Caring for Transgender Patients: An Educational Intervention to Improve Staff Knowledge

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Abstract

Background: Transgender and gender diverse (TGD) individuals face health disparities because of historical and current barriers to healthcare access, including lack of healthcare provider knowledge, discrimination and stigma, and financial burden. Current literature supports trainings for healthcare professionals on culturally inclusive care for TGD patients as effective interventions for improving knowledge and comfort in caring for and interacting with TGD patients.

Methods: This Doctor of Nursing Practice (DNP) project created an educational session on culturally inclusive care for transgender patients which was presented to clinic staff at a primary care clinic on November 1st, 2023. Educational content included terminology, health disparities and barriers, recommendations to create a welcoming environment for TGD patients, and resources to learn more on the topic. Staff were surveyed with pre-intervention surveys to gather data on baseline knowledge on this topic and were given post-intervention surveys to assess the impact of the intervention.

Results: Results show that this educational session increased knowledge and comfort in caring for and interacting with transgender and gender-diverse patients. Overall, participants thought that this session was helpful for their understanding of transgender healthcare.

Conclusion: This educational session improved staff knowledge and comfort in caring for TGD patients, addressing key barriers to healthcare access at this clinic. These improvements have the potential to reduce health disparities within the TGD population. The educational session developed in this study can serve as a model for future interventions aimed at improving healthcare access for TGD patients.

Problem Description

The term *transgender* (TG) is generally accepted to represent an individual whose gender identity is different than their sex assigned at birth (Coleman et al., 2022). While there are various terms related to gender identity and expression, the World Professional Association for Transgender Health (WPATH) recommends the umbrella term *transgender and gender diverse* (TGD) to encompass TG individuals and those who do not identify with either extreme of the gender spectrum (Coleman et al., 2022). Over one-third of TGD individuals have reported negative experiences with a healthcare provider, and 23% have avoided necessary healthcare services due to fear of mistreatment (Johnson et al., 2019; Kronk et al., 2022; Rowe et al., 2019). Barriers that TGD patients face in accessing healthcare services contribute to health disparities, which include greater risk of chronic conditions, including HIV and obesity, and an increased likelihood of smoking cigarettes compared to the general population (Teti et al., 2021). Additionally, they are more likely to develop mental health conditions, including anxiety, depression, and suicidal behavior. The 2015 United States Transgender Survey (USTS) consisting of over 27,000 individuals found that 40% of respondents had attempted suicide in their lifetime (Korpaisarn & Safer, 2018; Learmonth et al., 2018; Rowe et al., 2019, Teti et al., 2021a).

At a national level, the U.S. healthcare system creates and perpetuates existing barriers to healthcare for TGD patients. Federal dysregulation has allowed state policies that hinder and prohibit transgender youths from accessing gender-affirming care (Kraschel et al., 2022). Although the Affordable Care Act (ACA) protects against discrimination by insurance companies based on gender identity and sexual orientation, issues related to insurance are still a prominent barrier for transgender patients seeking care (Kcomt et al., 2020). Additionally, the USTS found that 25% of transgender persons were denied health insurance coverage for gender transition care or general health maintenance due to their transgender identity (Rowe et al., 2019), with transgender individuals who qualify for Medicaid experiencing denial of coverage of hormone therapy at a higher rate than patients with private insurance (Bakko et al., 2020). At the local level, TGD patients face non-inclusive electronic health records (EHRs) and a lack of providers competent in providing trans care (Chong et al., 2021; Johnson et al., 2019; Korsaiparn & Safer, 2018; Kronk et al., 2022; Puckett et al., 2018; Rowe et al., 2019; Teti et al., 2021a). TGD patients regularly face both subtle and overt discrimination and stigma through clinic environments that perpetuate cisnormativity (Kcomt et al., 2020; Puckett et al., 2018; Teti et al., 2021). This project provided an educational session focused on evidence-based healthcare for the TGD population at a primary care clinic that sees a high volume of transgender patients. Information on issues related to TGD healthcare, as well as culturally appropriate care for TGD patients, was presented to the clinic staff, with findings and recommendations to ensure the clinic does not perpetuate barriers and disparities endured by this vulnerable population.

Available Knowledge

To identify strategies to improve access to healthcare for the TGD population, a literature review was conducted. The PubMed and CINAHL databases were searched for peer-reviewed, online articles published between 2018 and 2023, utilizing various combinations of these terms: *transgender, gender diverse, barriers, healthcare, access, interventions, culturally inclusive, culturally sensitive,* and *systematic review.* Findings from this synthesis, which includes seven systematic reviews and one prospective, single-arm pre-post analysis, can be grouped into two main themes: barriers to accessing care and recommendations to provide culturally sensitive care.

Barriers to healthcare access among TGD patients can be categorized into three groups: lack of clinician knowledge and lack of available providers, discrimination and stigma, and financial burden. Three studies identified a lack of clinician knowledge in transgender healthcare and an inadequate quantity of clinicians who are able and willing to provide transgender care as major barriers (Howell & Maguire, 2023; Snow et al., 2019; Stoehr et al., 2022). TGD patients face difficulties in finding providers who possess the skills, experience, and comfort to provide gender-affirming care (GAC), with one study reporting that 65% of transgender individuals have this issue (Stoehr et al., 2022). Additionally, when TGD patients do find clinicians willing to provide care, patients often report needing to educate their clinicians on trans-specific healthcare (Howell & Maguire, 2023; Snow et al., 2019). Secondly, discrimination and stigma were found to be critical barriers to TGD patients accessing healthcare services (Chong et al., 2021; Howell & Maguire, 2023; Snow et al., 2019). Many transgender individuals report avoidance of healthcare environments due to fear of discrimination, which can take many forms for the TGD population, including verbal abuse, refusal of care due to gender identity, and using incorrect pronouns (Chong et al., 2021; Howell & Maguire, 2023; Snow et al., 2019). Lastly, financial burden is a significant factor to consider when evaluating barriers for transgender patients. TGD individuals face financial difficulties when seeking mental health care (Snow et al., 2019), as well as care related to transgender identity, including hormone therapy, fertility preservation, and gender-affirming surgery (Chong et al., 2021). Additionally, TGD individuals are less likely to have health insurance, as an estimated 75% of gender minority (GM) individuals (those whose gender does not align with sex assigned at birth) have health insurance in the U.S., compared with 91.2% of the general population (Clark et al., 2022; Stoehr et al., 2022).

