

A COMMITMENT TO INCLUSIVE CARE OF TRANSGENDER PATIENTS: A PROGRAM  
EVALUATION

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A project submitted to the faculty at the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice in the School of Nursing.

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## **ABSTRACT**

Sophie M. D. Austin: A Commitment to Inclusive Care of Transgender Patients: A Program Evaluation  
(Under the direction of Leslie Sharpe)

**Purpose** Transgender patients often face significant barriers accessing quality, affirming health care (Romanelli & Lindsey, 2020). Additionally, these patients often report negative health care experiences (Bizub & Allen, 2020). The purpose of this project is to identify areas that need improvement, with the goal of improving patient care.

**Methods** This project will be a program evaluation at two Piedmont Health Services (PHS) clinics and was guided by the Context, Input, Process, Product model. This program evaluation was completed through a chart review, an examination of the physical office space, and a survey distributed to staff and providers with direct patient care responsibilities.

**Results** Several areas were identified that may adversely affect safe and inclusive care for transgender patients, including an EMR banner that is cumbersome for noting pronouns and preferred name, lack of consistency between provider and staff documentation, and discrepancy between gender and gender identification, among other findings.

**Conclusions** Primary recommendations for change to improve care for transgender patients includes updating the EMR, particularly the banner, and providing training at regular intervals to both providers and staff. Additionally, it is recommended to include both a patient's sex and gender identity in the banner.

To my husband, Adrian, for his patience, love, and humor, and for daily inspiring me to be the best version of myself.

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## LIST OF ABBREVIATIONS

CIPP model	Context, Input, Process, Product model
EMR	Electronic Medical Record
GAHT	Gender-affirming Hormone Treatment
HPI	History of Present Illness
MA	Medical Assistant
MH	Mental Health
PCP	Primary Care Provider
PHS	Piedmont Health Service
THS	Transgender Help-Seeker

## **CHAPTER 1: INTRODUCTION**

Nationwide there is a growing population of transgender individuals. Approximately 1.4 million or 0.6% of Americans identify as transgender (Flores, et al., 2016). While the number of transgender individuals in the United States is likely much higher, the methods for collecting gender identity data are still evolving and often unreliable (Rosser, et al., 2007). Despite the growth in this population, these individuals often face significant barriers accessing quality, affirming health care (Romanelli & Lindsey, 2020). Additionally, these patients often report negative health care experiences (Bizub & Allen, 2020).

### **Background**

A transgender person is one whose gender identity differs from the sex recorded at birth (Safer & Tangpricha, 2019). Some individuals who identify as transgender will choose to undergo medical treatment to align physical appearance with gender identity (Safer & Tangpricha, 2019). Medical treatment may involve surgical interventions, such as sexual reassignment surgery (Kline & Schrock, 2015) and/or hormonal treatment. Alternatively, some transgender individuals may decide against any medical interventions (Kline & Schrock, 2015).

Multiple terms are utilized in popular culture to describe this diverse population whose gender identities do not align with the sex recorded at birth. These terms include, “transgender,” “transsexual,” “trans,” “gender nonbinary,” “gender incongruent,” and “genderqueer” (Safer & Tangpricha, 2019). Transgender individuals are often referred to as being part of the LGBTQ or LGBTQIA+ population, referring to those who are lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, or other sexual minority (Burton, et al., 2020). Only in the past

few decades has there been an increased emphasis on transgender rights, advocacy, and pro-trans policy (Matthews, 2017). Despite this increased dialogue, the transgender population is often misunderstood and marginalized. The 2011 U.S. Transgender Survey conducted by the National Center for Transgender Equality, specific examples of marginalization of the transgender population were identified. The results showed that transgender individuals experience discrimination in the areas of employment, public accommodations, education, family life, housing, health, police and jails, and identification documents (Grant, et al., 2011).

