments in patient flow and charting during this

phase. The expected level of benefit of this phase was to optimize process flow and clinic capacity to see more patients.

Phase 6: Data Analysis

Phase 6 (data analysis) was performed January through March 2023. Compilation of retrospective and current data was completed and synthesized in preparation for the final dissemination phase. The data analysis consisted of DPC trends for the corresponding months of January 2020-2022 versus January 2023 when the WiCS clinic was implemented. Comparative data for the months of February and March could not be obtained due to the two-month data retrieval system lag.

Phase 7: Dissemination

Phase 7 (dissemination and publication) occurred through multiple platforms:

- April 2023- fireside poster presentation at the 2023 TriService Nursing Research Program (TSNRP) Research and EBP Dissemination course (national conference)
- April 2023- USUHS EBP DNP Defense Validation (virtual presentation);
- April 2023- WBAMC stakeholders' presentation (PowerPoint presentation).
- May 2023- WBAMC Research Day (podium presentation) and USUHS Research Days Celebrating Excellence in Research (poster presentation); and
- Fall 2023 (projected)- Manuscript submission to peer-reviewed journals.

Data Analysis Plan

The independent variable (IV) of this project is the same-day WiCS clinic implemented in primary care. The possible ranges of values are zero and one, using a nominal level of measurement. Zero equals LARCs placed prior to the same-day clinic variable. One equals LARCs placed after the same-day clinic is implemented.

There are three dependent variables (DV) to measure the outcomes of the clinic's implementation. The volume of LARCs placed in the primary care setting, the wait time for LARC placements (in days or number of appointments), and the number of family planning counseling encounters in primary care cumulatively served to measure the impact, if any, of comprehensive access to contraception in the primary care setting. Medical records were audited retrospectively using medical billing code filters. Each dependent variable was measured comparatively to practice as usual in primary care. See the data analysis table in Appendix C. The decision rules/success metrics for the DV are as follows: 1) increase in same-day LARC placement in primary care; 2) reduction in the number of appointments required for LARC placement; 3) increase in the volume of family planning counseling in primary care.

Potential Barriers

The launch of a new Electronic Health Record (EHR) system was the first barrier identified. The EHR changed from Armed Forces Health Longitudinal Technology Application (AHLTA) to MHS Genesis in June 2022 which impacted patient care volume, provider workload, and the ability to access prior data. This change coincided with the DNP student team's arrival at Phase II site. This was an integral part of the project development to gauge the baseline procedures and processes as they pertained to contraception encounters, with an emphasis on LARC placements.

Provider training was another barrier identified. Upon arrival, Fort Bliss was noted to have a limited number of LARC-credentialed providers. Communication with LARC manufacturer vendors was initiated to address the need for revolving training. LARC vendors for both Bayer IUD and Organon Nexplanon stated that their staff can provide future initial and

refresher training. To evaluate the providers for the five insertions and removals required for credentialing, proctors were offered during the DoWH and primary care WiCS clinics.

Limited program awareness to the targeted population was the third barrier. To address this barrier, site visits to military units, Soldier Resilience and Readiness Center (SRRC), and other high-traffic areas for active-duty Soldiers were performed to advertise the walk-in clinic days. A PAO campaign was initiated, and flyers were distributed. The PAO campaign started later than expected, only one day prior to the WiCS clinic launch in January 2023.

Sustainment and Dissemination Plan

The dissemination of project findings will occur through meetings and presentations with leadership and critical stakeholders. Final briefing materials will be made available to WBAMC clinical leadership so that leaders can determine how best to preserve practices or decide whether this project be sustained. Dissemination to the external community and colleagues occurred through poster presentation at TriService Nursing Research (TSNRP) and USUHS Research Day 2023 in addition to a podium presentation at WBAMC Research Day. The DNP student team plans to submit project findings for publication in a peer-reviewed journal.

Sustainment recommendations to continue with WiCS clinic in primary care were based on the volume of contraception encounters achieved despite a second same-day contraception clinic in the WBAMC footprint. WBAMC is a vast post with a large population. The goal is to have numerous WiCS clinics, in convenient locations to Fort Bliss female beneficiaries, to support this large population.

HIPAA Concerns/Ethical Considerations

There are minimal HIPAA concerns, as no personal identifiable information (PII) was collected. Data mining included the number of visits, number of contraception counseling

completed, type of contraception (IUD vs implants vs SARC), and referrals to specialty clinics for LARC placement.

The data collected was stored on a digital device that is common access card enabled. In the event of a system failure, data was to be retrieved from SF600 medical documents. Positive control was maintained through established access safeguards. The project developers, the Phase II site director, and the DPC Chief Nurse were the only personnel to have access to this information.

Project Results

A total of 127 patients were seen in the primary care WiCS clinic from January-March 2023. Figure 2 depicts the trends of contraception encounters in recent years to present. Due to the inability to extrapolate the data for a more accurate comparison, it was important to show how WBAMC has been doing regarding contraception care.

Figure 2

January Fiscal Year Comparisons of DPC Contraception Encounters

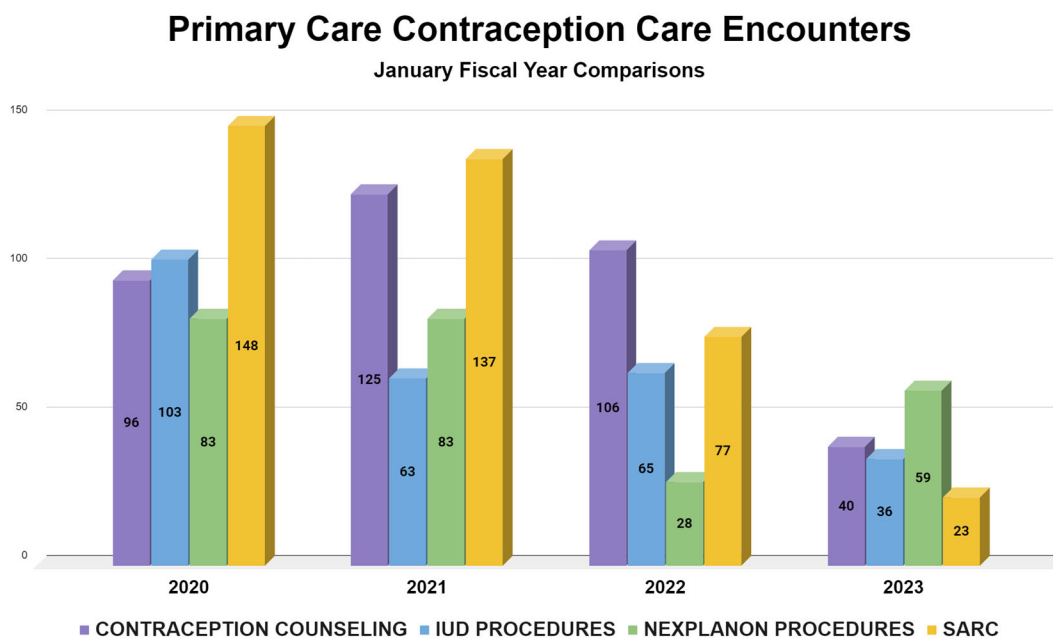


Figure 3 This graph is a breakdown comparison of DPC contraception encounters vs WiCS primary care encounters. The data retrieval system, M2, that is utilized by the MTF does not recognize the MEPRS code for the primary care WiCS clinic. When data was pulled the total included the WiCS clinic contraception encounters as well.

Figure 3

January 2023 DPC vs WiCS Contraception Encounters

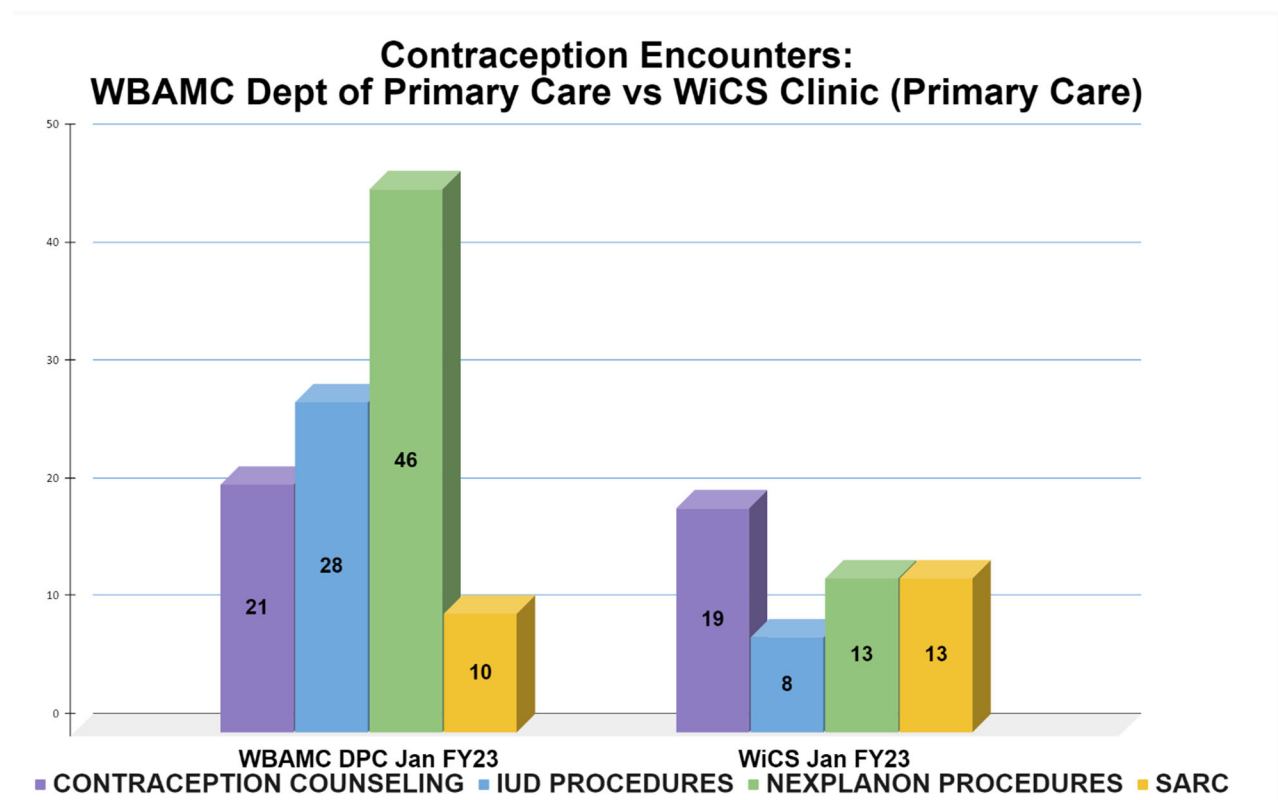


Figure 4 depicts the percentage of WiCS clinic contributions in the overall number of encounters for the month of January. The purple, as described on the graph, shows the DPC's total number of contraception encounters for each category. The blue is the total number of encounters for each category for the WiCS clinic.

Figure 4

January 2023 WiCS Clinic Contribution to DPC Contraception Encounters

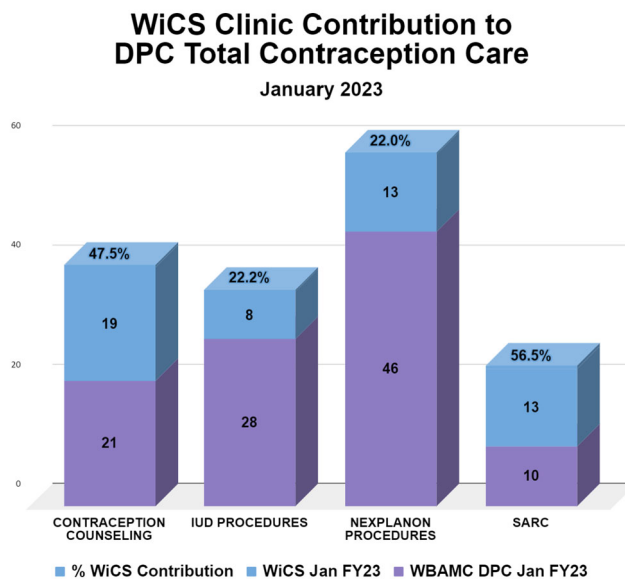
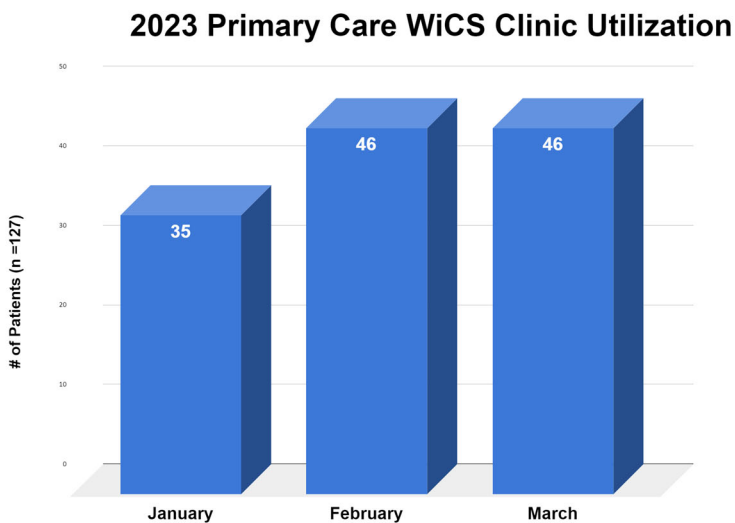


Figure 5 shows the monthly distribution of patients seen January- March 2023 retrieved and manually counted due to the system data retrieval lag for the months February and March 2023.

Figure 5

January-March 2023 DPC WiCS Clinic Utilization



Analysis of the Results

The data for the months of February and March could not be analyzed by the DNP student team. The January launch of the WiCS Clinic compared to the prior year's DPC contraception encounters trends, from the corresponding months of January 2020, 2021, and 2022, were determined to be the only data the team could analyze after numerous meetings with the statistician (J. Bader, personal communication, April 14, 2023). Due to the electronic health record system transition in June 2022, the Military Health System Management (M2) was experiencing a two-month data lag. The system M2, which had previously proven a reliable system to extrapolate data when AHLTA was being used, was no longer reliable once MHS Genesis was implemented. During the data analysis for the corresponding months, it was noted that despite the decrease in contraception encounters overall for the DPC, SARC usage decreased while LARCs doubled from January 2022 to January 2023. Access to contraception preferences and improved access to care can only be inferred as the causes for the increase in LARCs (the most effective contraception).

Process and Policy Gaps

The primary care WiCS clinic operating policy included billing and coding sheets in the appendices. However, the in-person WiCS clinic staff training and provider contraception brief, performed by the DNP student team, did not incorporate billing and coding sheets into their presentation. This gap was remedied by providing the billing and coding sheets on site for each provider, in a nurse charting station, and discussed during on site WiCS orientation.

There were also flow-impeding clinic processes observed during the initial implementation. There were a limited number of fully competent LARC-credentialed PCPs. The one fully LARC-credentialed PCP performed and supervised LARC procedures for PCPs

needing the repetitions to obtain the status of “fully competent” in CCQAS. That one provider was a DPC leader (Chief Nurse), dually fulfilling the clinical role in WiCS.

There was also limited ancillary staffing to accommodate the volume of patients seen. The intake forms and screening of walk-in requests were modified to streamline the patient intake. In the following months, an additional LARC-credentialed provider was added to support the WiCS clinic and medics (trained by the Licensed Vocational Nurse [LVN]) fulfilled the ancillary roles.

The DHA identified the WiCS clinic as a “Clinical Best Practice” (DHB, 2020). In January 2023, the DHA mandated that a WiCS clinic be at every MTF in the MHS, in accordance with DHA-Administrative Instruction 6025.09 (DHA, 2022). However, the service line in the MTF where WiCS clinic is implemented was left to leaders to decide.

Organizational Impact / Implications to Practice & Policy

In three months with a four-hour weekly clinic, 127 patients were seen at Fort Bliss’ DPC WiCS clinic. The quantity of patients seen is noteworthy considering there was an established WiCS clinic located in WBAMC at the DoWH. Despite the training, process flow gaps experienced, and delayed patient wait times, DPC’s WiCS clinic performed 42 LARC insertions (most effective contraception), 27 LARC removals, and 3 IUD surveillance alongside the 77 counseling encounters (see Figure 6 and Figure 7). Utilization of the DPC WiCS Clinic resulted in same-day no-appointment completion of 69 LARC procedures and three IUD surveillance encounters.

Figure 6

Jan-Mar 2023 WBAMC DPC WiCS Clinic LARC-related Procedures

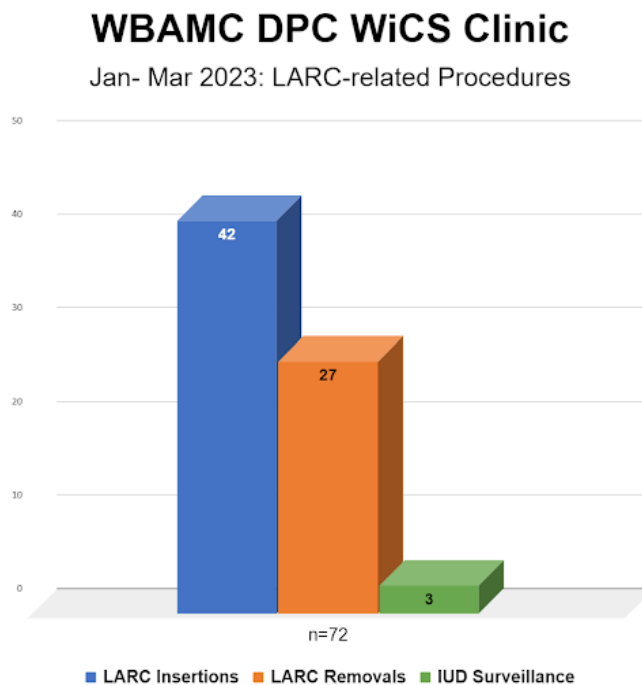
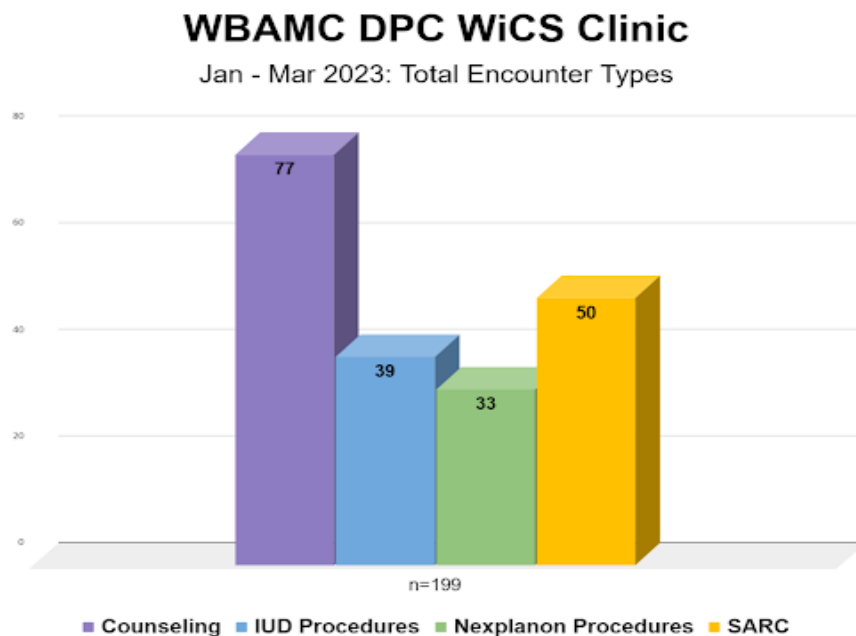


Figure 7

WBAMC DPC WiCS Total Contraception Encounters by Type



With the convenient proximity of DPC's WiCS clinic in the Fort Bliss footprint of the Hugo V. Mendoza SFCC, implementation of this project improved same-day access to contraception with counseling in primary care, facilitated provider training of 46 PCPs to perform LARC procedures independently, and promoted career autonomy for ADSW and female beneficiaries at Fort Bliss, TX. The DPC WiCS clinic positively impacts Soldier availability for training, improving operational readiness, and force deployability in the United States Armed Forces. Increasing utilization over the months (Figure 5) strongly suggests the need to sustain the DPC WiCS Clinic with consideration for future expansion to the additional Fort Bliss primary care clinics.

Future Directions for Research and Practice

The primary direction of this project is sustainability and expansion. Sustainment of Fort Bliss primary care WiCS should consider the following actions:

- Incorporate LARC vendor training into Phase I of military PCP education platforms;
- Coordinate biannual vendor training to ensure fully competent LARC credentialed providers remain in the Fort Bliss MHS footprint;
- Streamline the credentialing process for initial and continuation of privileges to perform LARC-specific procedures, ensuring standardization of WBAMC PCP orientation;
- Implement a pathway within primary care for uncredentialed LARC PCPs to promptly route patients interested in LARC procedures;
- Increase dissemination and publications on MHS primary care WiCS clinics' outcomes to add to the available body of literature;
- Expand research to compare patient preferences, outcomes, and benefits of WiCS clinic implementation in primary care vs OB/GYN setting; and

- Advocate for policies that expand minors' rights to receive contraception and contraception counseling without state-mandated parental consent requirements.

Conclusion

The access and time-cost barriers experienced by ADSW in primary care must be eliminated. A same-day walk-in contraception clinic will help to accomplish the DHA's medical mission of having a healthy and fit fighting force, medically prepared to accomplish deployment missions and military operations (Congressional Research Service, 2020). Expansion and sustainment of access to full spectrum primary care WiCS clinics is needed within the MHS to eliminate barriers to family planning and ensure timely access to the preferred contraception for ADSW.

References

- Adams, K. L. (2017). Operation PINC: Process improvement for non-delayed contraception. *Military Medicine*, 182(11), e1864–e1868. <https://doi.org/10.7205/MILMED-D-17-00083>
- Adirim, T. (2020). *Access to contraception within the MHS* [Presentation]. Office of the Assistant Secretary of Defense (Health Affairs)/Health Services Policy & Oversight. <https://dacowits.defense.gov/Portals/48/Documents/General%20Documents/RFI%20Docs/March2018/RFI%206%20Attachment%20D%20-%20Contraception%20Briefing.pdf?ver=2018-03-16-164750-930>
- Aker, J. A. (2022, January 18). *Long-acting contraceptives are a popular choice with service members*. Military Health System. <https://www.health.mil/News/Articles/2022/01/18/Long-Acting-Contraceptives-are-a-Popular-Choice-with-Service-Members#:~:text=The%20first%20walk%20in%20clinic,Cmdr>
- Barroso, A. (2019, September 10). *The changing profile of the U.S. military: Smaller in size, more diverse, more women in leadership*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2019/09/10/the-changing-profile-of-the-u-s-military/>
- Bergin, A., Tristan, S., Terplan, M., Gilliam, M. L., & Whitaker, A. K. (2012). A missed opportunity for care: Two-visit IUD insertion protocols inhibit placement. *Contraception*, 86(6), 694–697. <https://doi.org/10.1016/j.contraception.2012.05.011>
- Callegari, L. S., Tartaglione, E. V., Magnusson, S. L., Nelson, K. M., Arteburn, D. E., Szarka, J., Zephyrin, L., & Borrero, S. (2019). Understanding women veterans' family planning

- counseling experiences and preferences to inform patient-centered care. *Women's Health Issues*, 29(3), 283–289. <https://doi.org/10.1016/j.whi.2019.03.002>
- Carty, J. R., Batig, T. S., Heitmann, R. J., Hammons, C. B., & Batig, A. L. (2018). Women's health and contraceptive practices of army physician assistants. *Military Medicine*, 184(3-4), e169–e174. <https://doi.org/10.1093/milmed/usy191>
- Centers for Disease Control and Prevention. (2023, March 27). *Unintended pregnancy*. U.S. Department of Health & Human Services. <https://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/index.htm>
- Chiles, D. P., Roberts, T. A., & Klein, D. A. (2016). Initiation and continuation of long-acting reversible contraception in the United States military healthcare system. *American Journal of Obstetrics and Gynecology*, 215(3), 328.e1–328.e9. <https://doi.org/10.1016/j.ajog.2016.03.027>
- Christy, A. Y. (n.d.). *Unintended pregnancy among Active-Duty Service Women and women Veterans and access to contraception in DoD and VHA* [Presentation]. <https://www.amsus.org/wp-content/uploads/2019/12/Christy-Overcoming-Disparities-in-Womens-Health.pdf>
- Course Hero. (n.d.). *Policy procedure creation workflow*. <https://www.coursehero.com/file/123603656/Policy-Procedure-Creation-Workflowpdf/>
- Crabb, S. L. (2014). Contraception counselling of female soldiers in primary healthcare facilities. *Journal of the Royal Army Medical Corps*, 161(2), 109–111. <https://doi.org/10.1136/jramc-2014-000280>
- Curtis, K. M., Jatlaoui, T. C., Tepper, N. K., Zapata, L. B., Horton, L. G., Jamieson, D. J., & Whiteman, M. K. (2016). U.S. selected practice recommendations for contraceptive use,

2016. *MMWR Recommendations and Reports*, 65(4), 1–66.

<https://doi.org/10.15585/mmwr.rr6504a1>

Deans, E. I., Batig, A. L., Cordes, S., Scribner, A. N., Nielsen, P. E., Jamieson, D. J., Lathrop, E., & Cwiak, C. (2018). A survey of family planning training, knowledge, and practices among health care providers within the military health system at Joint Base Lewis–McChord. *Military Medicine*, 184(5-6), e394–e399.

<https://doi.org/10.1093/milmed/usy255>

Defense Health Agency. (2019, February 11). *Quadruple Aim performance process:*

Transforming performance improvement. [https://health.mil/Reference-](https://health.mil/Reference-Center/Presentations/2019/02/11/Quadruple-Aim-Performance-Process-Transforming-Performance-Improvement)

[Center/Presentations/2019/02/11/Quadruple-Aim-Performance-Process-Transforming-Performance-Improvement](https://health.mil/Reference-Center/Presentations/2019/02/11/Quadruple-Aim-Performance-Process-Transforming-Performance-Improvement)

Defense Health Agency. (2022, September 27). *Walk-in contraception services (WiCS) at*

military medical treatment facilities (MTF): DHA-administrative instruction (DHA-AI) 6025.09 [PDF]. Defense Health Agency Publications Library.

<https://www.health.mil/Reference-Center/DHA-Publications/2022/09/27/DHA-AI-6025-09>

Erickson, A. K., Nelson, D., Shaw, J. G., Loftus, P. D., Kurina, L. M., & Shaw, K. A. (2017).

Long-acting reversible contraceptive placement among active-duty U.S. Army Servicewomen. *Obstetrics & Gynecology*, 129(5), 800–809.

<https://doi.org/10.1097/AOG.0000000000001971>

Grindlay, K., & Grossman, D. (2015). Unintended pregnancy among active-duty women in the United States military, 2011. *Contraception*, 92(6), 589–595.

<https://doi.org/10.1016/j.contraception.2015.07.015>

- Haddaway, N., McGuinness, L., & Pritchard, C. (2023). Prisma2020: R package and shiny app for producing prisma 2020 compliant flow diagrams. *Zenodo*.
<https://doi.org/10.5281/zenodo.4287834>
- Healthy People 2030. (n.d.-a). *Family planning - Healthy People 2030*. Office of Disease Prevention and Health Promotion. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/family-planning>
- Healthy People 2030. (n.d.-b). *Reduce the proportion of unintended pregnancies — FP-01 - Healthy People 2030*. Office of Disease Prevention Health Promotion.
<https://health.gov/healthypeople/objectives-and-data/browse-objectives/family-planning/reduce-proportion-unintended-pregnancies-fp-01>
- Heitmann, R. J., Batig, A. L., Levy, G., Novotney, J., Grubbs, C., Batig, T. S., Gobern, J. M., Hemman, E., Christy, A. Y., & Hill, M. J. (2016). Unintended pregnancy in the military health care system: Who is really at risk? *Military Medicine*, *181*(10), 1370–1374.
<https://doi.org/10.7205/MILMED-D-16-00003>
- Heitmann, R. J., Mumford, S. L., Hill, M. J., & Armstrong, A. Y. (2014). Estimated economic impact of the levonorgestrel intrauterine system on unintended pregnancy in active duty women. *Military Medicine*, *179*(10), 1127–1132. <https://doi.org/10.7205/MILMED-D-14-00055>
- Herd, P., Higgins, J., Sicinski, K., & Merkurieva, I. (2016). The implications of unintended pregnancies for mental health in later life. *American Journal of Public Health*, *106*(3), 421–429. <https://doi.org/10.2105/ajph.2015.302973>
- Iowa Model Collaborative. (2017). The Iowa model revised: Evidence-based practice to promote excellence in health care. *Worldviews on Evidence-Based Nursing*, *14*(3), 175–182.

<https://uihc.org/iowa-model-revised-evidence-based-practice-promote-excellence-health-care>

Kamarck, K. N. (2016). *Women in combat: Issues for congress* (R42075) [PDF]. Congressional Research Service. <https://apps.dtic.mil/sti/pdfs/AD1023079.pdf>

Kamarck, K. N., & Donovan, S. A. (2021). *FY2022 NDAA: Parental leave benefits* (IN11802) [Report]. Congressional Research Service.

<https://crsreports.congress.gov/product/details?prodcode=IN11802>

Lethaby, A., Wise, M.R., Weterings, M.A., Bofill Rodriguez, M., & Brown, J. (2019). Combined hormonal contraceptives for heavy menstrual bleeding. *Cochrane Database of Systematic Reviews*, 2(2). <https://www.doi:10.1002/14651858.CD000154.pub3>

Lopez, C. T. (2022, July 29). *Women's health care in DoD unchanged by Supreme Court decision*. U.S. Department of Defense. <https://www.defense.gov/News/News-Stories/Article/Article/3110807/womens-health-care-in-dod-unchanged-by-supreme-court-decision/>

Mendez, B. H. (2022, November 18). *Defense primer: Military health system* [PDF]. Congressional Research Service. <https://fas.org/sgp/crs/natsec/IF10530.pdf>

MilSuite. (n.d.). *Female Force Readiness Family Planning Sub-Community*.

<https://www.milsuite.mil/book/groups/womens-health-family-planning-sub-community>

RAND Corporation. (2022, September 13). *Landmark women's reproductive health survey shows need for improvements in DoD reproductive health care*.

<https://www.rand.org/news/press/2022/09/13.html>

Reproductive Health National Training. (2020). *Same-visit contraception: A toolkit for family planning providers*. <https://rhntc.org/resources/same-visit-contraception-toolkit-family->

planning-providers. <https://rhntc.org/resources/same-visit-contraception-toolkit-family-planning-providers>

Serpico, J. J., Ricks, J. M., Smooth, W. G., Romanos, C., Brook, D. L., & Gallo, M. F. (2020).

Access to single-visit IUD insertion at obstetrician-gynecology practices in Ohio: An audit study. *Contraception*, *102*(3), 190–194.

<https://doi.org/10.1016/j.contraception.2020.05.007>

Seymour, J. W., Fix, L., Grossman, D., & Grindlay, K. (2018). Facilitators and barriers to

contraceptive use among U.S. Servicewomen who had an abortion. *Military Medicine*, *184*(5-6), e417–e423. <https://doi.org/10.1093/milmed/usy340>

Stahlman, S., Witkop, C. T., Clark, L. L., & Taubman, S. B. (2017). Contraception among active

component service women, U.S. Armed Forces, 2012–2016. *Medical Surveillance*

Monthly Report, *24*(11), 10–21. [https://www.health.mil/Reference-](https://www.health.mil/Reference-Center/Reports/2017/01/01/Medical-Surveillance-Monthly-Report-Volume-24-Number-11)

[Center/Reports/2017/01/01/Medical-Surveillance-Monthly-Report-Volume-24-Number-](https://www.health.mil/Reference-Center/Reports/2017/01/01/Medical-Surveillance-Monthly-Report-Volume-24-Number-11)

11

TriCare. (n.d.-a). *About William Beaumont Army Medical Center*. William Beaumont Army

Medical Center- about us. <https://william-beaumont.tricare.mil/About-Us>

TriCare. (n.d.-b). *Department of primary care (DPC)*. William Beaumont Army Medical Center-

Fort Bliss. <https://william-beaumont.tricare.mil/Health-Services/Department-of-Primary-Care-DPC>

Wilkinson, T. A., Downs, S. M., & Tucker Edmonds, B. (2019). Cost minimization analysis of

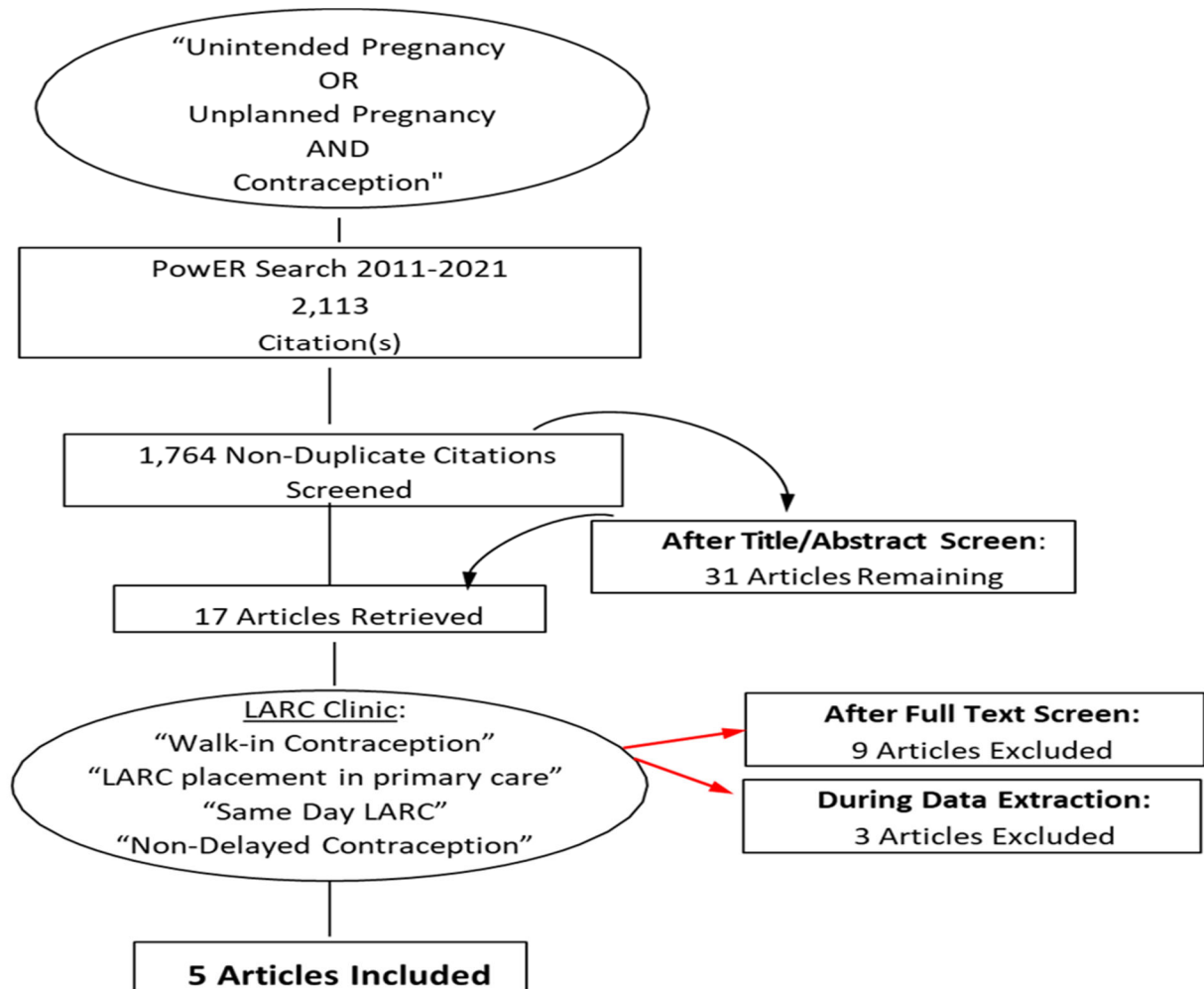
same-day long-acting reversible contraception for adolescents. *JAMA Network Open*,

2(9), e1911063. <https://doi.org/10.1001/jamanetworkopen.2019.11063>

Witkop, C. T., Webber, B. J., Chu, K. M., & Clark, L. L. (2017). Contraceptive prescriptions for U.S. Servicewomen, 2008–2013. *Contraception*, *96*(1), 47–53.

<https://doi.org/10.1016/j.contraception.2017.05.006>

Appendix A
PRISMA Diagram



Appendix B

Evidence Synthesis Table

Citation; Author, Date of	Purpose of Study	Conceptual	Design/Method	Sample/Setting	Major Variables Studied	Data Analysis	Study findings	Worth to Practice LOE; Strengths; Limitations;
Adams (2017). Operation PINC process improvement for non-delayed contraception. <i>Military medicine</i> , 182(11-12), e1884-e1888. https://doi.org/10.7205/MILMED.17-00083	Describe utilization of a walk-in contraceptive clinic including patient demographics, long-acting reversible contraception (LARC) initiation rates, projected cost savings, and patient satisfaction within the first 8 months of operation	CI Process	Prospective cohort and quality improvement study	Sample N=2207 women Characteristics: Mean age=25 years 80% Active Duty Setting: Full-service walk-in contraceptive clinic at Naval Medical Center San Diego	IV: Operation PINC DV: -LARC initiation in PINC clinic -volume of LARC services provided by the Ob/Gyn dept after Operation PINC opening -Access to care -Operation PINC-specific patient satisfaction	-Student t-test (for continuous outcome measurements) - χ^2 test or Fisher's exact test (for categorical data evaluation)	Operation PINC improved access to care for noncontraceptive GYN visits. -Operation PINC increased ESDI insertions from a mean of 102/mos to 152/mos after opening Operation PINC (χ^2 test, $p = 0.09$); -IUD insertions increased from a mean of 278/mos to 322/mos (χ^2 test, $p = 0.05$); -LARC initiation rate in Operation PINC increased 27%. -No show rates in Ob/GYN decreased from 17.8% to 12.5% (χ^2 test, $p = 0.002$); -Ob/GYN appointments improved from 28 days before PINC to 16 days after PINC (χ^2 test, $p = 0.04$); -Overall patient satisfaction with Operation PINC (0-10 scale survey on willingness to refer PINC Clinic to a friend: Median 9.6 (IQR=1.5)	LOE: Level V Evidence Strengths: Same day insertion of LARC methods significantly improves initiation rates Limitations: -Walk-in contraception clinic model does not promote LARC discontinuation. LARC discontinuation rates in a walk-in contraception clinic will need to be studied over a longer period and is outside the scope of this project. -Internal control to compare LARC utilization before Operation PINC was not available -Effect of same day full service contraception clinic on unintended pregnancy unknown Feasibility: Feasible Conclusion: Same day contraception clinics improve LARC placement initiation, reduces unintended pregnancies and related costs. RECOMMENDATION: Strong recommendation for implementation of walk-in contraception clinic in
Beeson, T., Wood, S., Bruen, B., Goldberg, D. G., Mead, H., & Rosenbaum, S. (2014). Accessibility of long-acting reversible contraceptives (LARCs) in federally qualified health centers (FQHCs). <i>Contraception</i> , 89(2), 91-98. https://doi.org/10.1016/j.contraception.2013.09.014	Examines the on-site availability of long-acting reversible contraception (LARC) methods at Federally Qualified Health Centers (FQHCs).	Cost Comparison and Equity Model	Original survey of 423 FQHC organizations was fielded in 2011	Sample: 423 FQHC organizations Setting: FQHC organizations	IV: FQHC Size: Large= >20K; Medium= 10K-19,999; Small= <10K patients annually FQHC funding: Title X Family Planning program funding DV: On-site IUD availability	Descriptive summary of the number of FQHCs' largest sites that provide these contraceptive methods. Bivariate analysis using χ^2 tests of independence. determine if any significant differences in the on-site availability of LARC methods were observed between FQHCs of differing size and those that do not. Our multivariate logistic regression explores the probability of an FQHC's largest primary care site providing LARC methods on-site, given a set of organizational characteristics and population demographics. Hosmer-Lemeshow goodness-of-fit tests for each of our models.	-Patients seeking care in small FQHC organizations, FQHCs with limited dedicated family planning funding and FQHCs located in rural areas may have fewer choices and limited access to LARC methods on-site. -Access to LARC methods at FQHCs' largest clinical sites is highly correlated with both the size of the health care organization and the receipt of dedicated family planning funding through the Title X Family Planning program. A higher proportion of large FQHCs offered on-site availability of each LARC method category when compared with small or medium FQHCs. Similarly, a higher proportion of FQHCs receiving Title X family planning funding offered on-site delivery at their largest primary care site for each LARC method category compared with FQHCs not receiving this dedicated funding. These differences were statistically significant at an alpha of 0.05. -FQHC size continues to have a strong association with ability to provide on-site delivery of LARC, with large FQHCs being over twice as likely to provide IUDs on-site at 6+ their largest primary care site compared to small FQHCs.	LOE: Level V Evidence Strengths: when costs were removed, 75% of women chose a LARC method as their contraceptive of choice - significant reduction in indicators of unintended pregnancy among the population as a whole, such as abortions and repeat abortions and teen births as a result of providing contraception at no cost to women. Limitations: limited understanding of how FQHCs may redesign their practices to provide on-site availability of LARC methods; analysis does not account for any patient level factors that may influence the ability to influence the ability to access LARC methods, including patient needs or preferences. Feasibility: Feasible Conclusion: LARC placement is a strong solution for unintended pregnancy rates. RECOMMENDATIONS: Further data is needed
Kelly, P. J., Cheng, A. L., Carlson, K., & Witt, J. (2017). Advanced practice registered nurses and long acting reversible contraception. <i>Journal of Midwifery & Women's Health</i> , 62(2), 180-185. https://doi.org/10.1111/mwh.12578	To learn more about APRN LARC practices and influences on those practices	APRN LARC placement	Electronic cross-sectional survey (survey contained 10 items on participants' opinions about LARC methods; these items had a 5-point Likert-format response ranging from "strongly agree" to "strongly disagree." There were 10 items on personal (eg, age, year of completion of APRN training, education level, national certification) and professional characteristics (eg, clinic location (urban-inner city, urban-non-inner city, suburban)	-snowball and convenience sampling, 390 nurse practitioners and nurse midwives - Mean age: 50 yrs with age range 27-72 years - Setting: electronic data collected at their university meeting hosted by Office of the Population Affairs where fliers were received	IV: unmet needs of prescription contraception DV: -contraceptive use rate -unintended pregnancy	Descriptive statistics and proportions. -zero-inflated Poisson regression models were conducted to study potential factors of influence on the number of IUDs and implants provided per year. Median data and IQR used	After accounting for clinic location, the results show that years in practice, the number of visits for receiving LARCs, and CE were strong predictors of LARC practices, that is the number of placements of each device or method. For every year in practice, APRNs placed a small, but statistically significant greater number of copper and hormonal IUDs. -Clinic practices varied, with only 136 (35%) having policies that permitted placement on the same day a woman requests the method for any of these 3 contraceptive methods, more than half required 2 or more visits (212/58%). -Every one-visit increase required for LARC provision resulted in the placement of 24% fewer copper IUDs, 27% fewer hormonal IUDs, and 32% fewer hormonal implants.	LOE: Level V Evidence Strengths: The Office of Population Affairs also funds the National Clinical Training Center for Family Planning, which provides low-cost and no-cost continuing education to health care providers in the Title X system. -These trainings include hands on practice with simulated models and evidence-based information on appropriate candidates, effectiveness, side effects and same-day placement. Limitations: snowball recruitment method meant that we were unable to definitively determine if participants responded from multiple venues. Feasibility: Feasible Conclusion: LARC placement increased when same day insertion used RECOMMENDATIONS: Strong recommendation for same day walk-in contraception clinic.
Serpio, J. J., Hicks, J. M., Smoother, W. O., Romanos, C., Brook, D. L., & Gallo, M. F. (2020). Access to single-visit IUD insertion at obstetrician-gynecology practices in Ohio: An audit study. <i>Contraception</i> , 102(3), 180-194. https://doi.org/10.1016/j.contraception.2020.05.007	To assess the availability of single-visit IUD insertions, and whether access to these services varies by age, race or parity	Ob/GYN clinic decision making/clinic practices	Audit chart methodology to test bias in scheduling single-visit IUD insertion at obstetrician-gynecology practices in - Multivariable logistic regression was used to control for clinics rural vs. urban location	398 Ob/GYN practices in OH; random sampling	IV: Availability of single-visit IUD insertion DV: -Access to same day IUD placement -Unintended pregnancy rates	Fisher's exact test to test for differences between rural-urban status across the dichotomized predictor variables. -logistic regression to evaluate associations between call outcome and the caller's purported age, race, and parity and multivariable logistic regression models that adjusted for all of the experimental variables (age, race, and parity) and for	Almost all (95%) of the practices called offered IUD placement, of which 92% required multiple appointments for IUD insertion. Although access to single-visit IUD services did not vary by age or race, we found that parity was associated with clinics' willingness to schedule a single-visit insertion visit (OR = 3.94, 95% CI = 1.23, 12.04). -The requirement to attend multiple clinic appointments to obtain a desired contraceptive may pose an insurmountable barrier to care	LOE: Level II Strengths: Audit methodology permits unobtrusive observation of conditions exactly as they occur, with little risk of reporting bias. Limitations: clinic staff may have misrepresented data; protocols or policies; few practices offered single-visit IUD insertions so the researcher had a low study power to evaluate the relationship between this outcome and caller characteristics. sample was limited to obstetrician-gynecologists; findings do not necessarily extend to the wide range of clinicians who provide IUDs. Feasibility: Feasible Conclusion: Patients seeking IUD placement must typically make more than one clinic visit RECOMMENDATIONS: LARC
Wilkinson, T. A., Downs, S. M., & Edmonds, B. T. (2018). Cost minimization analysis of same-day long-acting reversible contraception for adolescents. <i>JAMA Network Open</i> , 2(8), e1911063-e1911063. https://doi.org/10.1001/jamanetworkopen.2019.11063	To analyze Indiana Medicaid's cost savings associated with providing adolescents with same-day access to LARC. -Examined the anticipated outcome of providing LARC at the first visit compared with requiring a second visit for placement	Cost Model	Developed decision model from the perspective of state Medicaid in Indiana.	Single base case: 1 year-old patient presenting for care	IV: same day LARC placement DV: -cost of same-day LARC placement vs cost of LARC placement at subsequent visit -rates of unintended pregnancy, rates of abortion.	One-way sensitivity analysis performed from August 2017 through August 2018	-Same-day LARC placement was associated with lower overall costs (\$2018 per patient over 1 year) compared with LARC placement at a subsequent visit (\$4193 per patient over 1 year). -Compared with the return-visit strategy, same-day LARC was associated with an unintended pregnancy rate of 14%vs 48%and an abortion rate of 4%vs 14%.	LOE: Level V Evidence Strengths: same-day LARC placement was associated with savings of more than \$2000 per patient per year and with reduced unintended pregnancy and abortion rates. Limitations: values were consistently very far from baseline estimates. Feasibility: Feasible Conclusion: From a cost analysis standpoint, it is cheaper to place a LARC on the same day as the price increases on 2 day model. RECOMMENDATIONS: Implement practice that supports same day LARC placement instead of 2-3 additional appointments.

Appendix C

Data Analysis Table

Data Analysis	Variable Name	Variable Description and Type of Measure	Data Source	Possible Range of Values	Level of Measurement	Time Frame for Collection	Statistical Test	Decision Rule	
Event	IV	Same day Walk-in Contraception Clinic in Primary Care	Description: WBAMC PCPs to perform single appointment LARC placement in primary care clinic Type: Process measure	Current Clinic SOPs for LARC placement prior to Independent variable	0= before same day clinic 1= after same day clinic	Nominal	Aug-Dec 2022	None	N/A
	DV1	Change in Rate of LARCS placement per day DURING VS BEFORE project implementation	DV1. TOTAL Number of LARCS placed DURING project implementation period divided by TOTAL number of days during which project was implemented (to get rate of LARCS per day DURING IMPLEMENTATION) and DV1.1 TOTAL Number of LARCS placed in comparable period of time as that of project implementation divided by TOTAL number of days BEFORE project implementation x 100% (to get rate of LARCS per day BEFORE IMPLEMENTATION).	Audit medical records retrospectively using medical/billing (ICD) coding filters.	0-100%	Interval	Jan-Mar 2022 (before same day clinic) and Aug - Dec 2022 (after same day clinic)	Independent t-test (Mann-Whitney U, if issues with normality)	LARCS placement volume: 10-20% increase in same-day LARC placement in primary care setting via Walk-in Contraception Clinic implementation.
	DV2	Change in Wait times for LARC Placement DURING project implementation VS BEFORE project implementation	DV2. Wait time (days or # of appts) for LARC placement at contraception clinic (DURING project implementation) and DV2.1 Wait time (days or # of appts) for LARC placement at contraception clinic (BEFORE project implementation).	Audit medical records retrospectively using medical/billing (ICD) coding filters.	0-90 days or 0-5 appts (means or mode)	Interval (if mean) or ordinal (if mode)	Jan-Mar 2022 (before same day clinic) and Aug - Dec 2022 (after same day clinic)	Independent t-test (Mann-Whitney U, if issues with normality and using means) or Wilcoxon signed rank test (if using mode)	Wait time: -Reduction # of days/ appointments required for LARC placement -2-week reduction in average wait times for LARC placements
	DV3	Change in Number of Family Planning Encounters DURING project implementation VS BEFORE project implementation	DV3. # of family planning encounters (DURING project implementation) and DV3.1 # family planning encounters (BEFORE project implementation).	Audit medical records retrospectively using medical/billing (ICD) coding filters.	0-∞ encounters (reported in mode)	Ordinal	Jan-Mar 2022 (before same day clinic) and Aug - Dec 2022 (after same day clinic)	Wilcoxon signed rank test	Family Planning Encounters: 30% increased volume of family planning counseling in primary care

Appendix D

Business Case Analysis (BCA) Worksheet

NAME: CPT LAKIA STEWART AND MAJ MONIQUE VANCE

DATE: FALL 2021

Student Name:

Date:

BUSINESS CASE with VALUE BASED CARE ASSESSMENT	
Proposed Title for Project/Initiative/Opportunity to Improve <i>Proposed Title</i>	
Best Practices for Contraceptive Clinic in Primary Care	
Opportunity Statement <i>(Description of proposed project/initiative/opportunity to improve)</i> <i>Opportunity statement</i>	
This project will reduce the rate of unintended pregnancy (UIP) in the U.S. military Service women by increasing accessibility to contraceptive health options in Primary Care setting.	
Business Opportunity/Objectives <i>(Prioritize listing – macro and micro objectives)</i> <i>Business Opportunity</i>	
<ul style="list-style-type: none"> • Empower Primary Care Providers (PCP) to provide contraceptive counseling, administer long acting reversible contraceptives (LARC), and contraceptive management. • Provide added benefit of menstrual suppression. • Reduce bottlenecks in OB/GYN Dept. 	
Potential Impact of the Initiative/Project <i>(Identify outcome metrics & benchmarks/and how objectives align with Quadruple Aim, Value Based Care, and HRO goals)</i> <i>Potential Impact</i>	
<ul style="list-style-type: none"> • Improve mission readiness with reduced work hours loss • Promote career progression equity with planned pregnancy 	
Alternatives (courses of action) chosen for Analysis <i>Alternatives</i>	
<ol style="list-style-type: none"> 1. Establish LARC placement services walk-in clinic in primary care 2. Bring GYN to Primary Care walk-in days 3. "Status Quo": Keep OB/GYN as primary interventionist 	
Analysis of Alternatives <i>Alternatives</i>	
Alternative 1:	Establish LARC services walk-in clinic in primary care
Pros	Cons
<ul style="list-style-type: none"> • Reduces UIP rates by increasing SM accessibility. • Maximal utilization in Primary Care for contraceptive management. • Reduce bottlenecks in OB/GYN department. 	<ul style="list-style-type: none"> • Patient preference (culturally) to Primary Care to perform LARC placement. (Low level evidence) • PCP training needs assessment required. • Confidence to perform procedure. • Logistical material acquired.
Alternative 2:	Bring GYN to Primary Care LARC walk-in days
Pros	Cons
<ul style="list-style-type: none"> • Increase efficiency of LARC appointment completion. • No additional training hours/cost to train PCPs for LARC placement. 	<ul style="list-style-type: none"> • Undermines patient confidence of PCPs' competence to place LARCs. • Reduction of continuity of care for PCP in the PCMH. • Controversy with staffing/backfill of GYN providers. • OB/GYN staff reduction to organic clinic <ul style="list-style-type: none"> ◦ DMHRSI
Alternative 3:	"Status Quo": Keep OB/GYN as primary interventionist for LARCS
Pros	Cons
<ul style="list-style-type: none"> • Experienced providers --> decreasing LARC procedural complications • No additional training hours/cost to train PCPs for LARC placement • Patients more comfortable with OB/GYN performing LARC placement 	<ul style="list-style-type: none"> • UIP rates remain the higher in the military population <ul style="list-style-type: none"> ◦ Referral required to OB/GYN ◦ Multiple appointments to achieve LARC insertion --> decreasing likelihood of placement • OB/GYN department oversaturated with contraceptive management patients <ul style="list-style-type: none"> ◦ Poor sustainability of OB/GYN effectiveness with high volume of LARC patients
Assumptions <i>Assumptions</i>	
<ul style="list-style-type: none"> • LARC clinics will reduce UIP in U.S. military Service women. • LARC placement accessibility will improve military medical readiness by enhancing menstrual suppression. • Patients prefer LARCs for contraceptive management. • LARC Clinic implementation is cost-effective. • PCPs are not currently trained to perform LARC placement. 	
Recommendation and Rationale <i>Make a choice</i>	
Recommendation <i>Make a choice</i>	
Establish LARC services walk-in clinic in primary care	
Rationale <i>Make a choice</i>	

- Reduces UIP rates by increasing SM accessibility.
- Maximal utilization in Primary Care for contraceptive management.
- Reduce bottlenecking in OB/GYN department.

Value Based Care - Investment Required by the Organization and the Associated "VALUE" or \$ GAINED. *Below represents two ways to present this information. Depending on the initiative, you may need to alter this outline. Please adjust as appropriate and if need be ... do not hesitate to create this portion on a separate document and then attach to this assignment. Outline the Value Based Care*

LAYOUT IDEA #1 See Below

Value = Quality + Service

Cost

I. Quality projected based on: (suggestions-examples in blue font)

Patient Safety Related Benefit	
Financial Benefit	
Operational Readiness Benefit	
Total	

II. Service projected based on: (suggestions-examples in blue font)

Environmental Benefit	
Social Impact/Benefit	
Patient Satisfaction/Benefit	
Provider Satisfaction/Benefit	
Total	

III. Cost projected based on: (suggestions-examples in blue font)

Program Design and Development	
Project Management	
Marketing	

Total	

PROJECTED VALUE :

- or - LAYOUT IDEA #2

I. Volume projection based on:

Total	

II. Reimbursement calculated for:

	\$
	\$
	\$

III. Costs:

Variable Costs:

Supplies	\$
	\$
	\$
Total	\$

Fixed Costs:

Labor	\$
Overhead	\$
	\$
Total	\$

IV. Forecasted P&L statement:

Revenues:

	\$
	\$
	\$

Total revenues		\$
Costs:		
Variable costs	\$	
Fixed costs	\$	
Total costs	\$	
PROJECTED PROFIT		\$
-or- Layout #3 ... any way that best represents the data supporting the cost / benefit ratio for your project - please insert here or add as a separate document		
Risks and Mitigation Plan <i>Consider the risks:</i>		
Risks	Plan	
1. Negative impact to provider and patient flow at clinic that hinders access to care	1. Create algorithm-like flow that does not hinder patient access to PCP; keep teams informed of schedule impacts.	
2. Costs to implement exceeds the patient population's level of interest to utilize resources created.	2. Offset costs by re-purposing LARC clinic for pre-deployment menstrual suppression needs. Improve marketing to U.S. military Service women beyond contraceptive purposes.	
3. PCP opposition to same-day LARC clinic implementation.	3. Determine the "why?" (needs assessment; root-cause analysis; education; identify and address source of reluctance	
4. Unawareness of LARC clinic days to U.S. military Service women.	4. Marketing: Tour the military units onsite to inform leaders and SMs of option; Brochures/Flyers at Primary Dept; online link added to TOL services specifically listing Family Planning Clinic.	
5.	5.	
Implementation Plan <i>Implementation plan</i>		
Phase 1:	PERFORM NEEDS ASSESSMENT AND ASSESS ONSITE ORGANIZATIONAL STRUCTURE (Goal: Summer 2022)	
Milestone Description:	Assess the processes of the 'status quo' in place at Fort Bliss Primary Care Clinic. The assessment includes gathering the UIP rate of Fort Bliss active duty Service women, the volume of referrals to OB/GYN for LARC placement and PCP concerns regarding LARC clinic implementation.	
Deliverables	Due Date	Accountable Person
<ul style="list-style-type: none"> Gather the UIP rate of Fort Bliss active duty Service women Collect the volume of referrals to OB/GYN for LARC placement Assess PCP concerns regarding LARC clinic implementation. Number of providers credentialed to place LARCs. Determine logistical capabilities for supply of LARC devices. 	Prior to arrival to Fort Bliss.	CPT Stewart, MAJ Vance, LTC Sheets
Resources Needed		
EHR access		
Expected Level of Benefit		
Situational awareness of processes in place and population needs.		
Phase 2:	IDENTIFY/ASSESS/MEET STAKEHOLDERS	
Milestone Description:	Meet with the stakeholders of LARC Clinic.	
Deliverables	Due Dates	Accountable Person
Report needs assessment findings Create top 5 myths infographic to present at Stakeholder meeting Create diagram for logistical supply flow for leaders	Prior to arrival to Fort Bliss.	CPT Stewart and MAJ Vance
Resources Needed		
Logistical material/support analysis results from Phase I Needs Assessment (above).		
Expected Level of Benefit		
Situational awareness of stakeholder concerns and barriers to implementation.		
Phase 3:	EDUCATION AND TRAINING	

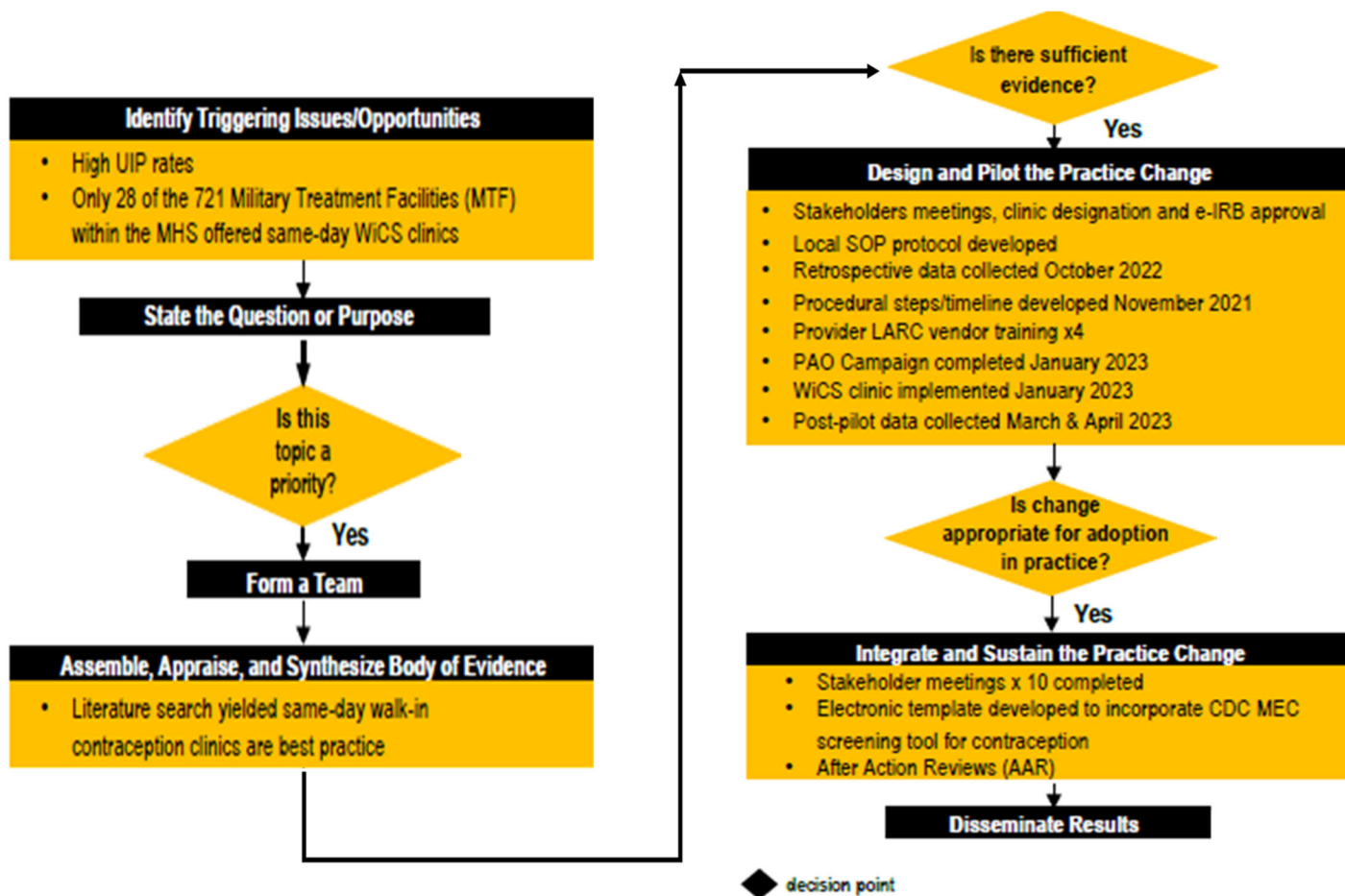
Milestone Description:	Coordinate LARC vendors to perform training to PCPs	
Deliverables	Due Dates	Accountable Person
Provider training coordinated with Vendor. Emphasize use of DoD app (Decide and Be Ready) to PCPs to facilitate contraceptive counseling services.	TBD	Staff scheduling coordinated with unit leadership and vendor availability by CPT Stewart and MAJ Vance.
Resources Needed		
Vendors, PCPs, LARC devices, Leadership approval		
Expected Level of Benefit		
Increased number of providers available to support same day LARC Clinic appointments.		
Phase 4:	MARKETING	
Milestone Description:	Enhance visibility of LARC Clinic available services.	
Deliverables	Due Dates	Accountable Person
<ul style="list-style-type: none"> Tour the military units onsite to inform leaders & SMs; Brochures/Flyers at Primary Dept; Online link added to TOL services specifically listing Family Planning Clinic 	TBD (pending progress of prior phases)	CPT Stewart and MAJ Vance; IT approval to update TOL link; PAO and leadership approval facilitated by LTC Sheets
Resources Needed		
Printing Services for brochures and flyers.		
Expected Level of Benefit		
Program awareness by female SMs and beneficiaries. Increased utilization of LARC clinic once established.		
Phase 5:	IMPLEMENTATION (goal Fall 2022)	
Milestone Description:	Appointments made and LARCs placement completed in Primary Care by PCPS.	
Deliverables	Due Dates	Accountable Person
<ul style="list-style-type: none"> Collect data on quantity of LARCs placed. Collect comparative data of referrals to OB/GYN for LARC placement. Assess stakeholder satisfaction via surveys. 	Rolling data collection on implementation Hard data analysis to begin NLT Dec 2022.	CPT Lokia Stewart and MAJ Monique Vance
Resources Needed		
Shared electronic spreadsheet (Microsoft Excel or Google Sheets)		
Expected Level of Benefit		
Reduction of UIP rates in active duty Service women at Ft. Bliss, TX		

NOTE: Modified from Harvard Business Review Press. (2011). *Pocket mentor: Developing a business case*. Boston: Author (pp 82-85).

SAME-DAY LARC CLINIC: VALUE BASED CARE COST ANALYSIS (LAYOUT #1)	
Patient Safety Related Benefit	<ul style="list-style-type: none"> - Promote patient autonomy of reproductive goals. - Reduced risk of UIP while completing referrals and additional appointments for LARC placement in specialty care clinics. - Reduction of UIP-related poor maternal and neonatal outcomes.
Financial Benefit (Cost Savings)	<ul style="list-style-type: none"> - Reduced unintended pregnancy and abortion rates - Indirect costs are negligible as LARC clinic implemented during business regular hours <ul style="list-style-type: none"> • Staff costs, overhead, ancillary staff salary expense nullified. • No difference in MTF reimbursements (cost to organization) for PCP LARC placement vs OB/GYN department LARC placement. - Same-day LARC placement: \$2,016 per patient over 1-year period; - Annual savings with LARC placement: \$3,387,107 to \$47,352,295 for 5-25% LNG-IUS (Heitmann et. al, 2014) - Decreased fiscal burden of UIPs via cost avoidance: <ul style="list-style-type: none"> • Avg cost of prenatal care, labor, and delivery for uncomplicated pregnancy: <ul style="list-style-type: none"> ○ Vaginal delivery: \$31,093 ○ C-Section: \$51,125 (Heitmann et. al, 2014) • Activity limitations/Lost Workdays: pregnancy and postpartum period • Maternity leave/Lost workdays: 12 weeks (min) • Non-deployability: up to 1 year <ul style="list-style-type: none"> ○ at least \$10K per SM to send home if SM becomes pregnant while deployed (Albright et al, 2007) - Decreased wait times for LARC placement: <ul style="list-style-type: none"> • Removal of nursing burden in gynecologic specialty clinics - Four most common causes of gynecologic disorders in U.S. military women: menorrhagia, PCOS, uterine fibroids, endometriosis (Stahlman, Williams & Taubman, 2017) <ul style="list-style-type: none"> • ~4,200 medical visits/year across all services • Hospitalization days for patients average approximately 1,000/year • Treatment cost and # lost workdays for alternate indications for LARC (menstrual suppression) (P&F, Chap 135): <ul style="list-style-type: none"> ○ Anemia d/t menses: <ul style="list-style-type: none"> ▪ pRBCs transfusion: \$230-\$3,510 (Rodgers et. al, 2015) ▪ iron infusion: \$243-\$1,057 per 1000mg (Hambley et. al, 2020) ○ Endometriosis: with lap \$5,946 per patient ○ Dysmenorrhea ○ PMS: (Fernandez et. al, 2018; Yonkers & Simoni, 2018) <ul style="list-style-type: none"> ▪ Average of 2 missed workdays/month ▪ Increase # in medical appointments ▪ Cost \$5,000 per case/per year - Variable Costs: <ul style="list-style-type: none"> • Supply chain scramble impact to logistical materials needed → Per Bayer Vendor Training Consultants meeting, 11/10/2021: No impacts to IUD costs or manufacturing anticipated; multiple U.S. Manufacturing locations; Possible delay deliveries. DoD Clinics reporting 2-3 day delayed arrival via FedEx. Delays remedied with higher volume or higher frequency orders to maintain.
Overall Readiness Benefit	<ul style="list-style-type: none"> - Improved personnel readiness of military units: <ul style="list-style-type: none"> • promote the overall well-being of Service members (autonomy, uninterrupted career progression) • reduction of lost workdays a/w UIP • reduction of the related emotional and psychological distress a/w UIP
TOTAL	<ul style="list-style-type: none"> - Removal of barriers to LARC access: <ul style="list-style-type: none"> • Improve provider training • Increase provider confidence to perform LARC device insertions • Increase patient knowledge on contraception options • Increase access to contraceptive services in a timely manner - Reduction of UIP rates in U.S. military Service women. - Accomplish the DHA's medical mission of "promoting a healthy and fit fighting force that is medically prepared to provide the Military Departments with the maximum ability to accomplish their deployment missions throughout the spectrum of military operations"

Appendix E

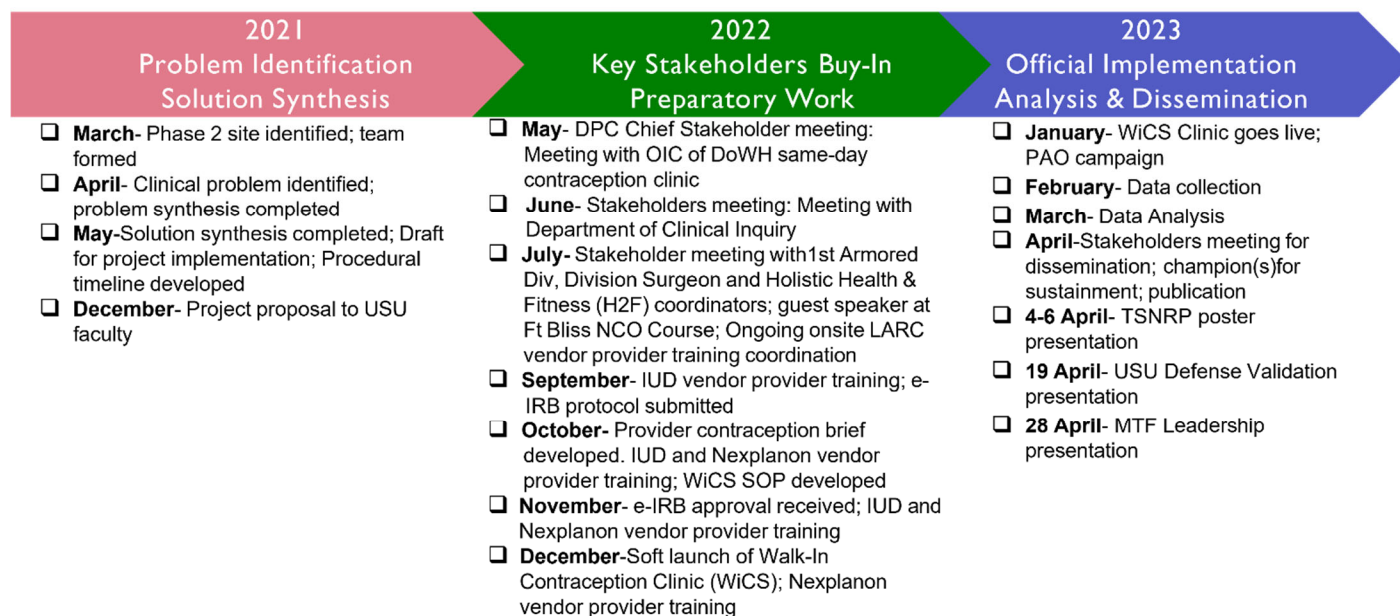
The Iowa Model (Revised)



Permission granted per Iowa University on 18 March 2023

Appendix F

Procedural Steps with Timeline



Appendix G

Team Mentor (Committee Membership) Agreement Form



Daniel K. Inouye Graduate School of Nursing
DNP Project Team Mentor (Committee Membership) Agreement Form

DOCTOR OF NURSING PRACTICE PROJECT DNP Project Clinical Question and Team Mentor (Committee Membership) Agreement Form

Graduation Year:

Name(s) of DNP Project Student Team:

1. MAJ Monique Vance Phase II Site: AGCNS FNP PMHNP RNA WHNP
2. CPT Lakia Stewart Phase II Site: AGCNS FNP PMHNP RNA WHNP
3. _____ Phase II Site: AGCNS FNP PMHNP RNA WHNP
4. _____ Phase II Site: AGCNS FNP PMHNP RNA WHNP
5. _____ Phase II Site: AGCNS FNP PMHNP RNA WHNP
6. _____ Phase II Site: AGCNS FNP PMHNP RNA WHNP

The tentative title of the DNP Project Proposal for this student group is:

Implementation of a Same-Day Contraception Clinic in Primary Care at William Beaumont Army Medical Center

Committee Approved DNP Project Clinical Question: In female beneficiaries at Fort Bliss, how does the implementation of a Walk-in Contraception Services (WiCS) clinic in Primary Care compared to treatment as usual in the Department of Primary Care at WBAMC impact timely access to effective contraception, the rate of contraceptive counseling, LARC procedures (IUD/Nexplanon), and SARC prescribing?

Names of DNP Project Team Mentors (*type the name and obtain signatures*):




I agree to serve as a member of the DNP Project Team (Team Mentors) for the above DNP Student Project Team. As a Project Team Mentor, I agree to the duties and responsibilities outlined within the DNP Project Manual which include but are not limited to the provision of consultation and guidance supporting the entire DNP project journey and to ensure the DNP project is of sufficient rigor and demonstrates doctoral level scholarship to meet the requirements for USUHS GSN graduation.

Form Version: 1 Jun 2016






Daniel K. Inouye Graduate School of Nursing
DNP Project Team Mentor (Committee Membership) Agreement Form




NOTE: *You may have 3-4 DNP Team Mentors [committee members including your DNP Senior Mentor (Chair)]. The Phase II Site Director may also be a member of the group, as well as other USUHS faculty or others who may serve as content experts. All non-USUHS faculty selected as a Team Mentor must be approved by the DNP Project Director.*

Senior Mentor (Chair):	Lt Col Natasha Best	Signature:	 BEST.NATASHA.I DETA.1017708100 <small>Digitally signed by BEST.NATASHA.I DETA.10177081 00 Date: 2023.04.24 14:24:42 -0400</small>	Date:	4/24/2023
Team Mentor (Committee):	LTC Cindy Roberts	Signature:	 ROBERTS.CINDY.LA TRICE.1109086742 <small>Digitally signed by ROBERTS.CINDY.LATRICE.1109 086742 Date: 2023.04.24 15:04:07 -0400</small>	Date:	4/24/2023
Team Mentor (Committee):	LTC Deanna Sheets	Signature:	 SHEETS.DEANNA MARIE.1258631761 <small>Digitally signed by SHEETS.D'EANNA.MARIE.125863 1761 Date: 2023.01.26 00:13:11 -0500</small>	Date:	4/25/2023
Team Mentor (Committee):	_____	Signature:	_____	Date:	_____

Appendix H

DNP Student Team CITI Certificates

		Completion Date 14-Apr-2021 Expiration Date 13-Apr-2024 Record ID 41999635
This is to certify that:		
<p>Lakia Stewart</p>		
Has completed the following CITI Program course:		
Not valid for renewal of certification through CME.		
<p>OUSD P&R Human Research <small>(Curriculum Group)</small> Biomedical Investigators and Research Study Team <small>(Course Learner Group)</small> 1 - Basic Course <small>(Stage)</small></p>		
Under requirements set by:		
<p>Office of the Under Secretary of Defense (Personnel and Readiness)</p>		
 Collaborative Institutional Training Initiative		
Verify at www.citiprogram.org/verify/?w825dd1ec-5442-455b-8042-7ec6793df94d-41999635		

		Completion Date 13-Apr-2021 Expiration Date 12-Apr-2024 Record ID 42039661
This is to certify that:		
<p>Monique Vance</p>		
Has completed the following CITI Program course:		
Not valid for renewal of certification through CME.		
<p>OUSD P&R Human Research <small>(Curriculum Group)</small> Biomedical Investigators and Research Study Team <small>(Course Learner Group)</small> 1 - Basic Course <small>(Stage)</small></p>		
Under requirements set by:		
<p>Office of the Under Secretary of Defense (Personnel and Readiness)</p>		
 Collaborative Institutional Training Initiative		
Verify at www.citiprogram.org/verify/?w74e92a86-9899-4472-9305-d46418c14227-42039661		

Appendix I

USU (VPR) Form 3202N

USUHS FORM 3202N

DANIEL K. INOUE GRADUATE SCHOOL OF NURSING

EVIDENCE-BASED PRACTICE/PERFORMANCE IMPROVEMENT PROPOSAL

VPR Date Stamp

Project Number: 22-16310 (VPR will assign)

Project Title: Implementation of a Same-Day Contraception Clinic in Primary Care at William Beaumont Army Medical Center

SECTION A: STUDENT POC INFORMATION	
1. Name (Last, First, MI): Vance, Monique, R.	Student E-mail: monique.vance@usuhs.edu
2. Home Address: [REDACTED]	Cell Number: [REDACTED]
SECTION B: COMMITTEE CHAIR / SENIOR MENTOR INFORMATION	
3. Name (Last, First, MI): Best, Natasha, I.	
[REDACTED] Fax:	E-mail: natasha.Best@usuhs.edu
5. USUHS Building/ Room No.: USUHS Bldg E/Room No 1053	
SECTION C: PROJECT INFORMATION	
6. Attach the Abstract for the proposal, including the following sections: Site Location of the Project, Title, Authors, Background or Problem/Issue, Clinical Question/Purpose, Project Design, Anticipated Organizational Impact/Implications for Practice and also include the Proposed Timeline. Single space the abstract and use Times New Roman font, size 12.	
7. Is this proposal related to an active research project of the Chair/Senior Mentor identified in Section B? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, complete below; if no, proceed to Part 8. Project Number: _____ Project Title: _____ Project Start Date: _____ Project End Date: _____	
8. Anticipated period of performance: Project Start Date: 18 Nov 2022 Project End Date: 30 April 2023	
9. Performance Site(s): Mendoza Soldier Care Clinic (WBAMC)	
10. Does this project involve any classified information? (Contact the USUHS Security Office for guidance) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
11. Do you have a funding source for this project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA If yes, specify the funding agency and the amount provided:	
SECTION D: SIGNATURES	
The following signatures attest to the validity of the above information:	
VANCE.MONIQUE.RENAE.1243310390 Digitally signed by VANCE.MONIQUE.RENAE.1243310390 Date: 2022.11.20 16:39:19 -07'00'	Chair/Senior Mentor (Signature and Date)
JOHNSON.HEATHER.L.1073935110 Digitally signed by JOHNSON.HEATHER.L.1073935110 Date: 2022.11.21 08:26:32 -05'00'	Chair/Program Director (Signature and Date)
[REDACTED] DNP Project Director or PhD Director (Signature and Date)	SEIBERT.DIANE.C.1084932279 Digitally signed by SEIBERT.DIANE.C.1084932279 Date: 2022.11.20 21:10:56 -05'00'
SIMMONS.ANGELA.MARIE.1143313375 Digitally signed by SIMMONS.ANGELA.MARIE.1143313375 Date: 2022.11.21 15:03:00 -05'00'	Associate Dean for Academic Affairs, GSN (Signature and Date)
[REDACTED] Associate Dean for Research, GSN (Signature and Date)	ROMANO.CAROL.A.1032050294 Digitally signed by ROMANO.CAROL.A.1032050294 Date: 2022.11.22 00:04:50 -05'00'
[REDACTED] USUHS Vice President for Research (Signature and Date)	Dean, DKU Graduate School of Nursing (Signature and Date)
In light of the above signatures, the project is approved.	
WOODBERRY.MITCHELL.WAYNE.1080957114 Digitally signed by WOODBERRY.MITCHELL.WAYNE.1080957114 Date: 2023.03.09 10:02:24 -05'00'	Date

Appendix J

WBAMC e-IRB Letter of Determination



DEPARTMENT OF THE ARMY
WILLIAM BEAUMONT ARMY MEDICAL CENTER
18511 Highlander Medics Street
Fort Bliss, Texas 79918

MCHM-DQS

10 November 2022

MEMORANDUM FOR LTC Deanna Marie Sheets, DNP, Principal Investigator, USU Phase II Site Director, Hospital Education, William Beaumont Army Medical Center (WBAMC)

SUBJECT: Not Research Status Determination

STUDY TITLE: Implementation of a Same-Day Contraception Clinic in Primary Care at William Beaumont Army Medical Center

EIRB PROTOCOL #23-03

EIRB Reference #955367

REVIEW TYPE: Administrative

ACTION: NOT RESEARCH STATUS DETERMINATION

DETERMINATION DATE: 10 November 2022

1. This letter is in response to your request for a “not research” determination for the above-referenced project. The following documents were reviewed:
 - a. Initial Review Submission Form – (Version 1.0)
 - b. EIRB Protocol Template – (Version 1.1)
2. A William Beaumont Army Medical Center (WBAMC) Exemption Determination Official has reviewed your proposed project and has determined that your project does not meet the definition of research as defined under 32 CFR 219.102(l).
3. Research is defined under 32 CFR 219.102(l) as follows:

“Research means a systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge.”
4. Based on the information you provided, the proposed project does not meet the definition of research because:

MCHM-DQS

SUBJECT: Not Research Status Determination

- a. The project is not a systematic investigation. The current project's intent is to improve soldier readiness by improving the access to family planning counseling and timely contraception.
 - b. The current project is not designed to contribute to generalizable knowledge. Rather it is an evidence-based quality improvement project to implement a same-day contraception services walk-in clinic in a primary care setting at William Beaumont Army Medical Center.
5. Because this project has been determined to be "not research," it is not subject to further review by the Institutional Review Board (IRB). **This determination should not be construed as approval to initiate the project.** Other institutional approvals may be required and should be coordinated through your department.
6. Any collection of information via surveys as defined by DoDI 8910.01 must comply with DoDI 1100.13 "DoD Surveys." It is the responsibility of the Project Lead to ensure that any additional reviews and approvals specific to these regulations are obtained.
7. Your project may become research subject to IRB review if it is modified to include a systematic investigation to develop or contribute to generalizable knowledge. Please notify the WBAMC Human Research Protections Program Office of any proposed modifications to the project that may result in a change in status.
8. Publication clearance is required prior to the release of any information outside of the institution. Please contact the WBAMC Department of Clinical Investigations (DCI) for specific requirements.
9. The POC for this determination is the Human Research Protections Program Office, William Beaumont Army Medical Center at (915) 569-3777.

Signature applied by Edna Rath on
11/10/2022 04:13:47 PM CST

WBAMC Determination Official

Appendix K

Public Affairs Office Publication Clearance Memo



DEFENSE HEALTH AGENCY
WILLIAM BEAUMONT ARMY MEDICAL CENTER
18509 HIGHLANDER MEDICS STREET
FORT BLISS, TEXAS 79918-8005

MCHM-DCI

17 April 2023

MEMORANDUM FOR MAJ Monique Vance, MSN, RN, AN, Department of Education, William Beaumont Army Medical Center (WBAMC), 18511 Highlander Medics St., Fort Bliss, TX 79918-8005

SUBJECT: Clearance of the Poster entitled "Implementation of a Same-Day Contraception Clinic in Primary Care at William Beaumont Army Medical Center" for presentation at USU Research Week.

1. Under the provision of AR 360-1, The Public Affairs Office, Readiness Division, and the Department of Clinical Investigation have cleared the subject material for presentation. It is approved with the stipulation that the following disclaimer be reflected on any written or oral publication: "The views expressed in this publication are those of the author(s) and do not reflect the official policy or position of William Beaumont Army Medical Center, Department of the Army, Defense Health Agency, or the US Government."
2. The subject material is cleared for the sole and specified purpose of presentation at USU Research Week. Any changes to the material submitted will require a subsequent clearance review prior to publication. Reuse of this approval is not authorized, as review and approval are required for every proposed use of the material.
3. If approached by the media for questions or comments regarding this material, please refer them to the WBAMC public affairs office or notify the WBAMC public affairs office as soon as possible thereafter if avoiding the interview is not an option.
4. The point of contact for this memorandum is the undersigned, William Beaumont Army Medical Center at (915) 569-3776; nicole.l.rowley.mil@health.mil.

X
20

ROWLEY.NICOLE LEIGH.12576199
Digitally signed by ROWLEY.NICOLE.LEIGH.1257619920
Date: 2023.04.17 12:11:13 -06'00'

MAJ Nicole Rowley, DVM, VC
Acting Chief, WBAMC-DCI



DEFENSE HEALTH AGENCY
 WILLIAM BEAUMONT ARMY MEDICAL CENTER
 18509 HIGHLANDER MEDICS STREET
 FORT BLISS, TEXAS 79918-8005

MCHM-DCI

4 May 2023

MEMORANDUM FOR MAJ Monique Vance, MSN and CPT Lakia Stewart, MSN, Education Division, William Beaumont Army Medical Center (WBAMC), 18511 Highlander Medics St., Fort Bliss, TX 79918-8005

SUBJECT: Clearance of the Abstract and Manuscript entitled "Implementation of a Same-Day Contraception Clinic in Primary Care at William Beaumont Army Medical Center" for presentation at Uniformed Services University (USU) Research Days 2023: Celebrating Excellence in Research.

1. Under the provision of AR 360-1, The Public Affairs Office, Readiness Division, and the Department of Clinical Investigation have cleared the subject material for presentation. It is approved with the stipulation that the following disclaimer be reflected on any written or oral publication: "The views expressed in this publication are those of the author(s) and do not reflect the official policy or position of William Beaumont Army Medical Center, Department of the Army, Defense Health Agency, or the US Government."
2. The subject material is cleared for the sole and specified purpose of presentation at Uniformed Services University (USU) Research Days 2023: Celebrating Excellence in Research. Any changes to the material submitted will require a subsequent clearance review prior to publication. Reuse of this approval is not authorized, as review and approval are required for every proposed use of the material.
3. If approached by the media for questions or comments regarding this material, please refer them to the WBAMC public affairs office or notify the WBAMC public affairs office as soon as possible thereafter if avoiding the interview is not an option.
4. The point of contact for this memorandum is the undersigned, William Beaumont Army Medical Center at (915) 569-3776; nicole.l.rowley.mil@health.mil.

X 0

ROWLEY.NICOLE.
LEIGH.125761992

Digitally signed by
ROWLEY.NICOLELEIGH.12576
19920
Date: 2023.05.04 20:24:16
-06'00'

MAJ Nicole Rowley, DVM, VC
Acting Chief, WBAMC-DCI

Appendix L

DNP Project Completion Verification Form (Signed)



Daniel K. Inouye Graduate School of Nursing DNP Project
Completion Verification Form

DOCTOR OF NURSING PRACTICE PROJECT Completion Verification Form

The DNP Project titled:

Implementation of a Same-Day Contraception Clinic in Primary Care at William Beaumont Army Medical Center

was completed at: Fort Bliss, Texas

by the following student(s):

(Student Name)

(Digital Signature)

MAJ Monique R. Vance

VANCE.MONIQUE. RENAE.1243310390
Digitally signed by VANCE.MONIQUE.RENAE.1243310390
Date: 2023.04.27 00:02:29 -0600

CPT Lakia S. Stewart

STEWART.LAKIA.SHANTRELL.1046582680
Digitally signed by STEWART.LAKIA.SHANTRELL.1046582680
Date: 2023.04.27 00:11:35 -0600

The DNP Practice Project Team verifies that the following components of the DNP project, accomplished by the above students, is of sufficient rigor and demonstrates doctoral level scholarship to meet the requirements for USUHS GSN graduation:

- Presentation of DNP project to the leadership/stakeholders at the Phase II Site,
- Abstract/Impact Statement (*Appendix F*), and
- DNP Project written report.

Verified by:

(Type name)

(Signature)

Senior Mentor: Lt Col Natasha Best

BEST.NATASHA.ID.ETA.1017708100
Digitally signed by BEST.NATASHA.ID.ETA.1017708100
Date: 2023.04.27 12:40:37 -0400

Senior Mentor: LTC Cindy Roberts

ROBERTS.CINDY.LA.TRICE.1109086742
Digitally signed by ROBERTS.CINDY.LA.TRICE.1109086742
Date: 2023.04.27 13:43:54 -0400

Phase II Site

Director: LTC Deanna Sheets

SHEETS.DEANNA.MARIE.1258631761
Digitally signed by SHEETS.DEANNA.MARIE.1258631761
Date: 2023.04.27 10:25:20 -0600

For RNA Students only - add the following additional signature for final verification of project completion:

RNA Project Director (*type name*)

(*Signature*)