Recommendations for culturally sensitive care for TGD individuals are primarily focused on one of the main barriers to care access: lack of clinician knowledge. The literature highlights the importance of increasing healthcare providers' knowledge and comfort through training on the topic (Cooper et al., 2022; Jecke & Zepf, 2023; Kreines et al., 2022). Findings emphasize the components to consider when creating an effective TGD-specific educational intervention for healthcare professionals. These include the method of delivery, educational content, and the method of measuring the intervention impact. All three articles examined didactic educational sessions in which participants received lecture-based learning materials, and outcomes demonstrated success in increasing provider knowledge and comfort (Cooper et al., 2022; Jecke & Zepf, 2023; Kreines et al., 2022). The two systematic reviews on this content also included studies that evaluated multi-formatted educational interventions (didactic designs in combination with "mock patient scenarios" for hands-on practice) (Cooper et al., 2022; Jecke & Zepf, 2023; Kreines et al., 2022). The content included in the educational sessions focused mainly on terminology associated with TGD communities, health disparities related to stigma and discrimination, and ways to provide culturally inclusive care (Cooper et al., 2022; Jecke & Zepf, 2023); Kreines et al., 2022). These two systematic reviews found that most studies utilized a pre-intervention survey as well as a post-intervention survey to assess the impact of the intervention, while a few of the included studies provided only a post-intervention survey to participants (Cooper et al., 2022; Jecke & Zepf, 2023). Similarly, Kreines et al. (2022) provided both pre- and post-curriculum surveys to participants to obtain feedback on their educational intervention. Barriers to healthcare access must be considered in combination with the components of effective educational training when aiming to increase access to healthcare services and dismantle pervasive health disparities for the TGD population.

Rationale

While the primary care clinic sees a high volume of TGD individuals, it currently does not have regular training sessions educating clinic staff on culturally sensitive care of TGD individuals. To create a welcoming and culturally inclusive environment, staff must be trained in how to care for TGD individuals. In this way, barriers, including a lack of knowledge and acts of stigma and discrimination, can be mitigated, fostering an equitable and safe place for TGD patients to access healthcare. The Model for Improvement (MFI), developed by the Institute for Healthcare Improvement (IHI), was applied as the guiding framework for this project. The MFI is rooted in three concepts: the specific aims of a project, indicators that measure progress, and the optimal approach for initiating transformation (Institute for Healthcare Improvement [IHI], 2020). The MFI concepts are then applied through a rapid-cycle testing approach known as Plan-Do-Study-Act (PDSA), which provides a structured approach to test and implement small-scale changes and allows for continuous improvement and learning (IHI, 2020). The

PDSA format aligns well with this project, as it involves an iterative process, including the creation of pre- and post-intervention surveys, the creation and presentation of an educational session, and a post-intervention analysis and reflection.

Specific Aims

This project aimed to develop and present an educational training session on transgender-specific healthcare for clinic staff, including clinicians, medical assistants, and front desk staff, with the goal of increasing knowledge and comfort in providing care to transgender patients by November 1st, 2023.

Context

OHSU Orenco Station is an OHSU Health partner clinic located in Hillsboro, Oregon that provides care to patients of all ages. The clinic is staffed by six family medicine physicians, two family nurse practitioners (FNPs), four internal medicine physicians, and nine resident physicians. Additional staff includes 13 medical assistants (MAs), five patient access specialists (PAS), two registered nurses (RNs), one behavioral health consultant (BHC), one administrative coordinator, one clinical pharmacist, one practice manager, one referral coordinator, one back-office supervisor, and one panel coordinator. Team members who contributed to this project include a DNP provider, the practice manager, the medical director, the behavioral health consultant, and a DNP student. In addition to providing primary care, the clinic also offers transgender/gender diversity care and mental healthcare services. Data on the percentage of patients who identify as transgender or gender diverse were not available due to Epic report limitations.

Interventions

This project comprised four phases, outlined as follows. Phase 1 consisted of creating a presentation titled ‘Creating a Welcoming Environment for Transgender and Gender Diverse Patients’

(Appendix A). The content of the presentation included a combination of findings from a literature review by the DNP student as well as an adaptation and update of presentations on transgender care previously created by two different providers who have expertise in this area – one who practices at Orenco, and the other at a primary care clinic in Portland that specializes in LGBTQ+ care. The content focused on terminology related to the TGD population, existing health disparities, barriers to accessing healthcare, recommendations to create an inclusive and respectful clinic environment, and community resources to learn more on the topic. During Phase 2, pre- and post-intervention surveys were created utilizing Qualtrics (Appendix B). The surveys were created by the DNP student utilizing findings from the literature review and were approved by the project team prior to implementation. Survey questions aligned with the content included in the educational session. The pre-intervention survey inquired about participants' previous training regarding culturally appropriate care for transgender patients, previous experience working with this population, awareness of resources for this patient population, self-reported preparedness in providing care and interacting with patients, knowledge of terminology, disparities, and barriers for the TGD population, and knowledge of current best practices for creating a culturally inclusive environment. The post-intervention survey assessed the same components to evaluate the effectiveness of the intervention and included three additional questions. One of the questions asked participants if the educational session was helpful, and two final questions were free-text, designed to gain qualitative data from participants about what they learned during the session and what could be added to future interventions. Phase 3 included the completion of the pre-intervention survey by participants, followed by the 30-minute in-person presentation at the clinic, with subsequent completion of the post-intervention survey. The educational session took place in person at the OHSU Orenco primary care clinic during an All-Staff meeting on November 1st, 2023. One hour was allotted for the staff meeting, with clinic-specific agenda items scheduled for the first half and the educational session scheduled for the second half. As attendees joined the meeting both in-person and on Webex, surveys were administered in two formats: paper copies to in-person attendees and via a link to an online version of the survey. Finally, Phase 4 involved a comparison and analysis of the pre- and post-intervention survey responses and an evaluation of the effectiveness of the intervention.

Study of the Interventions

The study of this intervention included an analysis of pre-and post-intervention surveys completed by participants. The pre-intervention assessed participants' baseline knowledge of caring for TGD patients. Responses from the pre-intervention survey were compared with the post-intervention survey to assess the effectiveness of the educational session. Additionally, a stratification of the data was performed to better understand outcomes.

Measures

The primary outcome measures for this quality improvement project are the portion of participants who felt the educational session increased their knowledge of how to care for transgender patients and the portion of participants whose comfort in caring for and interacting with transgender patients increased due to the intervention. The process measure for this project was to record the number of participants who were able to attend the educational session. The primary balancing measures for this project include the time dedicated by the DNP preceptor and project team to the project and the increased time burden for the participants while filling out pre- and post-intervention surveys.

Analysis

Qualitative data was collected through pre- and post-intervention surveys, administered to clinic staff who attended the educational session. Survey results were organized and analyzed in an Excel spreadsheet using data summary scores, with guidance from a statistician affiliated with OHSU.

Common themes and patterns were drawn from the data to understand the staff's perceptions and the impact of the educational session.

Ethical Considerations

This project focused on increasing awareness, knowledge, and comfort among clinic staff who care for and interact with transgender and gender-diverse patients. The educational materials for this project were created by the DNP student in collaboration with healthcare providers, including MDs and NPs who have expertise and experience in transgender care. The materials underwent a rigorous review by the DNP provider before implementation to mitigate bias and ensure that the educational session appropriately reflected best practices. Additional ethical considerations included voluntary participation by clinic staff in filling out surveys and attending the educational session, anonymous surveys to respect confidentiality, and appropriate handling of survey results. Additionally, the clinic site signed a letter of support for the project (Appendix C), and the project was submitted to the Oregon Health & Science University Investigational Review Board (IRB) (Study #00026213), which found this project exempt from further review.

Results

A total of 27 participants were at the meeting – 23 in-person and 4 via Webex. Twenty-three of the 27 participants completed the pre-intervention survey, and only 13 completed the post-intervention survey. All 23 participants consented to the pre-intervention survey, along with all 13 who completed the post-survey. Nine MAs, three PASs, two NPs, one attending physician, one resident physician, and one BHC completed the pre-intervention survey. Five participants left this question about their role blank to remain anonymous. Contrastingly, two medical assistants, three PASs, one attending physician, one resident, and five unknown roles completed the post-intervention survey. On the pre-intervention survey, 45.5% said that they had had previous training on caring for TGD patients, while 54.5%

responded said they had not. 63.3% responded that they had previous experience working with the TGD population*,* and the remaining 36.4% answered that they had no previous experience. Conversely, 36.4% were aware of organizational or community resources for this population and 63.6% were not. This contrasts with the post-intervention survey, in which 83.3% had previous training and 16.7% did not, 66.7% had previous experience and 33.3% did not, and 72.7% were aware of resources while 27.3% were not.

The low completion rate of post-intervention surveys, especially among those without previous training, does not allow for a direct comparison with pre-intervention survey results for the Likert scale questions. Results showed that 54.5% of respondents on the pre-survey had *not* had previous training, while only 16.7% said they had *not* had previous training on the post-survey. A stratification of responses based on previous training was used to analyze the Likert scale questions, rather than a direct comparison between pre- and post-survey responses. The analysis of this stratification will be discussed in the 'Interpretation' section.

Finally, responses asking participants what barriers could hinder the creation of an inclusive environment for trans patients on the post-survey included *fixed false belief, steps to get things approved at the organizational level, personal beliefs, system display of name/pronoun, knowledge in medical treatment/labs, patient forms,* and *patient and provider resources.* Responses also demonstrated that 84.6% of participants thought the session was helpful to their understanding of TGD healthcare, 7.7% did not think it was helpful, and 7.7% did not answer the question. The final item on the post-survey asked for feedback or recommendations for future educational sessions on this topic*.* Responses were varied and included *more time to discuss, trans surgery options, medication management,* and *more handouts to ensure vocab is readily available for reference in clinic setting.*

Interpretation

Survey results show that slightly more than half of the attendees who filled out the pre-intervention survey had *not* had previous training on this topic (54.5%), and the majority of participants who filled out the pre-intervention survey were not aware of resources for the TGD population (63.6%). This further reinforces the need for this type of educational session for the clinic.

The discrepancy in the number of participants who filled out the pre-survey versus the number who filled out the post represents a shift in group composition, creating two distinct samples between the pre- and post-intervention surveys. This can be considered a confounding factor, because the mix of participants with and without previous training in both surveys masks the true impact of the intervention. When comparing the Likert scale responses from the pre-survey with the post-intervention survey, it appears that participants' knowledge and comfort regarding caring for and interacting with TGD patients stayed the same or decreased after the intervention. However, when evaluating the responses to the Likert scale items utilizing the stratification based on previous training versus no previous training, there was an overall increase in the number of *agrees* and *totally agrees* in the post-surveys compared with the pre-surveys. For the stratification, each of the options for the Likert scale statements was assigned a number 1 through 5, with *totally disagree* being 1 and *totally agree* being 5. On the pre-intervention survey, an average was calculated for Likert scale responses for those who said they had previous training on the topic. The averages are as follows: question 6a was 4.00, question 6b was 3.30, question 6c was 3.90, question 6d was 3.80 and question 6e was 3.30. On the post-survey, the averages increased: 4.11 (6a), 4.11 (6b), 4.33 (6c), 4.33 (6d), and 4.11 (6e). Responses for participants who said they had not had previous training on the topic were averaged as well, with the pre-intervention survey showing: 3.00 (6a), 2.42 (6b), 2.58 (6c), 2.83 (6d), and 2.50 (6e). On the post-intervention survey, averages increased for these participants as well: 3.83 (6a), 3.83 (6b), 4.00 (6c), 4.08 (6d), and 3.92 (6e). This suggests that regardless of attendees' previous training on this topic, the educational session increased their preparedness to care for and interact with TGD patients, confidence with terminology relating to the TGD patient population, awareness of health disparities and barriers faced by this population, and knowledge of the components essential for creating a culturally inclusive environment for TGD patients. Stacked bar charts with results from the Likert scale questions both with and without the stratification based on training can be found in Appendix D.

Findings from the post-intervention survey indicate that overall, participants found the educational session helpful to their understanding of TGD healthcare. Additionally, themes emerged from the free-text question asking about barriers. Participant-identified barriers to creating a culturally inclusive environment for TGD patients overall were focused on personal factors, including lack of knowledge and personal beliefs, and environmental factors, such as electronic health record limitations and clinic resources available to staff. Some of these factors were included in the educational session content, suggesting two conclusions: current literature accurately reflects the barriers seen in this clinic, and/or that learning occurred among the attendees regarding healthcare barriers faced by TGD patients. Participant responses from the free-text section asking for recommendations and feedback can serve as a guide for future educational sessions on this topic, which can include medication management for the TGD population, gender-affirming surgical options, and more time for discussion.

Summary

This DNP project aimed to develop and present an educational training session on transgender-specific healthcare for clinic staff, including clinicians, medical assistants, and front desk staff, with the goal of increasing knowledge and comfort in providing care to transgender patients. Pre- and post-intervention survey data were collected and analyzed and demonstrated that participants' preparedness to care for and interact with TGD patients, their confidence with terminology relating to the TGD patient population, awareness of health disparities and barriers faced by this population, and knowledge of the components essential for creating a culturally inclusive environment for TGD patients all increased following the educational session. Overall, participants from this project felt the educational session was helpful for their understanding of trans healthcare. These findings reflect current recommendations from the literature and support the use of trainings on this topic for healthcare professionals to increase knowledge and comfort in providing trans healthcare. This type of training has the potential to help address some of the main barriers faced by the TGD community in accessing healthcare services that perpetuate health disparities for the population. The project design could be easily replicated and adapted for use in other clinic environments to reach a wider audience of healthcare professionals and further address these barriers and disparities.

Limitations

Limitations for this DNP project include the high number of participants who did not fill out the post-intervention survey. This was due to the limited time available to complete the intervention, resulting in many of the medical assistants needing to leave prior to filling out a post-intervention survey, which contributed to a skewed representation of previous training. This lack of responses ultimately hindered the ability to draw conclusions from directly comparing the pre-intervention responses with the post-intervention responses. Another limitation is the handful of participants who did not fill out the surveys completely. Some questions were left blank by participants, likely due to a lack of comfort in revealing their role at the clinic. Additionally, the meeting occurred in a small conference room. With the greater-than-expected number of attendees, it is possible that some survey respondents felt distracted while marking down their responses. The hybrid nature of the presentation was another limitation, as there were technical difficulties in connecting with online participants at the beginning of the meeting, which reduced the total amount of time left. Also, there was a delay in sending the post-intervention survey link to the online participants, which may have contributed to the low completion rate of the post-intervention surveys. Lastly, the interprofessional composition of the audience presented a challenge in creating content that would be useful and relevant for everyone, and because of this, content included in the session was intentionally general. The inclusion of more nuanced content, such as prescribing gender-affirming medications for providers, could serve as a guide for future sessions on this topic, as this was a requested topic on the post-intervention survey.

Conclusions

Barriers to healthcare access among transgender and gender diverse patients perpetuate health disparities and are primarily due to lack of clinician knowledge and lack of available providers, discrimination and stigma, and financial burden. A literature search revealed that carefully designed trainings for healthcare professionals on TGD-specific healthcare can be an effective way to address some of these barriers, namely lack of knowledge and discrimination and stigma. This DNP project showed that an educational session on TGD healthcare at a primary care clinic increased knowledge and comfort regarding caring for and interacting with TGD patients among session participants, as demonstrated by pre- and post-intervention survey results. Although this study represents just one way to address health barriers and disparities for the TGD population based on current literature, it can serve as a guide for future, larger-scale interventions.

References

Bakko, M., & Kattari, S. K. (2020). Transgender-Related Insurance Denials as Barriers to Transgender Healthcare: Differences in Experience by Insurance Type. *Journal of General Internal Medicine*, *35*(6), 1693-1700. https://doi.org/10.1007/s11606-020-05724-2

Chong, L. S. H., Kerklaan, J., Clarke, S., Kohn, M., Baumgart, A., Guha, C., Tunnicliffe, D. J., Hanson, C. S., Craig, J. C., & Tong, A. (2021). Experiences and perspectives of transgender youths in accessing health care: A systematic review. *JAMA Pediatrics*, *175*(11), 1159-1173. https://doi.org/10.1001/jamapediatrics.2021.2061

Clark, K. D., Sherman, A. D. F., & Flentje, A. (2022). Health insurance prevalence among gender minority people: A systematic review and meta-analysis. *Transgender Health*, *7*(4), 292-302. https://doi.org/10.1089/trgh.2020.0182

Coleman, E., Radix, A. E., Bouman, W. P., Brown, G. R., de Vries, A. L. C., Deutsch, M. B., Ettner, R., Fraser, L., Goodman, M., Green, J., Hancock, A. B., Johnson, T. W., Karasic, D. H., Knudson, G. A., Leibowitz, S. F., Meyer-Bahlburg, H. F. L., Monstrey, S. J., Motmans, J., Nahata, L., . . . Arcelus, J. (2022). Standards of care for the health of transgender and gender diverse people, version 8. *International Journal of Transgender Health*, 23(Suppl 1), S1-S259. https://doi.org/10.1080/26895269.2022.2100644

Cooper, R. L., Ramesh, A., Radix, A. E., Reuben, J. S., Juarez, P. D., Holder, C. L., Belton, A. S., Brown, K. Y., Mena, L. A., & Matthews-Juarez, P. (2022). Affirming and inclusive care training for medical students and residents to reducing health disparities experienced by sexual and gender minorities: A systematic review. *Transgender Health*. https://doi.org/10.1089/trgh.2021.0148

Howell, J. D., & Maguire, R. (2023). Factors associated with experiences of gender-affirming health care: A systematic review. *Transgender Health*, *8*(1), 22-44. https://doi.org/10.1089/trgh.2021.0033

Institute for Healthcare Improvement. (2020, September). QI 102: How to improve with the model for improvement. Retrieved May 12, 2023, from https://education.ihi.org/topclass/topclass.do?CnTxT-355102650-expand-New_CourseHome-id=355102650-activitytype=28

Jecke, L., & Zepf, F. D. (2023). Delivering transgender-specific knowledge and skills into health and allied health studies and training: a systematic review. *European Child and Adolescent Psychiatry*. https://doi.org/10.1007/s00787-023-02195-8

Johnson, A. H., Hill, I., Beach-Ferrara, J., Rogers, B. A., & Bradford, A. (2020). Common barriers to healthcare for transgender people in the U.S. Southeast. *International Journal of Transgender Health*, *21*(1), 70-78. https://doi.org/10.1080/15532739.2019.1700203

Kamran, R., Jackman, L., Chan, C., Suk, Y., Jacklin, C., Deck, E., Wietek, N., Stepney, M., Harrison, C., Jain, A., & Rodrigues, J. (2023). Implementation of Patient-Reported Outcome Measures for Gender-Affirming Care Worldwide: A Systematic Review. *JAMA Network Open*, *6*(4), e236425. https://doi.org/10.1001/jamanetworkopen.2023.6425

Kcomt, L., Gorey, K. M., Barrett, B. J., & McCabe, S. E. (2020). Healthcare avoidance due to anticipated discrimination among transgender people: A call to create trans-affirmative environments. *SSM Population Health*, *11*, 100608. https://doi.org/10.1016/j.ssmph.2020.100608

Korpaisarn, S., & Safer, J. D. (2018). Gaps in transgender medical education among healthcare providers: A major barrier to care for transgender persons. *Reviews in Endocrine and Metabolic Disorders*, *19*(3), 271-275. https://doi.org/10.1007/s11154-018-9452-5

Kraschel, K. L., Chen, A., Turban, J. L., & Cohen, I. G. (2022). Legislation restricting gender-affirming care for transgender youth: Politics eclipse healthcare. *Cell Reporrts Medicine*, *3*(8), 100719. https://doi.org/10.1016/j.xcrm.2022.100719

Kreines, F. M., Quinn, G. P., Cardamone, S., Pi, G. E., Cook, T., Salas-Humara, C., Fino, E., & Shaw, J. (2022). Training clinicians in culturally relevant care: a curriculum to improve knowledge and comfort with the transgender and gender diverse population. *Journal of Assisted Reproduction and Genetics*, *39*(12), 2755-2766. https://doi.org/10.1007/s10815-022-02655-1

Kronk, C. A., Everhart, A. R., Ashley, F., Thompson, H. M., Schall, T. E., Goetz, T. G., Hiatt, L., Derrick, Z., Queen, R., Ram, A., Guthman, E. M., Danforth, O. M., Lett, E., Potter, E., Sun, S. E. D., Marshall, Z., & Karnoski, R. (2022). Transgender data collection in the electronic health record: Current concepts and issues. *Journal of American Medical Informatics Association*, *29*(2), 271-284. https://doi.org/10.1093/jamia/ocab136

Learmonth, C., Viloria, R., Lambert, C., Goldhammer, H., & Keuroghlian, A. S. (2018). Barriers to insurance coverage for transgender patients. *American Journal of Obstetrics and Gynecology, 219*(3), 272 e271-272 e274. https://doi.org/10.1016/j.ajog.2018.04.046

Puckett, J. A., Cleary, P., Rossman, K., Newcomb, M. E., & Mustanski, B. (2018). Barriers to gender-affirming care for transgender and gender nonconforming individuals. *Sexuality Research and Social Policy*, *15*(1), 48-59. https://doi.org/10.1007/s13178-017-0295-8

Rowe, D., Ng, Y. & O'Keefe, L. (2019). Addressing transgender patients' barriers to access care. *The Nurse Practitioner, 44* (6), 30-38. doi: 10.1097/01.NPR.0000558155.38478.8f.

Snow, A., Cerel, J., Loeffler, D. N., & Flaherty, C. (2019). Barriers to mental health care for transgender and gender-nonconforming adults: A systematic literature review. *Health and Social Work*, *44*(3), 149-155. https://doi.org/10.1093/hsw/hlz016

Stoehr, J. R., Hamidian Jahromi, A., Hunter, E. L., & Schechter, L. S. (2022). Telemedicine for gender-affirming medical and surgical Care: A systematic review and call-to-action. *Transgender Health*, *7*(2), 117-126. https://doi.org/10.1089/trgh.2020.0136

Teti, M., Bauerband, L. A., Myroniuk, T. W., & Koegler, E. (2021). Listening to transgender patients and their providers in non-metropolitan spaces: Needs, gaps, and patient-provider discrepancies. *International Journal of Environmental Research and Public Health*, *18*(20). https://doi.org/10.3390/ijerph182010843

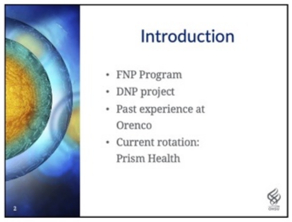
Teti, M., Kerr, S., Bauerband, L. A., Koegler, E., & Graves, R. (2021). A qualitative scoping review of transgender and gender non-conforming people's physical healthcare experiences and needs. *Frontiers in Public Health*, *9*, 598455. https://doi.org/10.3389/fpubh.2021.598455

Whitlock, B. L., Duda, E. S., Elson, M. J., Schwab, P. P., Uner, O. E., Wen, S., & Schneider, J. S. (2019). Primary care in transgender persons. *Endocrinology and Metabolism Clinics of North America*, *48*(2), 377-390. https://doi.org/10.1016/j.ecl.2019.02.004

Appendix A

Educational Materials

1



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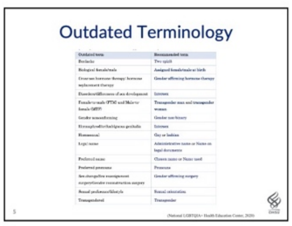

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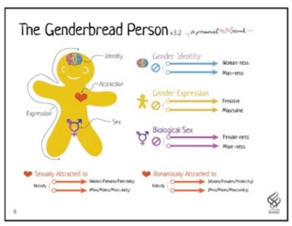

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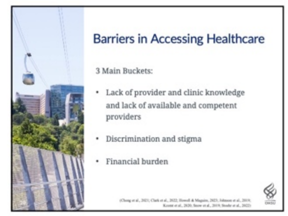

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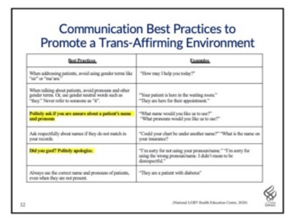

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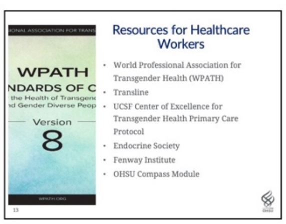

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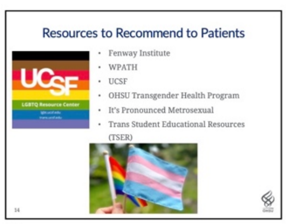

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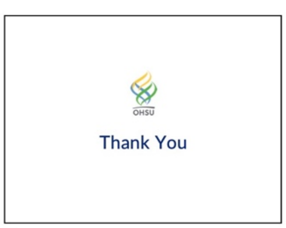

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Appendix B

Participant Pre-Intervention Survey

Please answer the following questions

Q1. **Consent:** This is a voluntary survey. Survey responses will be anonymous and you will not be asked for personal information. Data gathered from this project will be used solely for learning purposes to improve patient care.

Do you agree to take this survey?

- ○ Yes
- ○ No

Q2. My role at this clinic is:

Note: if you are uncomfortable with this question, please leave blank

Q3. I have received previous training on content relating to caring for transgender and gender-diverse patients

- ○ Yes
- ○ No

Q4. I have had previous experience working with and/or caring for transgender and gender-diverse patients

- ○ Yes
- ○ No

Q5. I am aware of organizational, community, and/or online resources available for transgender and gender-diverse individuals

- ○ Yes
- ○ No

Q6. For this portion of the survey, please answer each statement using the following choices:
I totally disagree
I disagree
I feel neutral
I agree
I totally agree

	I totally disagree	I disagree	I feel neutral	I agree	I totally agree
I feel prepared to care for and interact with transgender and gender-diverse patients	○	○	○	○	○
I could confidently explain the difference between gender identity and gender expression to others	○	○	○	○	○
I am aware of the health disparities faced by the transgender and gender-diverse population	○	○	○	○	○
I am aware of the barriers that transgender and gender-diverse patients face in accessing healthcare services	○	○	○	○	○

	I totally disagree	I disagree	I feel neutral	I agree	I totally agree
I know what components are essential for a culturally-inclusive clinic environment for transgender and gender-diverse individuals	○	○	○	○	○

Participant Post-Intervention Survey

OHSU

Please answer the following questions

Q1. **Consent:** This is a voluntary survey. Survey responses will be anonymous and you will not be asked for personal information. Data gathered from this project will be used solely for learning purposes to improve patient care.

Do you agree to take this survey?

- ○ Yes
- ○ No

Q2. My role at this clinic is:

Note: if you feel uncomfortable with this question, please leave blank

Q3. I have received previous training on content relating to caring for transgender and gender-diverse patients

- ○ Yes
- ○ No

Q4. I have had previous experience working with and/or caring for transgender and gender-diverse patients

- ○ Yes
- ○ No

Q5. I am aware of organizational, community, and/or online resources available for transgender and gender-diverse individuals

- ○ Yes
- ○ No

Q6. For this portion of the survey, please answer each statement using the following choices:
I totally disagree
I disagree
I feel neutral
I agree
I totally agree

	I totally disagree	I disagree	I feel neutral	I agree	I totally agree
I feel prepared to care for and interact with transgender and gender-diverse patients	O	O	O	O	O
I could confidently explain the difference between gender identity and gender expression to others	O	O	O	O	O
I am aware of the health disparities faced by the transgender and gender-diverse population	O	O	O	O	O
I am aware of the barriers that transgender and gender-diverse patients face in accessing healthcare services	O	O	O	O	O

	I totally disagree	I disagree	I feel neutral	I agree	I totally agree
I know what components are essential for a culturally-inclusive clinic environment for transgender and gender-diverse individuals	O	O	O	O	O

Q7. What do you see as a potential barrier to creating an inclusive environment for transgender and gender-diverse individuals?

Q8. Do you feel this educational session was helpful to your understanding of transgender and gender-diverse healthcare?

O Yes
O No

Q9. Please share any feedback or recommendations for future educational sessions on this topic.

Appendix C

Letter of Support from Clinic

<u>Letter of Support from Clinical Agency</u>

Date: *8/11/2023*

Dear *Rebecca Martinez*

This letter confirms that I, *Talia Buchsbaum* allow *Emily Schmidt* (OHSU Doctor of Nursing Practice Student) access to complete her DNP Final Project at our clinical site. The project will take place from approximately *4/1/2023* to *4/1/2024*

This letter summarizes the core elements of the project proposal, already reviewed by the DNP Project Preceptor and clinical liaison (if applicable):

- **Project Site(s)**: OHSU Orenco Station, Medical Office Building, 6355 NE Cornell Rd Suite 100, Hillsboro, OR 97124
- **Project Plan: Use the following guidance to describe your project in a <u>brief</u> paragraph.**
    - Identified Clinical Problem: Lack of training for providers and clinic staff in caring for transgender patients.
    - Rationale: The literature demonstrates that training interventions for clinic staff and healthcare providers measured with a pre- and post-intervention survey are effective in increasing comfort and knowledge in carding for transgender patients.
    - Specific Aims: Increase comfort and knowledge of clinic staff in caring for transgender patients to ultimately create a more inclusive and transgender-friendly clinic and increase access for transgender patients.
    - Methods/Interventions/Measures: The intervention for the project will be a presentation on best practices for caring for and interacting with transgender patients. The outcome measures for this project will be the portion of participants who felt the intervention increased their knowledge of how to care for transgender patients as well as the portion of participants who felt the intervention increased their comfort in caring for and interacting with transgender patients. The process measures will be keeping track of the number of participants in attendance during the educational session. The intervention effectiveness will be evaluated with a pre- and post-intervention survey to be sent out via participants' OHSU email.
    - Data Management: Pre- and post-intervention surveys sent out to staff will be anonymous to protect participants' identities.
    - Site(s) Support: the DNP Preceptor and Clinic Project Manager will support the student in sending out surveys to participants and will allow the student to present their intervention at a monthly staff meeting in the Fall of 2023.
    - Other:

During the project implementation and evaluation, *Emily Schmidt* will provide regular updates and communicate any necessary changes to the DNP Project Preceptor.

Our organization looks forward to working with this student to complete their DNP project. If we have any concerns related to this project, we will contact *Emily Schmidt* and *Rebecca Martinez* (student's DNP Project Chairperson).

Regards,

Talia Buchsbaum, FNP DNP

DNP Project Preceptor (Name, Job Title, Email, Phone): buchsbau@ohsu.edu 6107458277

Tala Bu

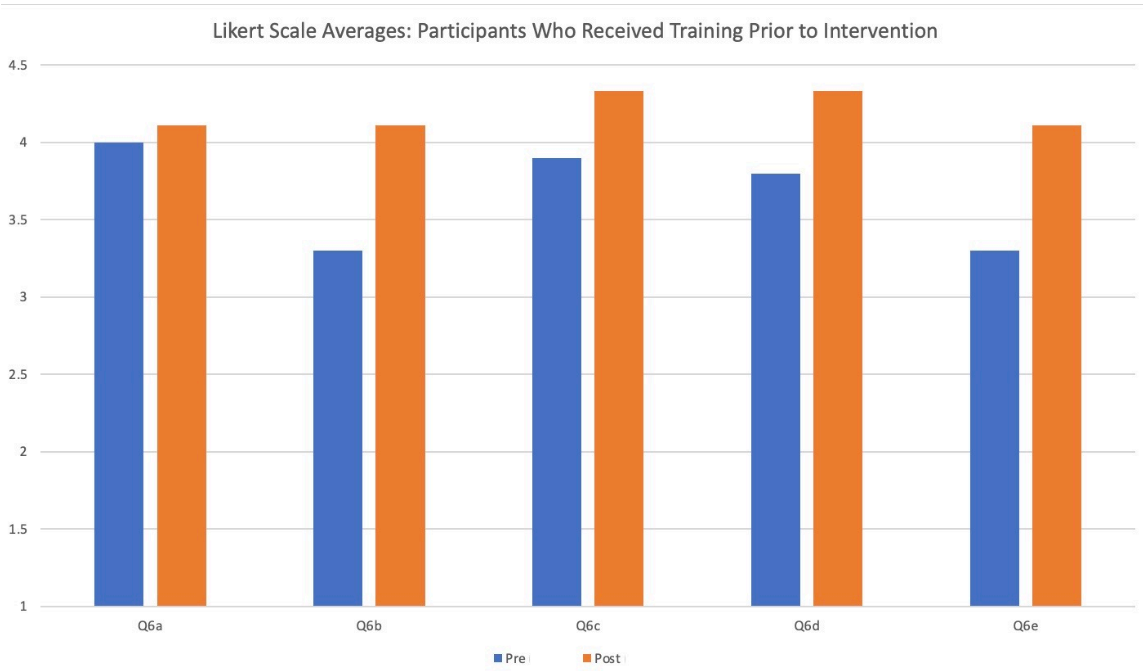
Signature

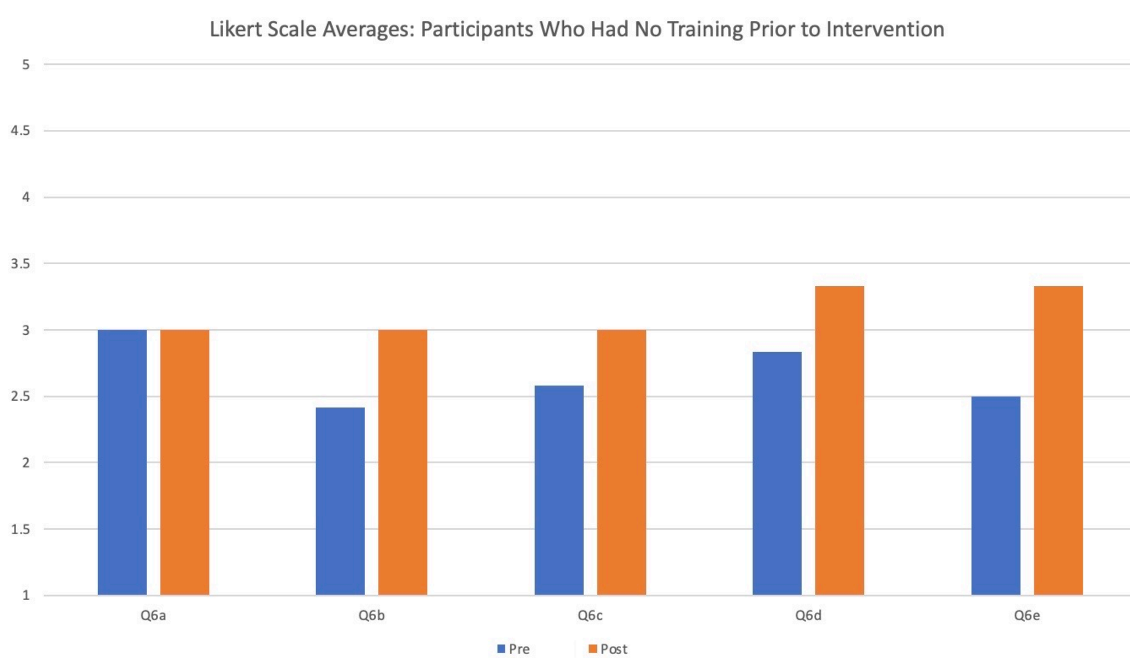
8/14/2023

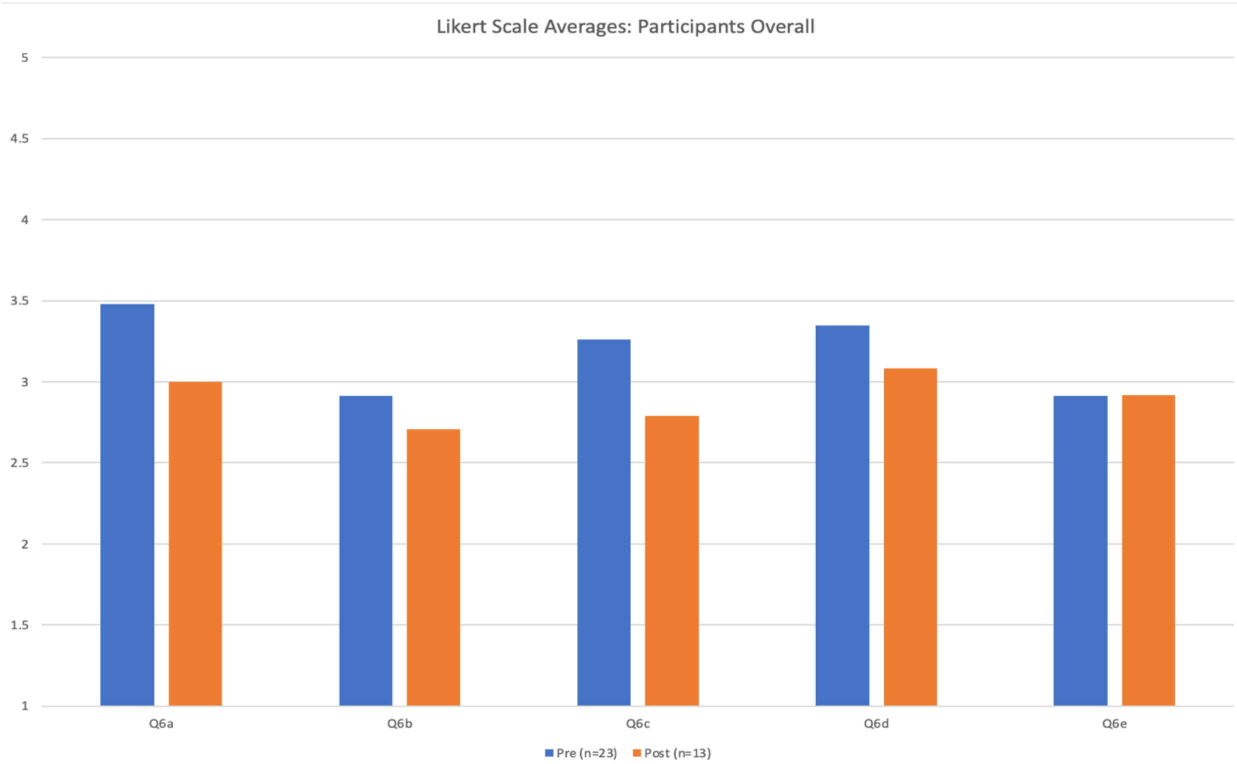
Date Signed

Appendix D

Stacked Bar Charts







Key:

Y Axis:

1 = *Totally disagree*

2 = *Disagree*

3 = *Neutral*

4 = *Agree*

5 = *Totally agree*

X Axis:

Q6a = *I feel prepared to care for and interact with transgender and gender-diverse patients*

Q6b = *I could confidently explain the difference between* gender identity *and* gender expression *to others*

Q6c = *I am aware of the health disparities faced by the transgender and gender-diverse population*

Q6d = *I am aware of the barriers that transgender and gender-diverse patients face*

Q6e = *I know what components are essential for a culturally-inclusive clinic environment for transgender and gender-diverse individuals*

OHSU IRB Exemption Letter

OREGON HEALTH & SCIENCE UNIVERSITY

IRB MEMO

Research Integrity Office
3181 SW Sam Jackson Park Road - L106RI
Portland, OR 97239-3098
(503)494-7887 irb@ohsu.edu

NOT HUMAN RESEARCH

August 25, 2023

Dear Investigator:

On 8/25/2023, the IRB reviewed the following submission:

Title of Study:	Improving Access to Healthcare Services Among Transgender Patients: An Educational Intervention
Investigator:	Rebecca Martinez
IRB ID:	STUDY00026213
Funding:	None

The IRB determined that the proposed activity is not research involving human subjects. IRB review and approval is not required.

Certain changes to the research plan may affect this determination. Contact the IRB Office if your project changes and you have questions regarding the need for IRB oversight.

If this project involves the collection, use, or disclosure of Protected Health Information (PHI), you must comply with all applicable requirements under HIPAA. See the HIPAA and Research website and the Information Privacy and Security website for more information.

Sincerely,

The OHSU IRB Office

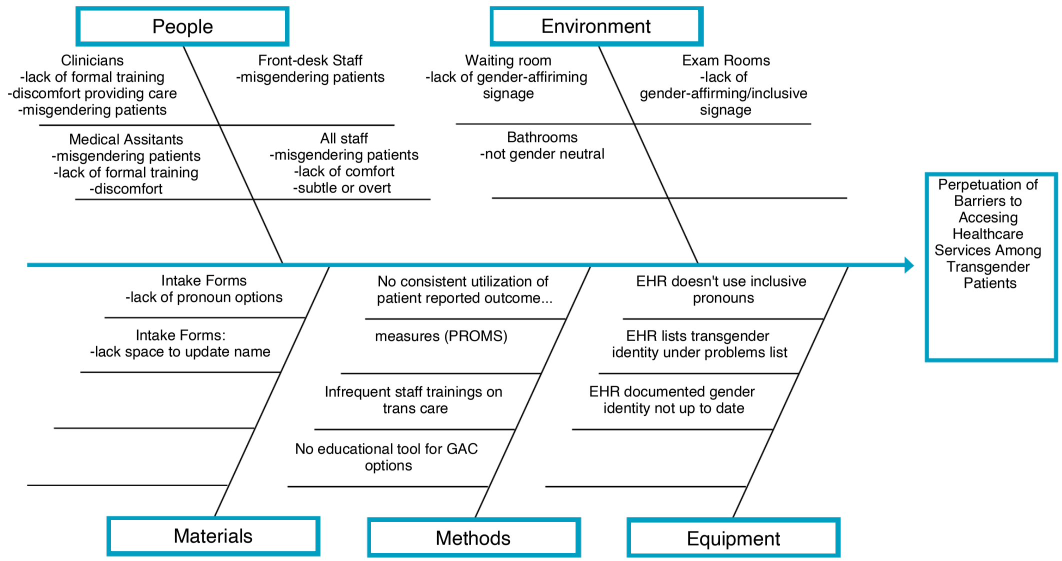
Fishbone Diagram

Before filling out this template, first save the file on your computer. Then open and use that version of the tool. Otherwise, your changes will not be saved.

Template: Cause and Effect Diagram

Team: Emily Schmidt **Project:** Addressing Barriers to Care for Transgender Patien

1) Input the effect you'd like to influence.
2) Input categories of causes for the effect (or keep the classic five).
3) Input causes within each category.



Project Timeline

	Jul	Aug	Sep	Oct	Nov	Dec-Mar
Finalize project design and approach (703A)	X					
Complete IRB determination or approval (703B)	X	X				
Phase 1: Creation of Educational Presentation (703B)			X			
Phase 2: Creation of Pre- and Post-Intervention Surveys (703B)			X	X		
Phase 3: Administer Pre-Intervention Survey to Clinic Staff, Present educational session to clinic, and administer post-intervention survey (703B)					X	
Phase 4: Review survey results and analyze findings (703B)					X	
Write sections 13-17 of final paper (703B)					X	X
Prepare for project presentation and further information dissemination (703B)						X