One particular area of concern for the transgender community is discrimination in gaining access to quality health care (Romanelli & Lindsey, 2020). Romanelli and Lindsay (2018) detail the prevalence and types of discrimination faced by transgender patients. This includes 19-28% of transgender help seekers (THS) being denied health care, and up to 70% of THS reporting discriminatory incidents including verbal harassment, being ignored, providers refusing to touch them, physically rough exams, and blame for their current physical and mental health status. As a result, transgender persons face health disparities and have increased rates of substance abuse, mental health conditions, certain types of cancer, infections, and chronic diseases (Safer & Tangpricha, 2019).

## **Historical Background**

### ***Legal Discrimination***

While the transgender population is growing in the United States, this population exists within a culture that stigmatizes sexual and gender minorities (Graham, et al., 2011). There is little historical data on discrimination and violence towards transgender individuals. In part, the lack of historical data is due to the lack of recognition of transgender individuals. It was not until the 20<sup>th</sup> century that the word transgender was introduced. In 1910, Magnus Hirschfeld, who would later develop the Berlin Institute where the very first 'sex change' operations took

place, introduced the word “transvestite” (Bullough, 2003). He used the term to describe those whose who were overcome with a “feeling of peace, security and exaltation, happiness and well-being...when in the clothing of the other sex” (Hirschfeld, 1991, p. 125).

In 1949, the term *transsexual* was introduced by David Oliver Cauldwell in his essay “Psychopathia Transexualis” (Graham, et al., 2011). Cauldwell introduced the term to describe individuals whose sex assigned at birth, based on the appearance of their external genitalia, did not match their gender identity (Cauldwell, 1949). The term transgender is attributed to Virginia Prince. It was in the 1970s that Prince first use the word “transgenderist” in order to “differentiate between cross-dressing practices and the then emergent medicalized identity of the transsexual” (Papoulias, 2006).

In part the absence of historical data is due to the fact that there was no language to define this population. Rather, the historical language focuses on those who were considered cross dressers. As far back as the 1600s in England, “gender crossing” was considered a crime (Graham, et al., 2011). The creation of this law in England, in turn, created a foundation for similar laws to be created in the United States. Contemporary sumptuary laws, known as cross-dressing laws, have been used to target individuals who transgress gender roles, whether they are gay, lesbian, transgender or straight (Redburn, 2018). It was not until the 1970s that the United States Supreme Court began to hear cases against these laws. For example, in 1975, the *Columbus v. Rogers* case was heard in response to the provision of a city ordinance that made it unlawful for any person to appear in public “in a dress not belonging to his or her sex” (O’Neill, 1975, need page number here).

Furthermore, the lack of historical data also exists because those who crossed-dressed were forced to keep their identity a secret. Afraid to disclose their identity out of fear of legal

consequences, transgender individuals seldom reported discriminatory acts, and as a result, data on discrimination and violence toward transgender individuals is limited (Graham, et al., 2011). There are, however, several anecdotal accounts that have been passed down and recorded, that detail instances of humiliation, violence, and harassment, in addition to the fear of being discovered and subsequently arrested or killed because of their gender identity (Feinberg, 1996).

Even in the late 20<sup>th</sup> century, the data regarding violence and discrimination against transgender individuals was underreported (Lombardi, et al., 2002). In 1995, the National Coalition of Anti-Violence Programs (NCAVP) collected data on violent attacks, and was only able to document 69 violent attacks against transgender individuals. However, the NCAVP reported that this data was most likely inaccurate, based on the fact that while transgender individuals made up only 2% of the sample, they accounted for 16% of all murder victims (Lombardi, et al., 2002). The NCAVP reported that of the “hate violence” homicides reported in 2013, 72% of the homicide victims were transgender women and 67% were transgender women of color (Reisner, et al., 2015).

Transgender persons have continued to face legal, social, and medical discrimination in the late 20<sup>th</sup> century and in the beginning of the 21<sup>st</sup> century. For example, in 1995 in Washington, D.C., Tyra Hunter, a transgender woman, died after being denied medical care by ER staff due to her gender identity. After her tragic death, her mother was awarded \$2.8 million, as the medics and doctors were found to negligent for not following “nationally accepted standards of care” (Feinberg, 2001). This single story is but one example of the pervasive discrimination that has led to poor outcomes for transgender individuals. It was not until 2009 that the Matthew Shepard and James Byrd, Jr. Hate Crimes Prevention Act was signed into law. This Act expanded the definition of a federal hate crime to include those violent crimes in which

a victim is chosen due to their actual or perceived gender or gender identity. Prior to this Act, federal hate crimes were defined solely as those violent crimes where the victim is selected based on their race, color, religion or national origin (The United States Department of Justice, 2018).

### ***Psychiatric Classification***

As previously mentioned, it was not until 1949 that the term *transsexual* was introduced by David Oliver Cauldwell in his essay “Psychopathia Transexualis” (Graham, et al., 2011). In his work, Cauldwell wrote that transsexuality is a genetically inherited predisposition, which combined with a dysfunctional childhood, results in mental immaturity (Cauldwell, 1949). Through his writing, Cauldwell reinforced a pathologizing and social stigma of the transgender population (Vipond, 2015).

The stigma associated with this population was reinforced in 1980 when the term “gender dysphoria” was introduced in the DSM-III (American Psychiatric Association, 1980), which furthered the idea of it being a psychiatric condition. Two diagnoses were included: gender identity disorder of childhood (GIDC) and transsexualism, referring to gender dysphoria in adolescents and adults (Graham, et al., 2011). It was not until the 1990s that these terms were challenged as being controversial when activists advocated for recognition of gender diversity and the depathologizing of gender variance (Graham, et al., 2011).

It was in the 1990s that activists saw progress and change in the fight for transgender rights (Graham, et al., 2011). In 1992, Minnesota became the first state that adopted human rights and antidiscrimination legislation that included transgender people (Graham, et al., 2011). Several other states have followed in adopting antidiscrimination legislation. However, only a minority of states have introduced legislation to expand the rights of transgender individuals, while a majority of states have either curtailed the rights of the transgender community or allowed existing restrictions on gender identity to remain in place (Mezey, 2020).



### ***Discrimination and Social Disadvantages***

Transgender individuals often face discrimination and social disadvantages. These disadvantages include living below the poverty level, experiencing a higher rate of homelessness, sexual and physical assaults, bullying, and unequal treatment or service in public accommodations. Additionally, these individuals are three times as likely to be unemployed as the general population (Cicero et al., 2019). Discrimination and social disadvantages are pervasive and exist within the health care system as well. Transgender individuals endure discrimination and systematic oppression by healthcare professionals and within healthcare settings (Cicero, et al., 2019). For example, transgender patients report that discriminatory experiences include inappropriate care, care refusal, and mistreatment by health providers (Cicero et al., 2019).

## **CHAPTER 2: IMPACT ON PHYSICAL AND MENTAL HEALTH**

Overall, transgender individuals experience a lack of safe places in society including at schools, churches, and work. For many transgender patients, they also may not be able to find a safe space in the health care setting, creating the potential for a patient's physical and mental health to be significantly and adversely impacted. To combat this potential discrimination, transgender patients need healthcare providers to recognize their identities as authentic, they need better access to health care resources, and they need education and prevention material appropriate to their experience (Lombardi, 2001).

### **Physical Health**

According to the 2015 US Transgender Survey (USTS), 23% of respondents did not see a healthcare provider in the last year when it was needed because of fear of being mistreated as a transgender person (James et al., 2016). This data speaks to the fact that transgender patients are not receiving medical care to address acute needs. In addition, transgender patients often do not receive the necessary preventative care and screening. Together this results in poor health outcomes for transgender patients (Romanelli & Lindsey, 2020; Seelman et al., 2017).

Many patients do not have access to affirming, competent health care. Others simply are not provided with the proper preventative care due to their gender identity (Edmiston et al., 2016). For example, transgender men with a cervix are less likely to receive cervical cancer screening than cisgender women. As a result, transgender men may face significant risks for cervical cancer that remains undetected due to decreased screening (Edmiston et al., 2016).

When asked to rate their health from “excellent” to “poor,” 22% of the respondents of the USTS said it was “fair” or “poor” as compared with 18% of the US general population (James et al., 2016). The resources that address the physical needs of transgender patients are inadequate (Fredriksen-Goldsen et al., 2014). This includes resources to support providers in providing gender-affirming health care. In addition, this includes resources for transgender patients to help facilitate access to evidence-based, affirming healthcare.

A well-documented link exists between experiences of discrimination and marginalization and poor mental and physical health outcomes (James, et al.). It is imperative that more research be done to better understand the health needs of transgender population. In addition, it is important to develop a deeper understanding of the barriers faced by this community, and the health needs that are not being appropriately met.

### **Mental Health**

The transgender population is at an increased risk for developing mental health problems (van der Miesen et al., 2020). In particular, transgender patients are at an increased risk for depression, anxiety, substance use, and suicidality (Valentine & Shipherd, 2018). Often mental health conditions develop due to the high degree of abuse and violence experienced by this population (Fredriksen-Goldsen et al., 2014). Just as more research efforts need to be devoted to the physical health needs of transgender patients, more research efforts are needed to address the mental health needs of the transgender population (Valentine & Shipherd, 2018), including older transgender adults, adolescents, and racial minorities (Fredriksen-Goldsen, et al., 2014; Price-Feeney, et al., 2020; Snow et al., 2019).

### **CHAPTER 3: PROJECT PURPOSE**

This project will be a program evaluation at PHS. The goal of a program evaluation is a systematic collection of data regarding the activities, characteristics, and outcomes of a program to assess its current strengths and limitations, improve its effectiveness, and guide informed decisions about future program development (Patton, 2008).

PHS is a network of clinics in North Carolina that focuses on providing comprehensive health services and education to all members of the community. The providers at PHS recognize the importance of providing affirming health care to transgender individuals (Piedmont Health, 2021b). The focus of this program evaluation will be to identify areas in which transgender individuals are being offered comprehensive and affirming health care, as well as areas where potential improvement is needed in order to sustain the commitment to inclusive care.

This program evaluation will involve four areas: a chart review, a review of the physical space of PHS clinics, and training provided to the staff. First, this program evaluation will involve a chart review that will examine whether pronouns and preferred names are documented, and if they are used consistently throughout the chart. Second, the chart review will examine whether preventative services are offered to patients, regardless of gender identity.

Next the program evaluation will include an evaluation of the physical space, including if gender neutral bathrooms are available to all staff and patients. Additionally, this program evaluation will evaluate the training that is provided to staff regarding the care of transgender patients, including providers, medical assistants and nurses, and front desk staff.

## **Problem Statement**

Transgender patients face significant health disparities as compared to cisgender patients (Bizub & Allen, 2020). One of the causes for the barriers faced by transgender persons is the lack of training that primary care providers receive regarding the care of transgender patients (Korpaisarn & Safer, 2018). More specifically, these patients experience barriers related to lack of cultural competence by health care providers and health system barriers. These barriers include facilities without gender neutral bathrooms (Guss et al., 2019) or intake forms that are inclusive of transgender and gender non-binary individuals (Rullo et al., 2018). Added barriers include electronic medical record (EMR) systems that do not allow for the documentation of pronouns or preferred name (Lau, et al., 2020) or that auto-populate male or female specific organs in either the review of systems or physical assessment charting (Portillo, 2021). Providers who may not be sufficiently trained and prepared to care for the specific needs of transgender patients, including interpreting laboratory results in the setting of hormone use, may pose an additional barrier (Rosendale, et al., 2018).

## **Purpose Statement**

The purpose of this quality improvement project is to evaluate the current program for providing comprehensive and affirming care of transgender individuals of a local health system. This project will be conducted at a health system that recognizes and advertises the importance of inclusive care. A retrospective chart review will be used to evaluate the documentation of pronouns or preferred name, and the consistent use of that name and pronouns throughout the chart. It will also evaluate if a patient is being referred for appropriate preventative services based on their anatomy and gender identity. The findings will be compared to evidence-based guidelines and will conclude with recommendations for improvement and future research.

In addition to conducting a retrospective chart review, it will be important to evaluate the physical space of the clinics. