Implementing a Toolkit to Improve Sexual Assault Screening in the College Student Population

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Notes from the Author

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Abstract

There are several recommendations available for sexual assault screening, though there is no specific benchmark in place. The presence of sexual assault among the college student population is significant. Early identification of sexual assault can improve the outcomes of associated persistent and long-term medical, psychological, and social consequences. This quality improvement project aimed to improve sexual assault screening in a primary care setting that serves a college campus. There was no standardized screening process in place before this project. A toolkit was implemented to include a standardized screening process, development of a Clinical Resource Guide, and a provider education session on toolkit components. Implementation of this toolkit resulted in 92% of eligible patients receiving screening, a significant improvement in sexual assault screening.

Keywords: sexual assault, screening, standardized screening process, toolkit, college student

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Section I. Introduction

Background

This DNP project partnered with a Student Health Services (SHS) organization that serves as a primary care clinic on a North Carolina university campus. The SHS mission is "to provide an accessible quality program of primary health care services relevant to the needs of eligible members of the University Community" (East Carolina University [ECU], 2020c). The college student population faces the ongoing public health issue of sexual assault. Early identification of patients who have experienced sexual assault can result in the prevention of the associated persistent and long-term medical, psychological, and social consequences (American College of Obstetricians and Gynecologists [ACOG], 2019). Screening is a commonly used method of secondary prevention to prevent the consequences of a condition through early identification. It is performed in asymptomatic patients at risk for the specified condition, such as sexual assault in the college student population (Sutherland & Hutchinson, 2019).

Organizational Needs Statement

The organization identified a need to improve their current process of how patients are being screened for sexual assault during their visits, as the population they serve is at an increased risk (L. Wright, personal communication, March 4, 2020). Of both male and female graduate and undergraduate students, 11.2% of all students experience rape or sexual assault (Rape, Abuse & Incest National Network [RAINN], 2020a). Nearly 80% of women who report being a victim of rape report the first incidence before the age of 25 years, while 41% of these women report the first incidence before the age of 18 years (ACOG, 2019). There was initially no standardized process in place for sexual assault screening or for addressing a positive screen. The organization's only available method to prompt sexual assault screening by providers was

the optional use of a Review of Systems checklist in the Electronic Medical Record (EMR). The safety section of this checklist included a question asking if the patient had felt threatened or abused. This checklist was available within the subjective portion of the EMR for any patient encounter (L. Wright, personal communication, March 4, 2020). A retrospective chart review revealed that this screening method was utilized in 28% of female physical exam visits. This review included 109 charts one year before project implementation. There was no documentation of sexual assault in any of these charts (M. Keel, personal communication, March 23, 2021).

There are currently no specific National benchmarks regarding sexual assault screening; however, there are several guidelines to improve this process. ACOG (2019) recommends all women's healthcare providers and obstetrician-gynecologists routinely screen every female patient for sexual assault. US Preventive Services Task Force (2018) recommends providers screen for intimate partner violence among any female of reproductive age. The Family Violence Prevention Fund (2004) also created a set of guidelines for domestic violence victimization that recommend screening all adolescents and adults as a part of routine health histories, initial visits, annual visits, and periodic health assessments. Healthy People 2020 discuss a goal to "prevent unintentional injuries and violence and reduce their consequences," including sexual violence (Office of Disease Prevention and Health Promotion [ODPHP], 2020, Goal section). Healthy People 2020 also note a need for a better understanding of the trends of sexual violence as well as the causes and strategies for prevention (ODPHP, 2020).

The need for improvement in sexual assault screening also intersects with the Triple Aim, which is a framework that was developed to enhance healthcare through the improvement of the experience of care and population health, as well as a reduction in healthcare cost (Institute for Healthcare Improvement [IHI], 2020). Improving sexual assault screening can help initiate the

conversation of the patient's potential risk for sexual assault, focus on their well-being, and enhance their experience of care. This can also improve population health through early identification of sexual assault, allowing the earliest opportunity for referral, treatment, or prevention of the associated consequences. Preventing these consequences could reduce the cost of healthcare through the prevention of expenditure of healthcare dollars for treatment or management of potential long-term effects, including infection, substance use, and other mental health conditions (ACOG, 2019).

Problem Statement

College students are at an increased risk of experiencing sexual assault, which can result in long-term medical, psychological, and social consequences. Sexual assault screening can result in early identification of survivors and subsequent potential of preventing these consequences (ACOG, 2019). The organization's only available method to initiate this screening by providers in this clinic was the optional use of a Review of Systems checklist, but there was no standardized, recommended routine screening process in place (L. Wright, personal communication, March 4, 2020).

Purpose Statement

The purpose of this project was to implement a mandatory, standardized toolkit addressing sexual assault at a primary care clinic that serves the college student population. This toolkit included a standardized screening process, Clinical Resource Guide for patient use, and education for providers on toolkit components.

Section II. Evidence

Literature Review

A Literature Search Log was utilized to guide this literature search (See Appendix A). A Literature Matrix was then used to collect details of the articles kept from this search (See Appendix B). Four databases were used with similar search strategies, including PubMed (New), CINAHL (EBSCOhost), ProQuest Nursing & Allied Health Source, and Google Scholar. A total of 15 resources were kept through the following searches.

PubMed (New) and CINAHL (EBSCOhost) were initially searched with the Boolean phrase (sexual assault) AND (screening) AND (college student). Limits set for these searches included publication within the last five years, English language, abstract available, and adolescent and adult ages. Additionally, the academic journal source limit was set for CINAHL (EBSCOhost). After limits were set, 16 and 36 articles were found in PubMed (New) and CINAHL (EBSCOhost), respectively. Inclusion criteria included discussing screening or a recommendation for college services, a focus on the college population, and an evidence level of IV or better to ensure that strong evidence was used to support the project. Exclusion criteria included discussing something other than sexual assault or a similar concept and a primary age group other than adolescents or adults. After applying these criteria, four articles were kept from PubMed (New), and two were kept from CINAHL (EBSCOhost).

ProQuest Nursing & Allied Health Source and Google Scholar were then utilized for similar literature searches. The Boolean phrase (sexual assault) AND (improve screening) AND (college student) was used. The first limit set included publications within the last five years. Additional limits set for ProQuest included the English language and the subject of college students. Using the advanced search option for Google Scholar, further limits were set to include

the exact phrase, *sexual assault screening*, and at least one of the words, *college student*. These searches produced 12 and 33 articles for ProQuest and Google Scholar, respectively. Inclusion criteria included a discussion of sexual assault screening or service and an evidence level of IV or better to ensure that strong evidence was used to support the project. Exclusion criteria included a primary topic other than sexual assault or a similar term and a focus on a specific population other than college students. After these criteria were applied, one article was kept from each database.

After reviewing the sources discovered from these four databases, PubMed was utilized for an additional literature search. Upon use of the Boolean phrase (sexual assault) AND (improve screening) AND (college student), there were two results, neither of which were pertinent to this project. This phrase was then broadened to (sexual assault) AND screening, which produced 1,442 results. Limits set included publications within five years, abstract available, Human species, English language, child or adult ages, and article types to include guidelines, randomized controlled trials, and systematic reviews. This search then produced 30 results. The MeSH terms included early detection of cancer, mass screening, sexual behavior, and sexuality. Inclusion criteria were to discuss screening or recommendations for sexual assault identification and an evidence level IV or better to ensure that strong evidence was used to support the project. Exclusion criteria included a primary topic other than sexual assault or a similar term, a focus on the treatment of something other than sexual assault, a focus population younger than adolescents, or a focus population of older adults. After applying these criteria and assessing for applicability to this project, seven sources remained.

Current state of knowledge

University student health centers provide a vital opportunity to address sexual assault through screening practices. Due to the alarming presence of sexual assault in the college student population, there is a need for the development of a standardized screening process and policies for student health centers (Moscou, 2015). The American College Health Association (ACHA) recommends that student health centers screen for sexual violence during all patient health histories (Halstead et al., 2017). Many student health centers do screen for sexual violence or general abuse, but few utilize effective strategies, such as universal and routine screening as well as the use of a consistent screening tool. Currently, there is a lack of best practice guidance and literature regarding how to approach and conduct these screenings (Halstead et al., 2017).

Much of the literature available continued to focus on establishing and recommending the need to create an approach that encompasses screening, education, and referral (Fantasia et al., 2018). The American College of Obstetricians and Gynecologists [ACOG] (2019) emphasizes the SAVE Model Protocol, which focuses on screening all patients, asking questions directly and without judgment, validating the patient, as well as evaluating, educating, and referring as appropriate. They also discuss the significance of provider ability to recognize the health consequences of sexual assault, including mental health, infection, and pregnancy. Their recommendation includes incorporating a framework to assess these needs of survivors (ACOG, 2019).

Current approaches to solving population problem(s)

Although there is evidence to establish the need for sexual assault screening in the college student population, few guidelines or approaches were discussed in the literature regarding how to improve this screening. One of the recommended approaches discussed most

frequently in the literature was to incorporate screening questions into the Electronic Medical Record (EMR) (Fantasia et al., 2018; Halstead et al., 2017). Moscou (2015) discussed implementing this approach by embedding survey questions into their EMR women's health template.

There was also discussion in the literature regarding the management of patients who are survivors of sexual assault. An approach discussed in the literature included utilizing a pathway that addressed standards for treating victims of sexual assault (Gilles et al., 2019). This included assessing for the presence of a sexually transmitted disease, prophylactic antibiotic use, pregnancy testing and emergency contraception, as well as follow-up for psychological and medical treatment as indicated. This approach was paired with educational sessions for providers, ensuring they were knowledgeable of how to implement the tool and resulted in an increase of optimal care for this population (Gilles et al., 2019).

After reviewing and discussing the approaches found in the literature with the partnering organization, the incorporation of both approaches was chosen for this project. The primary approach included embedding sexual assault screening questions into the clinic's EMR. Since positive screening may warrant intervention or referral by the provider, the approach to implement a Clinical Resource Guide was also chosen. This would be introduced to the providers through an educational session for its purpose, as recommended by this approach (Gilles et al., 2019). These approaches were combined to create an electronic toolkit to increase sexual assault screening and provide the appropriate resources for providers.

Evidence to support the intervention

Though there were limited studies to show its effectiveness, embedding screening questions into the EMR was frequently recommended in the literature that discussed the

improvement of sexual assault screening. Moscou (2015) found that embedding screening questions into the EMR helped initiate the discussion between patients and providers and showed the potential to increase screening. Halstead et al. (2017) found that the majority of student health centers that complete sexual violence screening do so with the use of their EMR. EMRs are useful tools to conduct this screening, and some providers depend on their EMR to complete this screening (Halstead et al., 2017). Implementing a standardized screening process by embedding screening questions within the student health center's EMR provides an opportunity to improve sexual assault screening in the at-risk population they serve.

Implementing pathways for the management of sexual assault victims was also supported by limited studies. These studies focused on care delivered in the emergency department; however, they have increased patients' likelihood of receiving the recommended prophylaxis for sexually transmitted infections and unwanted pregnancy (Schilling et al., 2015). Gilles et al. (2019) found that implementation of a pathway and instructional, educational sessions with providers led to a radical improvement of care from 10% to 90% of appropriately delivered care. Due to the known presence of sexual assault in their patient population, student health center providers must be prepared to manage sexual assault screening results. The incorporation of a Clinical Resource Guide for these providers will assist in the management of patients with a positive screening result.

Evidence-Based Practice Framework

Identification of the framework

This project was implemented based on the Model for Improvement. The Model for Improvement is comprised of two parts and can be applied to support an effort for improvement. The effort for improvement in this project was to improve sexual assault screening. The first part

of this framework includes a series of three questions that are utilized to form the foundation for improvement and can be answered in any order. These questions address what is to be accomplished by the change, how to know if a change will lead to improvement, and what changes can be made to produce this improvement (Langley et al., 2009). For this project, the project intervention, or change, was the sexual assault screening toolkit. This change accomplished the establishment of a standardized sexual assault screening process. Improvement was recognized through provider utilization of the toolkit.

The second part of the Model for Improvement includes the Plan-Do-Study-Act (PDSA) cycle. This cycle begins with the *plan* by planning the implementation. Next, *do* includes testing the plan, followed by the *study* of the results. Lastly, the next action, or *act*, is developed based on what was learned in the cycle (Langley et al., 2009). The PDSA cycle can be used consecutively, refining and executing the improvement process on larger scales with each cycle. This consecutive cycling creates a loop of continuous learning from the prior cycle; therefore, this project could be improved and implemented again based on what was learned during the first cycle (Langley et al., 2009).

Ethical Consideration & Protection of Human Subjects

This project's intervention primarily involved providers. The initial educational session regarding the toolkit was presented to all providers by the DNP student during a regularly scheduled staff meeting designated for educational in-services. Attendance of these scheduled meetings were strongly encouraged but not mandatory. This session was available for providers to attend in person or virtually to maintain social distancing during the COVID-19 pandemic. All providers received a copy of the presentation via email as well, so if a provider was not present during this session, they had access to the presentation. The electronic version of the presentation

also served as a means for reiteration of the information for providers during the implementation period. Providers not present at the initial education session also had the opportunity to meet with the DNP student to review the presentation individually. Potential harms were limited to the potential for discomfort for the provider or patient when discussing the sensitive topic of sexual assault. Providers within the project site were already expected to be able to discuss such topics. In addition, this conversation can lead to positive patient outcomes, demonstrating more benefit than harm. The nature of this project yielded no potential that anyone in this target population would be taken advantage of during project implementation.

Another ethical consideration included legal implications for reporting. These implications rely on state confidentiality laws, and this project took place in a state that does not require disclosure of information gathered from sexual assault victims (Rape, Abuse & Incest National Network [RAINN], 2020b). Additionally, the use of patient identifiers is addressed in the data collection process discussion in Section III. Data collection included reviewing eligible charts, screening answers, and documentation of the use of the Clinical Resource Guide. Patient identifiers were limited to the last three numbers of the medical record number (MRN) to aid in the data collection process; however, patients were primarily referred to by an informally assigned identifying variable. Data was collected using a password-protected computer only accessible by the DNP student and project site champion maintained in a locked, secure place at all times. This process ensured that there would be no breach of patient confidentiality throughout the chart review process.

The project site did not require any specific approval process or Institutional Review Board (IRB); therefore, this project only required the completion of the university's formal project approval process. This process classifies projects as quality improvement (QI) or

research. If classified as a research project, a full IRB review by the university is required. To prepare for the university's formal approval process, the completion of appropriate Collaborative Institutional Training Initiative (CITI) modules was required. These modules are utilized to develop a strong foundation of knowledge regarding ethical research. The Social and Behavioral CITI modules were most appropriate for this project and chosen for completion to prepare for the university's approval requirements. After completing the university's formal project approval process, the project was deemed QI in nature and was exempt from a full IRB review (See Appendix C).

Section III. Project Design

Project Site and Population

This project was completed within a Student Health Services (SHS) organization located on a North Carolina university campus. This project site provides primary care services for the college student population attending this university. Serving this population facilitates the opportunity to improve screening for prominent public health issues among students, such as sexual assault. A barrier to this goal included the lack of a standardized sexual assault screening process within this organization as well as limited recommendations on how to implement this process. Additional barriers included limited time for project implementation and that providers may view the new screening process as an addition to their workload.

Description of the Setting

This university's SHS is comprised of two locations, one on the university's main campus and one on a satellite campus that is home to various specialized programs within the university. The main campus clinic is located in its own building, in a central area of main campus, while the satellite clinic is located within the satellite campus' student center. SHS sees approximately 200 patients each day, leading to a total of 32,000 patient visits or more each year (L. Wright, personal communication, June 25, 2020). SHS is typically open Monday through Friday during regular business hours. The main campus location is also open on Saturday and Sunday mornings for urgent issues. Additionally, they offer a 24-hour nurse line available for patients who need to discuss an issue (East Carolina University [ECU], 2020d).

Both clinic locations serve as primary care clinics and offer services, including general medical care, immunizations, select lab services, LGBTQ+ health, referrals, and reproductive health services (ECU, 2020a). The main campus location offers several additional services,

including allergy injections, nutrition, personal safety and sexual assault, pharmacy, triage care, and x-rays (ECU, 2020b). Patients who are eligible to receive services from the SHS include students who are enrolled in on-campus or distance education courses. Office visit charges are covered with payment of a Health Service Fee included in tuition fees. Distance education students may not be required to pay this tuition-based fee and are subject to an additional per-visit fee. SHS extends pharmacy services to university employees, but students' spouses or dependents are not eligible for general services (ECU, 2020e).

Description of the Population

The project purpose of improving sexual assault screenings primarily involved the SHS providers. Of these providers, there are eight nurse practitioners, two physician assistants, and four physicians of various levels and experience (L. Wright, personal communication, June 25, 2020). One provider primarily works at the satellite location, but other providers may rotate to this location when needed. Providers also rotate weekly to serve as the triage provider, available at the main campus location. Triage providers often see patients with urgent concerns without an appointment.

Patients who visit this clinic primarily include undergraduate and graduate students who are enrolled in on-campus or distance education programs (ECU, 2020e). Students who are eligible to receive services include those who paid the health fee for the current semester. There were 17,609 eligible students during the implementation period. Of these students, ages ranged from 17 to 73 years. The majority of these students, 82.16%, were between 18 and 22 years of age. The most common race of eligible students was white, 73.31%, followed by Black or African American, 16.01%. There were 56.73% eligible students who identified as female,

42.91% who identified as male, 0.34% who identified as genderqueer, and 0.03% who identified as transgender or another gender (K. White, personal communication, October 19, 2020).

Project Team

The project team was primarily composed of a DNP student, DNP faculty member, and project site champion. The DNP student served as the team leader and was responsible for maintaining continuous advancement towards completing the project and maintaining communication with all team members regarding project progress. They were also responsible for completing the literature review, identifying evidence-based practice, and collecting and analyzing the data. It was essential for the DNP student to utilize leadership and communication skills to ensure success in this role. The DNP faculty team member was a doctorally prepared member of the university's College of Nursing. Faculty team members are paired with students based on their interests and areas of expertise. The primary role of the DNP faculty member was to mentor and guide the DNP student throughout the project process. They were also responsible for evaluating student work and promoting timely completion of the project (Moran et al., 2020). The final member of the project team included the project site champion. The site champion for this project served as the director and was one of the providers at the SHS. The role of the site champion was to guide the student in navigating their project at their site, provide their expertise, and assist them with any barriers (Moran et al., 2020). The site champion also assisted in identifying the organizational need and coordinating communications with clinic staff members. Each of these team members was responsible for evaluating the progress of the project and contributing to project success.

Additional team members included the project site Tech Specialist, Nurse Director, and Nurse Manager. The Tech Specialist served as a vital team member, as they assisted with

technical aspects of the project. This included creating and embedding the screening questions into the Electronic Medical Record (EMR), embedding the Clinical Resource Guide into the EMR, assisting with data collection, and assisting with changes throughout project implementation. The Nurse Director's role included formatting the Clinical Resource Guide with the appropriate layout and letterhead. The Nurse Manager's role included communicating with the nursing staff regarding changes to the screening process.

Project Goals and Outcome Measures

The primary goal of this project was to improve sexual assault screening at a primary care clinic that serves the college student population. The project intervention developed to address this goal was the implementation of a toolkit that encompassed a standardized screening process for sexual assault. This was completed through implementation of a standardized screening process, utilization of a Clinical Resource Guide, and education for providers on toolkit components. Outcome measures included the implementation of a standardized screening process, sexual assault screening completion, and Clinical Resource Guide use.

Description of the Methods and Measurement

Project approval began with the completion of any specific approval process or Institutional Review Board (IRB) required by the project site or the university. The project site did not require any specific approval process, so this project only required completion of the university's formal project approval process. This formal project approval process classifies projects as quality improvement (QI) or research. A full IRB review by the university is required only for projects classified as research. The Social and Behavioral Collaborative Institutional Training Initiative (CITI) modules were most appropriate for this project and were completed to prepare for this formal approval process. These modules contributed to the development of a

strong foundational knowledge of ethical research. After completing this formal project approval process, this project was deemed QI, and a full IRB review was not indicated (See Appendix C).

Planning for project implementation required the selection and development of various tools and resources. As the Project Implementation Tool, the Plan-Do-Study-Act (PDSA) cycle was chosen to guide the implementation phase of the project as a part of the chosen framework, the Model for Improvement. The PDSA cycle allows for the opportunity to improve and learn from each cycle of implementation. It was utilized at least every two weeks during and as indicated throughout the implementation process. The chosen Project Tracking Tool, the run chart, was utilized to track changes made throughout implementation by applying data collected with the Data Collection Tool. The Data Collection Tool (Appendix D) was developed to collect data for each week of implementation. This data included if screening was completed, if the screening was positive, and if the Clinical Resource Guide was used. Screening compliance was also analyzed from this data using the number of patients screened from those who were eligible for screening.

Before project implementation began, the DNP student led an educational session to prepare the providers for their role in this project. This session took place during a regularly scheduled staff meeting that was designated for educational in-service presentations. All project site staff were invited to this presentation, and attendance was strongly encouraged. Due to the COVID-19 pandemic, this session could be attended through a live streaming service in addition to in-person attendance. A PowerPoint presentation (Appendix E) was developed for this session to educate the providers on the significance and purpose of the project, the toolkit components, and the expectations of the providers. This PowerPoint presentation was emailed to all of the providers after the educational session to provide the opportunity to review the information if

they were unable to attend. This also provided the opportunity to review the information throughout the implementation period.

Five screening questions were chosen by the DNP student and site champion by combining questions from two sets of literature-suggested screening questions (See Appendix F). These questions were originally formatted to provide only yes or no responses. To improve screening completion, an additional answer choice was added during implementation if the patient preferred not to answer a question. Positive screenings were identified based on the patient's yes or no response. If the patient chose the response stating they preferred not to answer a question, the screening was also considered positive.

For this project, the DNP student and site champion also determined that sexual assault screening would be indicated for specified visit types and as indicated based on assessment findings and provider judgment. Visit type is determined and assigned when the patient makes their appointment, either electronically or via phone. This clinic uses a collection of visit types to label the overall purpose of a patient's visit. The specified visit types chosen to require screening for this project included GYN Problems, Pap with Birth Control, and Pap without Birth Control. These visits were chosen to focus on screening female patients during episodic and annual visits, based on the following recommendations. The American College of Obstetricians and Gynecologists (2019) recommends all women's healthcare providers and obstetrician-gynecologists routinely screen every female patient for sexual assault. The US Preventive Services Task Force (2018) recommends screening any female of reproductive age for intimate partner violence. The Family Violence Prevention Fund (2004) recommends screening all adolescents and adults as a part of routine health histories, initial visits, annual visits, and periodic health assessments.

Screening questions were then electronically embedded within the electronic check-in process for these specific visits. Patients were to complete these questions while checking in for their appointment. Prior to COVID-19, patients completed check-in and any applicable forms using one of the kiosks at the front desk. These kiosks were removed to prevent transmission of COVID-19. Instead, patients were to complete these forms and screenings online before their visit. Because of this change, nursing staff and providers became responsible for ensuring the completion of missing forms. The provider was then responsible for reviewing the screening answers with the student during their visit and filing them into the patient's EMR. The screening question template was also accessible to providers within the EMR to utilize during other visit types upon their discretion.

The Clinical Resource Guide (Appendix G) was developed to serve as a resource for providers to present to patients as indicated. This guide included available local resources for patient use. At the start of implementation, the Clinical Resource Guide became available to providers in the EMR's education resource within the patient encounter. Providers had the option to print a hard copy or send the document electronically through a secure message to the patient's online portal. The appropriate option was to be chosen based on the patient's situation and the potential that sending the patient with a hard copy could trigger an adverse response by their partner.

This project encompassed three outcome measures. The first outcome measure, the implementation of a standardized screening process, was measured by compliance with the newly developed presence of this process, as it did not exist before project implementation. The second outcome measure, sexual assault screening completion, was the primary component of the toolkit and was measured with the Data Collection Tool. Credit was given once a completed

screening was filed into the patient's electronic record. The final outcome measure, Clinical Resource Guide use, was another component of the toolkit and was also measured with the Data Collection Tool. Once the provider selected the resource in the EMR to be printed or sent as a secure message, it populated the documentation of its use into the patient chart and received credit.

Discussion of the Data Collection Process

Data collection took place throughout the implementation period during a series of project site visits. The Data Collection Tool (Appendix D) was utilized during this process to collect data for each week of project implementation. Data was collected on charts of patients seen for the specified visit types and if a screening was completed independently by the provider. This was accomplished by electronically pulling all appointments identified as one of the chosen visit types, including GYN Problems, Pap with Birth Control, and Pap without Birth Control. Charts were reviewed of every patient on this list to complete each component of the Data Collection Tool. An additional electronic pull including all completed screening templates was used to evaluate for additional screenings completed outside of these specific visit types. These charts were then reviewed individually to collect the necessary data within the tool.

Data collected with this tool included the type of visit, if the sexual assault screening was completed, if the screening was positive, and if the Clinical Resource Guide was used. Additional data was added to this tool including positive screening responses and qualitative comments regarding how the provider addressed the screen within their note. The last three digits of the patient's MRN and the date of the encounter was also collected to aid the chart review process. An informally assigned number primarily identified each patient encounter. This number also assisted in keeping a total count of patients seen. At the end of the data collection

process, a run chart was used as the Project Tracking Tool to track the changes made with the project intervention. Further dissemination of the data took place following the completion of this process.

Implementation Plan

One week before implementation began, an educational session for providers was led by the DNP student. This session utilized a PowerPoint presentation (Appendix E) to provide education for providers on the project purpose, significance, and components of the intervention. Specific to the intervention, the screening questions, Clinical Resource Guide use, and the provider role was discussed. In addition, contact information for the DNP student was provided to ensure open communication and dialogue. The session took place in the staff conference room during a regularly scheduled staff meeting for all clinic staff. This was to ensure the highest participation. To attempt to maintain social distancing during the COVID-19 pandemic, this session was also available virtually. During this session, provider demographic information was obtained using an attendance log. This information included the provider name, role, and years of experience (See Appendix H). After the session was complete, the PowerPoint presentation was sent to all providers via email. This allowed access to the information for providers to refer to throughout project implementation and if they were unable to attend the session. An individual meeting could also be scheduled with the DNP student to review the project and presentation information.

Project implementation began on the first day of the week following the educational session. Intermittent site visits were scheduled every one to two weeks following the beginning of project implementation to complete data collection and meet with the site champion. These site visits also included interaction with providers to address any questions or concerns during

the implementation period. The PDSA cycle was utilized during each site visit to address any concerns and to improve the implementation process. Implementation was initially planned to take place over eight weeks. Due to several changes throughout this period and time availability, the implementation period was extended to continue over a total of twelve weeks. One final site visit took place after the end of implementation to complete the data collection process.

Timeline

After the initial educational session for providers, project implementation was completed over twelve weeks. This was an extension to the original implementation period of eight weeks. Site visits occurred intermittently, every one to two weeks, throughout this period. Appendix I displays the project timeline. The Project Implementation Tool, the PDSA cycle, assisted in adjustments to this timeline throughout the project implementation phase.

Section IV. Results and Findings

Results

The primary measures of this project included implementation of a standardized screening process, sexual assault screening completion, and Clinical Resource Guide use. The standardized screening process was measured by its use, as there was no standardized process prior to this project. Sexual assault screening completion was the primary component of the implemented toolkit and was measured using the Data Collection Tool (Appendix D). A screening was considered complete if each question was accompanied by an answer within the Electronic Medical Record (EMR). If any answer was missing or if the screening was not present within any patient encounter labeled as one of the pre-determined visit types (GYN Problems, Pap with Birth Control, and Pap without Birth Control), the screenings were considered incomplete. Since the discovery of incomplete screenings through the data collection process would occur after the actual screening date, there was no additional opportunity for providers to revise screenings identified as incomplete.

Positive screenings and Clinical Resource Guide use were also measured with the Data Collection Tool. A screening was considered positive if one or more questions were answered with a positive answer (Appendix F). Screenings that were deemed incomplete but included a positive response were included in the total number of positive screenings. This was decided after the discovery that some patients would choose not to answer specific questions for fear of discussion, still warranting attention and intervention by the provider. The provider could select to utilize the resource guide for patients with a positive screening. This was located within the Education portion of the Plan in the EMR. The provider could choose to print or electronically

send the Clinical Resource Guide to the patient based on their judgment. If the provider utilized this resource, their visit note would automatically document its use within their plan.

Measuring the use of a standardized screening process was simple, as initially expected, since there was no prior standardized process in place. The project goal for sexual assault screening completion was 100%. After the 12 weeks of project implementation, sexual assault screening completion averaged 92%. There were 341 total screenings completed of the 371 patients who were eligible for screenings. Of the 30 incomplete screenings, 15 were partially completed and 15 were missing from the patient's encounter in the EMR. Clinical Resource Guide use was initially expected to reflect the number of positive screenings. The Clinical Resource Guide was utilized a total of 13 times, and there were 87 positive screenings. This generated a 15% use of the Clinical Resource Guide per positive screening. This data was also gathered with the Data Collection Tool. Appendix J includes a visual display of toolkit use per week of implementation.

Additional data was collected to provide further meaning to the project measures. Supplemental information gathered with the Data Collection Tool included visit type and positive screening answers. Comments were also entered into the Data Collection Tool to support provider choice for utilizing the Clinical Resource Guide, such as patient declination. There were no screenings completed during visit types other than those pre-determined to require screening (GYN Problems, Pap with Birth Control, and Pap without Birth Control).

Demographic data of the providers within the project site was also collected during the initial educational session. This included their provider role, years of experience, and if they attended the session in person, virtually, or did not attend. Three physicians, two physician assistants, and six nurse practitioners attended the educational session. Two of these attended the

session in person, and the remaining providers attended virtually. Two nurse practitioners and one physician did not attend the session. The average number of years of experience among all of the providers was 14 years. Experience ranged from two years to 30 years.

Outcomes Data

Outcome measures of this project included sexual assault screening completion and Clinical Resource Guide use. Process measures of this project included the implementation of a standardized screening process. Quantitative data was primarily collected through these measures, but qualitative data was also collected to provide additional meaning. This included visit type, positive screening answers, and comments regarding provider choice to utilize the Clinical Resource Guide. Demographic data of project site providers was also collected during the initial educational session to describe the provider population utilizing the toolkit.

Discussion of Major Findings

Sexual assault screening improved overall within the project site by implementing the standardized screening process, aligning with the original expectation. Over the first several weeks of implementation, screening completion was not as high as initially expected. Screening completion dropped as low as 83% during week six of project implementation. This was thought to be due to changes in clinic routine during the COVID-19 pandemic. At the beginning of implementation, very few providers were seeing patients while the remaining providers assisted with campus efforts to increase COVID testing. As more providers began to return to seeing patients in the clinic and more patients were being seen, screening completion decreased. Verbal and email communication was conducted with the providers to reeducate and reinforce project measures. This helped to discover barriers to successful screening and improve overall screening completion.

Providers were able to review the screening with their patients and edit their response if they selected an answer by mistake. The providers were also able to discuss the Clinical Resource Guide with students who had a positive screening. The Clinical Resource Guide was successfully used for 15% of positive screenings. Many students opted not to receive the resource guide for various reasons. These included not wanting to discuss the situation they experienced with anyone, already utilizing resources for their experience, or if their experience occurred many years ago and they felt they no longer needed assistance. In these situations, providers verbally informed the patient of the resource guide availability should they need it later.

The Plan-Do-Study-Act (PDSA) cycle was utilized periodically throughout the implementation period to identify barriers and the need for change. There were several barriers identified that triggered adjustments to the original plan. These changes ultimately improved sexual assault screening completion to the level of initial expectation. The first identified barrier was that the EMR automatically locked the screening form without requiring providers to review screening answers. Many providers did not realize the screening form was present for review in the patient's chart, leading to incomplete screenings. This barrier was resolved with the Tech Specialist's assistance, who served as the project site's IT representative throughout project implementation.

Next, it was discovered that some patients did not want to answer specific screening questions, causing incomplete screenings. This barrier was resolved by adding an additional answer choice if the patient did not choose to answer a particular question. Providers were notified of this change and were to consider any screening with a "Prefer Not To Answer"

response as a positive screening, as this would warrant further discussion and assessment by the provider.

At the end of implementation, the remaining barrier was missing screenings due to patients not filling out required forms online before their visit. This was primarily due to visits made without an advanced appointment notice. This was also a change made due to the pandemic. Previously, patients completed all forms for their visit at check-in using a self-service kiosk at the front desk, which was removed to decrease the spread of the virus. With this change, the nursing staff and providers manually added screening forms to the patient's chart and reviewed the questions with the patient.

The implementation period was extended from eight to twelve weeks as a result of some of these adjustments. This allowed for more data collection to reflect on the changes and the ability to see improvement in toolkit utilization. At the end of implementation, improvement was seen with this extension.

Section V. Interpretation and Implications

Cost Benefit Analysis

Organizational costs associated with this project were minimal. This project primarily required additional time rather than people or money (Appendix K). Monetary costs were limited to printer paper for physical use of the Clinical Resource Guide. Additional tasks were added to the Tech Specialist's workflow, who works with information technology (IT) efforts within the project site. These tasks included a demonstration of data collection within the electronic medical record (EMR) as well as embedding and assisting with improvements to the electronic screening tool and Clinical Resource Guide. Additional tasks were also required of providers to review the screening results with the patients and provide interventions, such as using the Clinical Resource Guide, as appropriate. Additional people would not have benefited this project, especially due to the decrease in patients seen from the COVID-19 pandemic. Additional people may not also be beneficial outside of the pandemic.

Benefits associated with this project generally included quality improvement through the overall impact on the patient. It also offered the potential to reduce future healthcare expenditure through early identification and increased awareness of resources. Patients identified to have experienced sexual assault can be directed to the appropriate resources, potentially preventing adverse effects of long-term consequences such as posttraumatic stress disorder (American College of Obstetricians and Gynecologists [ACOG], 2019). Though there are no benchmarks for sexual assault screening, this project utilized available sexual assault screening recommendations to implement a standardized screening process in a high-risk population.

Unexpected negatives associated with this project were limited to increased time and effort of the project team members to improve and implement the electronic screening tool.

There were no unexpected negatives that contributed to all cost categories, including people, time, and money. In general, the organization had a good return on their investment in this project due to the resulting quality improvement.

Resource Management

This project required electronic embedding of the sexual assault screening tool and Clinical Resource Guide. Several updates to the electronic screening tool were also needed to improve implementation. The Tech Specialist assisted with these needs and was a vital resource in reaching a successful project outcome. While the Tech Specialist performs similar duties in their role within the project site, tasks derived from this project were considered additional to their daily routine.

A resource that could have been used, and was initially planned for use, included the use of kiosks to assist with patient check-in form completion at the front desk. Due to the COVID-19 pandemic, these kiosks were removed from use, and patients were to complete check-in forms online before their appointment. Online form completion was not required for patients to check in for their appointment, which caused incomplete screenings. It was unknown whether the use of these kiosks would return after the pandemic ends.

Implications of the Findings

Implications for Patients

Many patients do not independently report a sexual assault event. This project provides the opportunity to begin a conversation regarding a sexual assault experience if the patient has not been able to talk to anyone. This increases awareness of sexual assault and available local resources. It also improves long-term outcomes, including early detection and referral for mental health consequences.

Implications for Nursing Practice

This project supported the Doctor of Nursing Practice Essentials (Appendix L). Standardizing a screening process for sexual assault increases the quality of care. This also raises awareness of available resources and improves patient referral to the appropriate resources when indicated. Additionally, this quality improvement opportunity allows nursing practice to meet sexual assault screening recommendations and guidelines, since there is no specific benchmark in place.

Impact for Healthcare System(s)

This project is an example of a standardized screening process that can be implemented in other organizations, especially in high-risk groups such as the college student population. The most significant impact for healthcare systems revolves around the relation to the Triple Aim. The initial conversation of a patient's potential risk for sexual assault begins with improving sexual assault screening. This leads to a deeper focus on their well-being and enhances their experience of care. Population health is improved through this early identification of sexual assault, which allows the opportunity for prompt referral, treatment, or prevention of any consequences. Healthcare costs are then potentially reduced through the reduction of long-term consequences, especially when focusing on mental health consequences (ACOG, 2019).

Sustainability

The organization planned to continue the use of the sexual assault screening tool and Clinical Resource Guide. There were no substantial costs to complete this project. Monetary costs were limited to the cost of paper for printing the Clinical Resource Guide. Any remaining costs were limited to provider and Tech Specialist time as well as additional tasks to their role. Successful continuation is supported by the presence of the screening tool in the EMR, providers

that have been educated and are knowledgeable of the toolkit components, and providers that are supportive of the impact of increased screening for sexual assault. Continuation may require additional intervention if a sexual assault screening benchmark is created or if recommendations change in the future.

Dissemination Plan

This project was presented to the project site staff during a regularly scheduled staff meeting after completion of project implementation and review of the findings. The project and poster were also presented virtually to the ECU College of Nursing during a poster presentation event. Lastly, the completed paper was submitted for publishing to The ScholarShip: ECU's Institutional Repository.

Section VI. Conclusion

Limitations

This biggest limitation throughout this project was the COVID-19 pandemic. The implementation period began at the beginning of the first semester following the onset of the pandemic. This significantly affected project implementation, as it restricted in-person meetings with project team members, decreased the number of patients seen in the project site, changed the clinic flow, altered many provider roles, and distracted providers from project goals. The initial education session was also viewed online by many providers rather than in-person to promote social distancing.

Additionally, many providers were not seeing patients in the clinic during the first few weeks of implementation due to other pandemic efforts on campus. As they began to return to the clinic setting, compliance began to drop because many did not realize the project had started. This decrease in compliance as well as the increase in participating providers led to the discovery of electronic limitations. These included screening forms being automatically locked before provider review and missing screening forms for patients who did not check-in online. Kiosks that were previously used for patient check-in were removed from patient use. This required patients to complete forms online before their appointment, but they were not required for check-in. These limitations were then able to be addressed to improve outcomes.

Patient and provider comfort level when discussing the sensitive topic of sexual assault was also considered a limitation. Though project site providers were already expected to discuss this topic prior to project implementation, many patients were not open to the discussion. Some patients did not want to disclose answers to screening questions, which led to many incomplete screenings until the additional answer choice “Prefer Not to Answer” was added. Provider

comfort was also impacted by patient comfort levels. This sensitive conversation may still be difficult to tackle when a patient has experienced an event, limiting the ability to have a constructive conversation.

Lastly, time was a limitation, as this was the biggest cost for project implementation. This project required additional time of the Tech Specialist and providers outside of their previous daily role. Time was required for the Tech Specialist to embed the Clinical Resource Guide and screening form into the electronic medical record (EMR). They then had to spend time adjusting the screening form throughout the implementation period as barriers were identified to improve outcomes. Additional time was also required of the providers to attend the initial education session, review and discuss screening responses with patients, assess for the need for intervention, and utilize the Clinical Resource Guide if indicated.

Recommendations for Others

During the planning process, it is essential to determine if there is a pre-existing sexual assault screening process within the organization. One may also need to determine which patients or visit types will qualify for screening. Then, one should evaluate how screenings are generally completed within the organization. Distribution methods may include online screening, kiosks for self-service screenings, and paper screenings. If screenings are primarily conducted online, it is vital to create a relationship with the information technology (IT) department. IT may also assist in collecting some of the desired data. Education should be provided to providers as well as anyone that may have to assist with screenings completion. Education can be delivered in-person and electronically. The comfort level and need for additional training of providers should also be considered.

During implementation, it is vital to visit the project site at least weekly, if able, to meet with staff and assess for needed adjustments. During these meetings, ensure to talk with providers regarding their experiences and ideas for improvement. In-person visits are also recommended over virtual visits to provide feedback effectively and encourage continued participation during implementation. Lastly, it is recommended to keep in close contact with an IT staff member if there is any electronic involvement during implementation.

Recommendations for evaluating outcomes include comparing previous screening rates if any form of sexual assault screening was completed before implementation of the standardized screening process. Evaluation of project outcomes should also include weekly screening compliance rates, overall compliance, the number of positive screenings and their relation to the percentage of screenings completed, the use of the Clinical Resource Guide and its relation to the number of positive screenings. One may also want to assess for any qualitative findings to add to the significance of the results.

Recommendations Further Study

Further studies could be impactful through replication or extension of this project. Sexual assault is a sensitive topic to discuss for both the provider and patient. Though the providers of this project site were already expected to be able to discuss sexual assault, further studies should focus on provider comfort, knowledge, and education of how to discuss sexual assault with their patients. This could include additional training for the provider to improve comfort in leading this conversation. Replication of this project could also include utilization of nurse-led clinics or other campus resources. Additional universities that desire to replicate this project may consider use of such resources if they do not have their own campus clinic.

Further studies should also include screening for other appointment types outside of gynecological visits, such as annual physical exams. Consideration should also include screening for additional gender types and how to determine what gender types are included. This could involve screening for males and members of the LGBTQ community. Increased outreach to potential sexual assault survivors should also be considered as an extension of this project. This could include delivering sexual assault information and resources to all students within a college student population, leading survivors to the appropriate resources sooner.

Ultimately, sexual assault is an ongoing public health issue for the college student population and can lead to many health consequences. Early identification of those who have experienced a sexual assault event may help to delay or prevent these consequences with appropriate intervention. Implementation of the sexual assault screening toolkit resulted in successful improvement in sexual assault screening within a primary care clinic serving the college student population.

References

American College of Obstetricians and Gynecologists. (2019). ACOG Committee Opinion No. 777: Sexual assault. *Obstetrics & Gynecology, 133*(4), e296-e302. doi: 10.1097/AOG.0000000000003178

East Carolina University. (2020a). *Health sciences campus – student health center*. ECU. https://studenthealth.ecu.edu/health-sciences-campus-student-health-center/

East Carolina University. (2020b). *Main campus – student health center*. ECU. https://studenthealth.ecu.edu/maincampus-student-health-center/

East Carolina University. (2020c). *Our mission and goals*. ECU. https://studenthealth.ecu.edu/our-mission-and-goals/

East Carolina University. (2020d). *Welcome to Student Health Services.* ECU. https://studenthealth.ecu.edu/

East Carolina University. (2020e). *Who can use SHS?* ECU. https://studenthealth.ecu.edu/eligibility/

Family Violence Prevention Fund. (2004, February). National consensus guidelines on identifying and responding to domestic violence victimization in health care settings. Retrieved March 27, 2020 from https://www.futureswithoutviolence.org/userfiles/file/Consensus.pdf

Fantasia, H. C., Sutherland, M. A., & Hutchinson, M. K. (2018). Lifetime and recent experiences of violence among college women. *Journal of Forensic Nursing, 14*(4), 190-197. Doi: 10.1097/JFN.0000000000000211

Gilles, C., Manigard, Y., Roussear, C., Libois, A., Gennotte, A. F., & Rozenberg, S. (2019). Implementation of a protocol and staff educational sessions improves the care of

survivors of sexual assault. *Maturitas, 124*, 39-42. https://doi.org/10.1016/j.maturitas.2019.03.004

Halstead, V., Williams, J. R., Gattamorta, K., & Gonzalez-Guarda, R. (2017). Sexual violence screening practices of student health centers located on universities in Florida. *Journal of American College Health, 65*(8), 548-557. DOI: 10.1080/07448481.2017.1351447

Institute for Healthcare Improvement. (2020). *Triple aim for populations*. http://www.ihi.org/Topics/TripleAim/Pages/Overview.aspx

Langley, G. J., Moen, R. D., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (2009). *The improvement guide: A practical approach to enhancing organizational performance* (2nd ed.). Jossey-Bass.

Moran, K., Burson, R., & Conrad, D. (2020). *The doctor of nursing practice project: A framework for success* (3rd ed.). Jones & Bartlett Learning

Moscou, S. (2015). Screening college students for domestic violence, sexual assault, and molestation. *The Journal for Nurse Practitioners, 11*(8), 824-828. http://dx.doi.org/10.1016/j.nurpra.2015.04.012

Office of Disease Prevention and Health Promotion. (2020). *Injury and violence prevention*. https://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention

Rape, Abuse & Incest National Network. (2020a). *Campus sexual violence: Statistics*. https://www.rainn.org/statistics/campus-sexual-violence

Rape, Abuse & Incest National Network. (2020b). *Laws about private communications: North Carolina*. https://apps.rainn.org/policy/policy-state-

laws.cfm?state=North%20Carolina&group=6&_ga=2.206212051.1305587904.1601917838-193874807.1601917838

Schilling, S., Samuels-Kalow, M., Gerber, J. S., Scribano, P. V., French, B., & Wood, J. N. (2015). Testing and treatment after adolescent sexual assault in pediatric emergency departments. *Pediatrics, 136*(6), e1495-e1503. doi: 10.1542/peds.2015-2093

Sutherland, M. A., & Hutchinson, M. K. (2019). Organizational influences on the intimate partner violence and sexual violence screening practices of college health care providers. *Research in Nursing & Health, 42*, 284-295. Doi: 10.1002/nur.21950

US Preventive Services Task Force. (2018). Screening for intimate partner violence, elder abuse, and abuse of vulnerable adults: US preventative services task force final recommendation statement. *The Journal of the American Medical Association, 320*(16), 1678-1687. doi:10.1001/jama.2018.14741

Appendix A

Literature Search Log

DNP Project Literature Search Log					
Student: Christina Smith				**Date of Submission: 4/27/2020**	
Project Title: Implementing a Toolkit to Improve Sexual Assault Screening in the College Student Population					
Date of Search	**Database**	**Key Word Searches**	**Limits**	**# of Citations Found / Kept**	**Rationale for Inclusion / Exclusion (include rationale for excluding articles as well as for inclusion)**
4/20/20	PubMed (New)	(sexual assault) AND (screening) AND (college student)	5 years; English language; adolescent, adult, and young adult ages; abstract available	16 found, 4 kept	**Inclusion Criteria**: discuss screening or recommendation for college services, college population, level IV or better **Exclusion Criteria**: primary focus other than sexual assault or similar term
4/20/20	CINAHL (EBSCOhost)	(sexual assault) AND (screening) AND (college student)	5 years, English language, adolescent and adult ages, abstract available,	36 found, 2 kept	**Inclusion Criteria**: discuss screening, college population, level IV or better **Exclusion Criteria**: primary focus other than sexual assault or similar term, primary age group younger than adolescent

			academic journals		
4/21/20	ProQuest	(sexual assault) AND (improve screening) AND (college student)	5 years, English language, Subject: college students	12 found, 1 kept	**Inclusion Criteria**: discuss screening, level IV or better **Exclusion Criteria**: primary topic other than sexual assault or similar term
4/22/20	Google Scholar	(sexual assault) AND (improve screening) AND (college student)	5 years, exact phrase "sexual assault screening", with at least one of the words "college student"	33 found, 3 kept but 2 later excluded, 1 final kept	**Inclusion Criteria**: discuss sexual assault screening or service, level IV or better **Exclusion Criteria**: primary topic other than sexual assault or similar term, focus on a specialized population other than college students (ex/ military); 1 article that was originally kept used same data as another from other databases; 1 article not available through interlibrary loan
4/22/20	PubMed	(sexual assault) AND (improve screening) AND (college student)	none	2 found, 0 kept	**Inclusion Criteria**: publication within 5 years, discuss screening, level IV or better **Exclusion Criteria**: primary focus with military veterans

4/23/20	PubMed	(sexual assault) AND screening	5 years, English language, Human species, child and adult ages, abstract available, article types (guidelines, systematic reviews, RCTs)	30 found, 7 kept	**Inclusion Criteria**: discuss screening or recommendations for sexual assault, level IV or better **Exclusion Criteria**: primary topic other than sexual assault or similar term, focus on the treatment of something other than sexual assault, focus population younger than adolescents or of elders

Appendix B

Literature Matrix

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods GAPS
Eisenberg, M. E., Palacios, L., Lust, K., & Porta C. M.	2019	Sexual assault reporting and emotional distress among college female-identified victims/survivors	Social Support Theory	*Journal of Forensic Nursing*	To determine associations between reporting sexual assault, formal or informal sources, and corresponding diagnoses	Level I: Qualitative - generalizable study	IV: reporting sexual assault to formal or informal resource DV: student well-being, diagnoses	College Student Health Survey	38,648 students invited to participate, 12,220 student completed the survey	17 colleges in Minnesota provided contact info for a random sample of their students; students invited via postcard and email; gift card drawing incentive	7 2-year and 10 4-year colleges; 7,308 female students; 1734 white, 71 black, 105 Asian, 17 Native American, 92 multirace, 86 Hispanic	The authors found that reporting to a formal source, healthcare provider or police, was associated with mental health diagnoses or select diagnoses respectively. Limitations: No timing between sexual assault and reports assessed; reporting experiences not noted Usefulness: Colleges have the opportunity to influence the well-being of those affected by sexual assault. Synthesis: There should be adequate resources for patients post assault.
Halstead, V., Williams, J. R., Gattamorta, K., & Gonzalez-Guarda, R.	2017	Sexual violence screening practices of student health centers located on universities in Florida	none	*Journal of American College Health*	To determine sexual violence (SV) screening of student health centers (SHCs) in Florida	Level III: Qualitative - descriptive study	IV: university survey DV: screening practices	Telephone-administered survey regarding SV/IPV screening practices based on national recommendations and literature	33/34 universities agreed to participate after invitation	Online search of the National Center for Education Statistics	33 SHC representatives: 25 SHC directors, 12 other job title, 9 RN, 7 Physicians; 22 private universities, 11 public universities Number of providers ranged 1-35	The authors found that most SHC screen for sexual violence, but effective screening strategies are not consistently used. Limitations: Only used SHCs in Florida; does not represent provider behavior but only institutional practice; appropriate interventions upon screening are unknown Usefulness: Recommendations for screening practices provided Synthesis: SHCs provide a good opportunity to implement screening; recommendations are made to improve screening such as screening questions imbedded in the EMR can improve screening
Eisenberg, M. E., Lust, K. A., Hannah P. J. & Porta, C.	2016	Campus sexual violence resources and emotional health of college women who have experienced sexual assault	none	*Violence and Victims*	To assess the well-being of female victims of sexual assault and available resources on college campuses.	Level III: Qualitative - descriptive study	IV: sexual violence resources DV: well-being, associated diagnoses	College Student Health Survey; College Resources and Sexual Health (CRaSH) inventory	12,263 of 31,899 invited students from 28 college campuses; 495/10,590 female college students experienced sexual assault	invited by email	396 white, 25 AA, 12 Hispanic, 27 Asian/Pacific Islander, 16 Native American, 19 other race/ethnicity	The authors found that those who attended colleges with more resources had lower rates of mental health illness than collages with less resources. Limitations: Students may have chosen a university based on their overall access to resources. Usefulness: Meeting needs of students includes ensuring access to appropriate resources. Synthesis: Available resources for sexual violence can positively assist affected students.

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods GAPS
Tsui, E. K. & Santamaria, E. K.	2015	Intimate partner violence risk among undergraduate women from an urban commuter college: The role of navigating off- and on-campus social environments	none	*Journal of Urban Health*	To explore the risk, impact, and occurrence of IPV as well as available college resources.	Level III: Qualitative - descriptive study	IV: IPV perception on campus DV: academic performance, exposure, perceived and desired resources	none	18 female undergraduate students	Recruited via posters, emails, and phone calls	13 Hispanic, 2 AA, 2 Asian, 1 non-Hispanic white; age rand 18-52, median age 23.5	The authors found that college attendance alone can increase the risk of IPV, therefore, colleges should focus on the development of screening and prevention activities to reduce the effects of IPV. Limitations: Small sample size, participants were likely more interested in IPV Usefulness: Discuss the importance of screening and prevention of IPV in the college setting. Synthesis: Screening and prevention activities on college campuses can reduce the negative effects of student health, well-being, academic performance, and college completion.
Fantasia, H. C., Sutherland, M. A., & Hutchinson, M. K.	2018	Lifetime and recent experiences of violence among college women	none	*Journal of Forensic Nursing*	To describe the reported experiences and associated factors of violence by college women.	Level I: Qualitative - generalizable study	IV: college attendance DV: reports of sexual violence experiences	Survey that included items from the Abuse Assessment Screen	873 female undergraduate students	Random sample of female undergraduate students from 5 universities were sent an email with an invitation to participate	682 white, 806, non-Hispanic; 653 lived on campus; mean age 19.3	The authors found that college women report recent and lifetime experiences of violence, most commonly sexual violence. Limitations: Secondary analysis of some already collected data, self reporting, lacked ethnic and racial diversity Usefulness: IOM recommends routine screening for violence at healthcare visits as a part of preventative care. Synthesis: College women have an increased risk of sexual violence. Screening should be used as a form of preventative care and can be implemented through questions in the EHR.
Conley, A. H., Overstreet, C. M., Hawn, S. E., Kendler, K. S., Dick, D. M., & Amstadter, A. B.	2017	Prevalence and predictors of sexual assault among a college sample	Item response theory (IRT)	*Journal of American College Health*	To assess the prevalence and correlates of sexual assault among students, specifically precollege, college, and repeat sexual assault.	Level IV: Evidence from well-designed case-control and cohort studies	IV: prior trauma, personality, mental health, relationship DV: (re)victimization	Life Events Checklist, Primary Care PTSD Screen (PC-PTSD), The Parenting Styles Inventory, modified version of Big Five Inventory (BFI), modified version of Medical Outcomes Study (MOS) module, Connor-Davidson Resilience Scale (CD-RISC)The Symptoms Checklist (SCL)-90 Short Version	7,603 students	Sent an email survey for 3 cohorts of incoming students; received a t-shirt and $10 for participation	61.1% female; 19.6% Black, 16.3% Asian, 13.8% Other	The authors found that women report sexual assault more than men and prior incidence before college is associated with increased risk of a repeat incidence. Limitations: Only included students from 1 university, potential for overlap of responses Usefulness: Student health should screen for prior sexual trauma as this is a risk factor for repeat incidence. Synthesis: There are certain factors that are associated with an increased risk of sexual assault including prior trauma, therefore, screening for prior trauma or other associated factors is essential.
Moscou, S.	2015	Screening College Students for Domestic Violence, Sexual Assault, and Molestation	none	*The Journal for Nurse Practitioners (JNP)*	To review a QI study that was implemented in 2008 and 2 follow-up QI studies in 2010 and 2013.	Level III: Evidence obtained from well-designed controlled trials without randomization, quasi-experimental	IV: QI studies, providers DV: screening	Screening instrument (HITS survey) was embedded in the two follow-up QI studies	3 QI studies	Follow-up studies from original studies used	female patients visiting for an annual women's health exam	The authors found that embedding questions or prompting clinicians to screen can increased screening. Limitations: All studies done at same institution; small sample sizes, sample sizes differed in each study Usefulness: Discusses a method that has been studied regarding improving sexual assault screening in the target population Synthesis: Embedding screening questions (HITS survey) can induce discussion; screening prompts should be uses for women's health visits

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods GAPS
Yoshimura, C. G. & Campbell, K. B.	2016	Interpersonal violence and sexual assault: Trauma-informed communication approaches in university counseling centers	Communication accommodation theory	*Journal of College Student Psychotherapy*	To review 2 years of a counseling services program for patients who had experiences sexual assault, relationship violence, and/or stalking.	Level III-IV: Qualitative - descriptive study, case study	IV: counseling program DV: patient reporting unwanted sexual experience	Brief therapy model - de Shazer and Berg's Solution-Focused Brief Therapy (SFBT)	1 university counseling center	Funded by DOJ for 2 years of mental health treatment of students with sexual assault, etc.	University in US Mountain West	The authors found that brief therapy models can be used in counseling settings for universities as tool to assess student functioning levels. Limitations: Single university Usefulness: Discussed resources for student health centers for students who experiences sexual assault. Synthesis: Application of this approach and outcomes can support treatment options and lead to increased well-being of students.
The American College of Obstetricians and Gynecologist	2019	ACOG Committee Opinion Summary Number 777: Sexual Assault	none	*Obstetrics & Gynecology*	To provide a overview of the updated recommendations for sexual assault.	Level I: Clinical practice guideline	Theme: sexual assault Concepts: recommendations, definitions, incidence and prevalence, medical consequences, psych and mental health consequences, incorporation of trauma-informed care, roles of clinicians	none	none	none	none	The authors found that women's health providers have an important role in evaluating and managing sexual assault, a major public health problem. Limitations: None noted Usefulness: Respected clinical practice guideline Synthesis: Clinicians should screen all women for sexual assault, evaluate acute survivors, and recognize consequences of sexual assault.
Crawford-Jakubiak, J. E., Alderman, E. M., & Leventhal, J. M.	2017	Care of the adolescent after an acute sexual assault	none	*American Academy of Pediatrics*	To update physicians on treating and managing adolescents who have experiences sexual assault.	Level I: clinical practice guideline	Theme: sexual assault Concepts: management and treatment of adolescents who have experiences sexual assault	none	none	none	none	The authors found that there was a need to update their report from 2008. Limitations: Directed towards pediatricians Usefulness: Provides guidance on treatment and management of sexual assault in the adolescent population Synthesis: Pediatricians should routinely ask adolescents about sexual assault, be aware of reporting requirements, know of resources, know CDC guidelines for survivors, consider the use of drugs, off emotional support, and support prevention efforts.
Northridge, J. L.	2019	Sexual violence in adolescents	none	*Pediatric Annals*	To discuss the recommendations for sexual violence screening, treatment, and resources.	Level I: clinical practice guideline	Theme: sexual assault Concepts: treatment, screening, resources	none	none	none	none	The authors found that screening for sexual violence in the adolescent population is vital due to the high prevalence and effect on their well-being. Limitations: Published in pediatric journal. Usefulness: Discuss screening recommendations for sexual violence. Synthesis: Sexual assault screening is recommended for all adolescents.

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods GAPS
Schilling, S., Samuels-Kalow, M., Gerber, J. S., Scribano, P. V., French, B., & Wood, J. N	2015	Testing and treatment after adolescent sexual assault in pediatric emergency departments	none	*Pediatrics*	To assess the use of recommended testing an prophylactic measures for victims of sexual assault.	Level IV: Evidence from well-designed case-control and cohort studies	IV: sexual assault pathway or team present DV: rates of use of recommended testing or prophylaxis	Hospital survey	38 hospitals; 12,687 included cases	Children 12-18 years with specific diagnosis code used; only first visit after assault included	93% female, 52% public insurance, 34% NH white, 38% NH black, 21% Hispanic	The authors found that pathways were associated with increased rate of use of prophylaxis but not testing and there was a variation practice reported by hospitals. Limitations: Limited to ED setting, some patients excluded due to missing discharge status, exam finding differences Usefulness: Shows the importance of a standardized practice in improving management of sexual assault patients. Synthesis: The presence of a clinical pathway was associated with better use of recommended prophylaxis, which is expected since they are to help standardize care.
Gilles, C., Manigard, Y., Roussear, C., Libois, A., Gennotte, A. F., & Rozenberg, S.	2019	Implementation of a protocol and staff educational sessions improves the care of survivors of sexual assault	none	*Maturitas*	To analyze if a protocol and education sessions for staff will increased the number of patients who receive specified care.	Level III: Evidence obtained from well-designed controlled trials without randomization, quasi-experimental	IV: new protocol in place DV: optimal medical care	none	362 sexual violence survivors	Reviewed charts of female patients over 15 years	Median age 25; 256 Caucasian, 28 North-African, 42 Sub-Saharan African, 27 other, 9 unknown	The authors found that optimal care was provided to 90% of patients compared to a previous audit of 10% of patients after implementation of the new protocol. Limitations: Comparison with another group, no long-term outcomes Usefulness: Discuss the implementation of a protocol to improve care to patients who experiences sexual assault Synthesis: Implementation of a protocol and educational sessions can improve the care for victims of sexual assault.
Vrees, R. A.	2017	Evaluation and Management of Female Victims of Sexual Assault	none	*Obstetrical and Gynecological Survey*	To prepare the learner to be familiar with components of the initial evaluation, provide adequate treatment, discuss sexual assault sequelae, and identify resources.	Level I: Evidence synthesis	Theme: sexual assault Concepts: standardized protocols	none	none	none	none	The authors found that the best practice includes the Sexual Assault Nurse Examiner, Sexual Assault Forensic Examiner programs, and standardized treatment protocols. Limitations: Generalizes to all females Usefulness: Provides a review of screening and management of sexual assault. Synthesis: Screening and prevention as well as knowledge of care of survivors by women's health care providers is essential.
Miller-Graff, L. E., Cater, A. K., Howell, K. H., & Graham-Bermann, S. A	2015	Victimization in childhood: General and specific associations with physical health problems in young adulthood	none	*Journal of Psychosomatic Research*	To assess the relationship between childhood victimization and health problems in early adulthood.	Level III: Qualitative - descriptive study	IV: history of violence exposure DV: psychosocial functioning	Electronic survey questionnaire	2500 Swedish young adults	Randomly selected from Swedish national inhabitant register	52.6% female; ages 20-24; 69.4% employed, 58.3% in college47% financed by study assistance	The authors found that early detection of childhood victimization is vital. Limitations: Only used young adults, results relied on self-reporting, Usefulness: Focused on the young adult population and the affect of violence, such as sexual assault, on their well-being. Synthesis: Childhood victimization of any kind can affect the health as they reach young adulthood, therefore, clinicians should routinely screen for this during health assessments of young adults.

Appendix C

Quality Improvement/Program Evaluation Self-Certification Tool

Click "download PDF" to save a copy of this page for your records.
Note: The IRB Office does not maintain copies of your responses.

Below is a summary of your responses

Download PDF

Quality Improvement/Program Evaluation Self-Certification Tool

Purpose:

Projects that do not meet the federal definition of human research pursuant to 45 CFR 46 do not require IRB review. This tool was developed to assist in the determination of when a project falls outside of the IRB's purview.

Instructions:

Please complete the requested project information, as this document may be used for documentation that IRB review is not required. Select the appropriate answers to each question in the order they appear below. Additional questions may appear based on your answers. If you do not receive a STOP HERE message, the form may be printed as certification that the project is "not research", and does not require IRB review. The IRB will not review your responses as part of the self-certification process.

Name of Project Leader:

Christina Smith

Project Title:

Implementing a Toolkit to Improve Sexual Assault Screening in the College Student Population

Brief description of Project/Goals:

The goal of this project is to increase sexual assault screening in the college student population and will take place in a university student health clinic. A toolkit will be implemented that will include embedding sexual assault screening questions into the EHR, a clinical resource guide for providers to

utilize as indicated, and an initial educational session for providers on toolkit use.

Will the project involve testing an experimental drug, device (including medical software or assays), or biologic?

- ○ Yes
- ● No

Has the project received funding (e.g. federal, industry) to be conducted as a human subject research study?

- ○ Yes
- ● No

Is this a multi-site project (e.g. there is a coordinating or lead center, more than one site participating, and/or a study-wide protocol)?

- ○ Yes
- ● No

Is this a systematic investigation designed with the intent to contribute to generalizable knowledge (e.g. testing a hypothesis; randomization of subjects; comparison of case vs. control; observational research; comparative effectiveness research; or comparable criteria in alternative research paradigms)?

- ○ Yes
- ● No

Will the results of the project be published, presented or disseminated outside of the institution or program conducting it?

- ● Yes
- ○ No

Would the project occur regardless of whether individuals conducting it may benefit professionally from it?

- ● Yes
- ○ No

Does the project involve "no more than minimal risk" procedures (meaning the probability and magnitude of harm or discomfort anticipated are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests)?

- (●) Yes
- ( ) No

Is the project intended to improve or evaluate the practice or process within a particular institution or a specific program, and falls under well-accepted care practices/guidelines?

- (●) Yes
- ( ) No

Based on your responses, the project appears to constitute QI and/or Program Evaluation and IRB review is not required because, in accordance with federal regulations, your project does not constitute research as defined under 45 CFR 46.102(d). If the project results are disseminated, they should be characterized as QI and/or Program Evaluation findings. Finally, if the project changes in any way that might affect the intent or design, please complete this self-certification again to ensure that IRB review is still not required. Click the button below to view a printable version of this form to save with your files, as it serves as documentation that IRB review is not required for this project. 7/9/2020

Powered by Qualtrics A

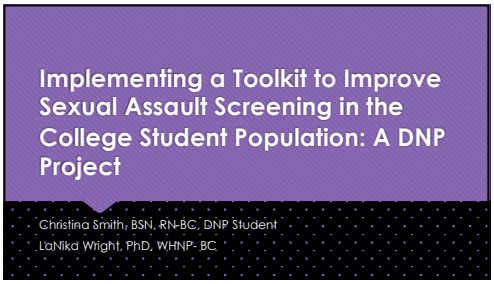
Appendix D

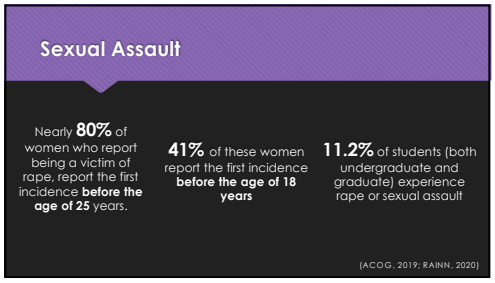
Data Collection Tool

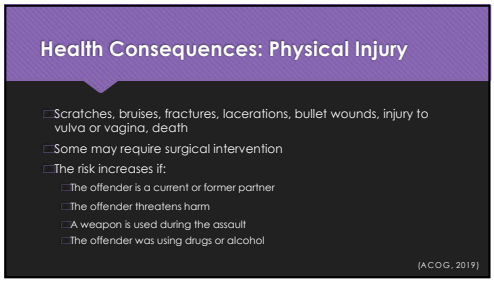
Data Collection Tool									
Week 1: mm/dd/yyyy - mm/dd/yyyy									
Patient	**Total Patients**	**MRN (last 3 digits)**	**Date of Encounter**	**Type of Visit (GYN Problems=1, Pap with BC=2, Pap & Pelvic=3, Other=4)**	**Screening Completed (Yes=1/No=0)**	**Positive Screen (Yes=1/No=0)**	**Clinical Resource Guide Used (Yes=1/No=0)**	**Positive Screening Answers**	**Comment**
1	1								
2	2								
3	3								
Total:									
Averages:					**%**	**%**	**%**		

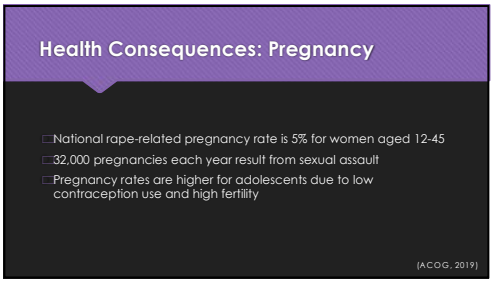
Appendix E

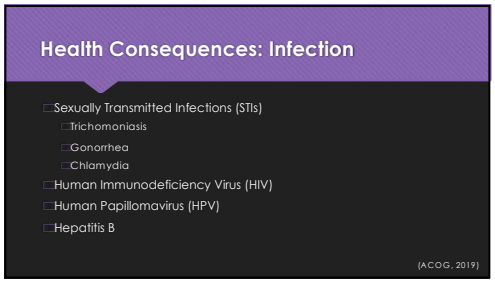
PowerPoint Presentation for Providers











Health Consequences: Mental Health

- **Rape-Trauma Syndrome**
  1. **Disorganization Phase**: physical reactions, may last days to weeks
  2. **Organization Phase**: somatic and gynecological symptoms, may occur weeks or months after the event
- **Posttraumatic Stress Disorder**
  - May not appear for months to years after the event
- **Alcohol abuse and drug use**

(ACOG, 2019)

Sexual Assault in Healthcare

Sexual Assault in Healthcare

- Common symptom presentation:
  - Chronic pelvic pain
  - Dysmenorrhea
  - Sexual dysfunction
- Can also present with other symptoms (GI, Neuro, CV, Respiratory)
- Early identification can help to prevent some of the long-term and persistent health consequences
- Treatment and referral

(ACOG, 2019)

Sexual Assault in Healthcare: Student Health Services

- College women are 3x more likely to experience sexual violence than those not in college
- Victims may experience academic challenges due to the event or subsequent health consequences
- Opportunity to screen college women, who have some of the highest sexual assault rates
- Those who are screened or asked about sexual assault are more likely to disclose an event than to disclose spontaneously

(Sutherland et al., 2016; Sutherland & Hutchinson, 2018)

Recommendations

Recommendations

- **ACOG**
  - Recommends all women's healthcare providers and obstetrician-gynecologists routinely screen every female patient for sexual assault
- **US Preventative Task Force**
  - Recommends providers to screen for intimate partner violence among any female of reproductive age
- **Family Violence Prevention Fund**
  - Recommend screening all adolescents and adults as a part of routine health histories, initial visits, annual visits, and periodic health assessments

(ACOG, 2019; US Preventative Task Force, 2018; Family Violence Prevention Fund, 2004)

What are the barriers?

Barriers

- Lack of standardized screening questions or process
- Not asking patients about relationship status
- Not discussing the topic of sexual assault or safe sex
- Patient presentation or visit type

How can we overcome these barriers?

(ACOG, 2019; Sutherland et al., 2016)

Article Review

Screening for Intimate Partner and Sexual Violence in College Women: Missed Opportunities

Article Review

- **Objective:**
  - To examine IPV and SV screening and screening experiences among college women.
- **Method:**
  - An online survey was sent to women attending two universities in Northeastern US. The survey addressed demographics, lifetime experience with IPV and SV, on or off-campus healthcare service use, and healthcare setting screening.

(Sutherland et al., 2016)

Article Review

- **Results:**
  - The average age of the 615 college women was 21.5 years.
  - 36.1% of these women reported some lifetime experience with IPV/SV, and 8.1% of these women reported an experience in the last 6 months.
  - 63% reported not being being asked about IPV/SV at their most recent off-campus healthcare visit and 90% reported not being asked at their most recent on-campus healthcare visit.
- **Conclusion:**
  - College women experience particularly high rates of IPV/SV, but there are low rates of screening in healthcare settings, especially college health centers.

(Sutherland et al., 2016)

The DNP Project

Purpose

- **To Implement a Toolkit to Improve Sexual Assault Screening**
  - Standardized screening process
  - Clinical resource guide
  - Educating providers on toolkit component

SAVE Model

- **SCREEN** all patients
- **ASK** questions in a direct and non-judgmental way
- **VALIDATE** the patient
- **EVALUATE**, **EDUCATE**, and refer

(ACOG, 2019)

Standardized Screening Process

- Screen for sexual assault during visits for:
  - GYN Problems
  - Annual pap with birth control
  - Annual pap without birth control
  - As indicated
- Questions to be answered by patients at check-in
- Provider to review answers with patient during visit
- Provider to lock completed screen in the EHR

Standardized Screening Process: Screening Questions

Question	Yes	No
Has anyone ever touched you against your will or without your consent?		
Have you ever been forced or pressured to engage in sexual activities when you did not want to?		
Have you ever had unwanted sex while under the influence of alcohol or drugs?		
Do you feel that you have control over your sexual relationships and will be listened to if you say "no" to sexual activities?		
Do you feel safe?		

Standardized Screening Process: Screening Questions

Question	Yes	No
Has anyone ever touched you against your will or without your consent?	X	
Have you ever been forced or pressured to engage in sexual activities when you did not want to?	X	
Have you ever had unwanted sex while under the influence of alcohol or drugs?	X	
Do you feel that you have control over your sexual relationships and will be listened to if you say "no" to sexual activities?		X
Do you feel safe?		X

Clinical Resource Guide

- Supplemental education available for patients
- May be given physically (printed copy) or electronically (secure message)
- Includes local resource information
  - REAL Crisis Intervention
  - Dean of Students Office
  - Center for Counseling and Student Development

Project Timeline

- Implementation begins Monday, August 24
- 8 weeks of data collection
- Completion October 16
- Site visits every 1-2 weeks
- Contact with questions or concerns

Contact Info

Email: smithchris09@students.ecu.edu
Phone: 252-814-7882

References

- American College of Obstetricians and Gynecologists. (2019). ACOG Committee Opinion No. 777: Sexual assault. *Obstetrics & Gynecology, 133*(4), e294-e300. doi:10.1097/AOG.0000000000003178
- Family Violence Prevention Fund. (2004, February). National consensus guidelines on identifying and responding to domestic violence victimization in health care settings. Retrieved March 27, 2020 from https://www.futureswithoutviolence.org/userfiles/file/Consensus.pdf
- Rape, Abuse & Incest National Network. (2020). *Campus sexual violence: Statistics.* https://www.rainn.org/statistics/campus-sexual-violence
- Sutherland, M. A., Fantasia, H. C., & Hutchinson, M. K. (2016). Screening for intimate partner and sexual violence in college women: Missed opportunities. *Women's Health Issues, 26*(2), 217-224. http://dx.doi.org/10.1016/j.whi.2015.07.008
- Sutherland, M. A., & Hutchinson, M. K. (2019). Organizational influences on the intimate partner violence and sexual violence screening practices of college health care providers. *Research in Nursing & Health, 42*, 284-295. Doi: 10.1002/nur.21950
- US Preventive Services Task Force. (2018). Screening for intimate partner violence, elder abuse, and abuse of vulnerable adults: US preventative services task force final recommendation statement. *The Journal of the American Medical Association, 320*(16), 1678-1687. Doi:10.1001/jama.2018.14741

Questions?

Appendix F

Sexual Assault Screening Questions and Example of Positive Answers

Question	Yes	No	Prefer Not to Answer
Has anyone ever touched you against your will or without your consent?			
Have you ever been forced or pressured to engage in sexual activities when you did not want to?			
Have you ever had unwanted sex while under the influence of alcohol or drugs?			
Do you feel that you have control over your sexual relationships and will be listened to if you say “no” to sexual activities?			
Do you feel safe?			

Question	Yes	No	Prefer Not to Answer
Has anyone ever touched you against your will or without your consent?	X		X
Have you ever been forced or pressured to engage in sexual activities when you did not want to?	X		X
Have you ever had unwanted sex while under the influence of alcohol or drugs?	X		X
Do you feel that you have control over your sexual relationships and will be listened to if you say “no” to sexual activities?		X	X
Do you feel safe?		X	X

Appendix G

Clinical Resource Guide

Student Health Service
Division of Student Affairs
http://www.ecu.edu/studenthealth

1000 East 5th Street • Greenville, NC 27858 • Phone (252) 328-6841 • Fax (252) 328-0462 • https://ecu.medicatconnect.com/

Have you been assaulted?
Are you in an abusive relationship?
You do not have to suffer alone.
Here are some resources.

REAL Crisis Intervention
24/7 counseling and referral services available
1011 Anderson St.
Greenville, NC 27858
252-758-4357
http://realcrisis.org/

Dean of Students Office
Available to assist with crisis, advocate for students, and direct to appropriate resources
125 Umstead Hall
East Carolina University
Greenville, NC 27858
252-328-9297
https://deanofstudents.ecu.edu/

Center for Counseling and Student Development
Crisis, individual, group, partner, and substance use counseling services available
137 Umstead Hall
East Carolina University
Greenville, NC 27858
252-328-6661
https://www.ecu.edu/cs-studentaffairs/counselingcenter/

Appendix H

DNP Project Educational Session Provider Attendance

Date	Name	Provider Role (NP, PA, MD, etc.)	Years of Experience	Presentation Viewing (in-person, live stream, did not view live)

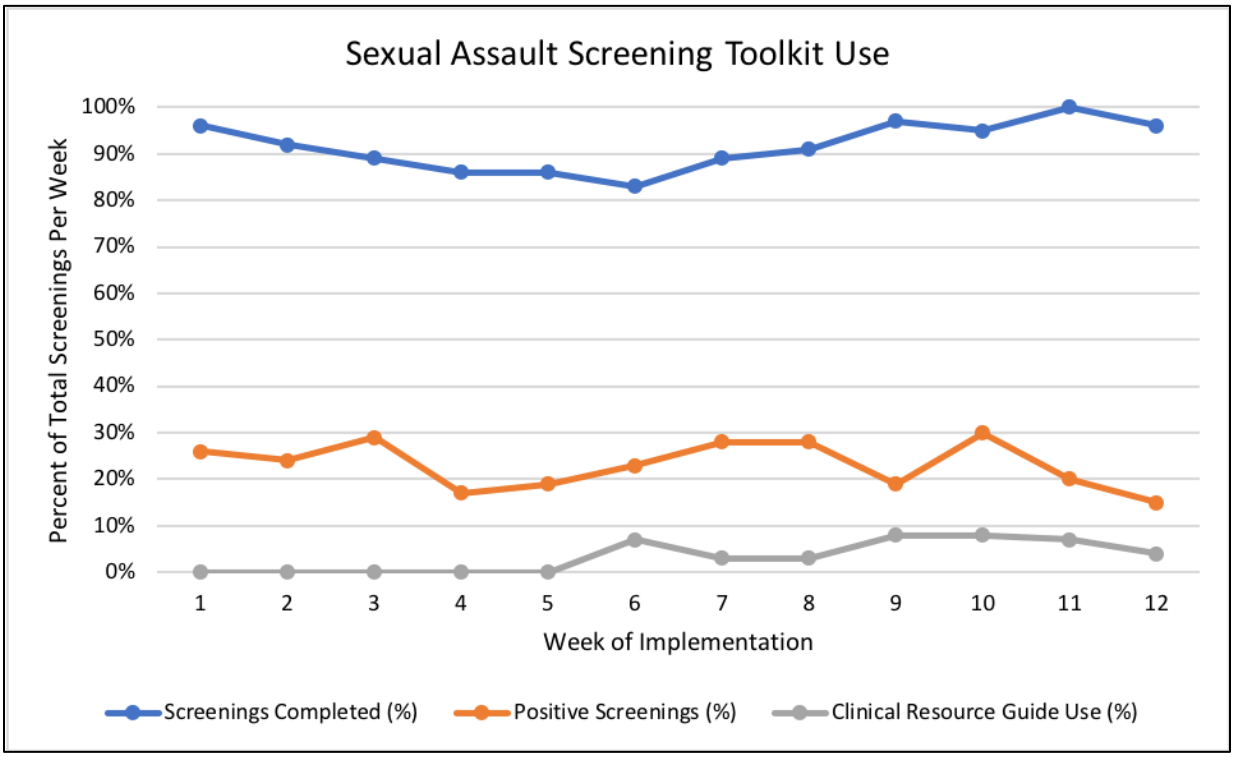
Appendix I

Project Timeline

8/19/2020	• Educational Session
8/24/2020	• Implementation Began
8/31/2020	• Site Visit #1
9/14/2020	• Site Visit #2
9/28/2020	• Site Visit #3
10/12/2020	• Site Visit #4
10/19/2020	• Site Visit #5
10/26/2020	• Site Visit #6
11/4/2020	• Site Visit #7
11/10/2020	• Site Visit #8
11/13/2020	• Implementation Ends
11/16/2020	• Site Visit #9
4/6/2021	• Project Poster Presentation
4/7/2021	• Project Site Dissemination Presentation

Appendix J

Sexual Assault Screening Toolkit Use



Appendix K

Project Budget

Item	Quantity	Unit Cost	Total
Project Supplies			
Paper	1 pack	$5.00	$5.00
Tech Specialist Tasks			
Demonstrating EMR access for data collection	1 hour	$0.00	$0.00
Embedding the clinical esource guide	1 hour	$0.00	$0.00
Embedding the screening tool	1 hour	$0.00	$0.00
Improving the screening tool as needed	2 hours	$0.00	$0.00
Provider Tasks			
Attending the education session	1 hour	$0.00	$0.00
Assessing screening tool responses	5 minutes	$0.00	$0.00
Printing and reviewing the clinical resource guide with the patient	5 minutes	$0.00	$0.00
TOTAL			**$5.00**

Appendix L

Doctor of Nursing Practice Essentials

	Description	Demonstration of Knowledge
Essential I ***Scientific Underpinning for Practice***	**Competency** – Analyzes and uses information to develop practice **Competency** -Integrates knowledge from humanities and science into context of nursing **Competency** -Translates research to improve practice **Competency** -Integrates research, theory, and practice to develop new approaches toward improved practice and outcomes	Since there was no guideline available for sexual assault screening, recommendations were utilized to develop a standardized screening process for sexual assault.
Essential II ***Organizational & Systems Leadership for Quality Improvement & Systems Thinking***	**Competency** –Develops and evaluates practice based on science and integrates policy and humanities **Competency** –Assumes and ensures accountability for quality care and patient safety **Competency** -Demonstrates critical and reflective thinking **Competency** -Advocates for improved quality, access, and cost of health care; monitors costs and budgets **Competency** -Develops and implements innovations incorporating principles of change **Competency** - Effectively communicates practice knowledge in writing and orally to improve quality **Competency** - Develops and evaluates strategies to manage ethical dilemmas in patient care and within health care delivery systems	Quality of care was improved through the implementation of the standardized screening process, provider education, and Clinical Resource Guide. Project progress was evaluated throughout the implementation period through critical and reflective thinking.
Essential III ***Clinical Scholarship & Analytical Methods for Evidence-Based Practice***	**Competency** - Critically analyzes literature to determine best practices **Competency** - Implements evaluation processes to measure process and patient outcomes **Competency** - Designs and implements quality improvement strategies to promote safety, efficiency, and equitable quality care for patients **Competency** - Applies knowledge to develop practice guidelines **Competency** - Uses informatics to identify, analyze, and predict best practice and patient outcomes **Competency** - Collaborate in research and disseminate findings	Best practice for sexual assault screening was discovered through a thorough literature search prior to project planning. Information was applied to develop the sexual assault screening toolkit for the project site. This toolkit was implemented to improve quality care for patients within the project site. After implementation, findings were disseminated and presented to the project site.
Essential IV ***Information Systems – Technology & Patient Care Technology for the Improvement & Transformation of Health Care***	**Competency** - Design/select and utilize software to analyze practice and consumer information systems that can improve the delivery & quality of care **Competency** - Analyze and operationalize patient care technologies **Competency** - Evaluate technology regarding ethics, efficiency and accuracy **Competency** - Evaluates systems of care using health information technologies	The Electronic Medical Record (EMR) system within the project site was utilized to deliver the screening tool electronically with the Tech Specialist's assistance.

	Description	**Demonstration of Knowledge**
Essential V ***Health Care Policy of Advocacy in Health Care***	**Competency**- Analyzes health policy from the perspective of patients, nursing and other stakeholders **Competency** – Provides leadership in developing and implementing health policy **Competency** –Influences policymakers, formally and informally, in local and global settings **Competency** – Educates stakeholders regarding policy **Competency** – Advocates for nursing within the policy arena **Competency**- Participates in policy agendas that assist with finance, regulation and health care delivery **Competency** – Advocates for equitable and ethical health care	Implementation and dissemination of the sexual assault screening toolkit advocates for appropriate healthcare for the college student population.
Essential VI ***Interprofessional Collaboration for Improving Patient & Population Health Outcomes***	**Competency**- Uses effective collaboration and communication to develop and implement practice, policy, standards of care, and scholarship **Competency** – Provide leadership to interprofessional care teams **Competency** – Consult intraprofessionally and interprofessionally to develop systems of care in complex settings	The sexual assault screening toolkit developed a new standard of care for sexual assault screening. Collaboration and communication with the project site champion and Tech Specialist continued throughout project planning and project implementation.
Essential VII ***Clinical Prevention & Population Health for Improving the Nation's Health***	**Competency**- Integrates epidemiology, biostatistics, and data to facilitate individual and population health care delivery **Competency** – Synthesizes information & cultural competency to develop & use health promotion/disease prevention strategies to address gaps in care **Competency** – Evaluates and implements change strategies of models of health care delivery to improve quality and address diversity	Sexual assault screening was used to address gaps in care through health promotion and disease prevention. Identifying sexual assault early can lead to a reduction in long-term consequences.
Essential VIII ***Advanced Nursing Practice***	**Competency**- Melds diversity & cultural sensitivity to conduct systematic assessment of health parameters in varied settings **Competency** – Design, implement & evaluate nursing interventions to promote quality **Competency** – Develop & maintain patient relationships **Competency** –Demonstrate advanced clinical judgment and systematic thoughts to improve patient outcomes **Competency** – Mentor and support fellow nurses **Competency**- Provide support for individuals and systems experiencing change and transitions **Competency** –Use systems analysis to evaluate practice efficiency, care delivery, fiscal responsibility, ethical responsibility, and quality outcomes measures	The sexual assault screening toolkit was designed, implemented, and evaluated to promote quality care in the college student population. Support was given to the providers utilizing the toolkit through site visits during the implementation period.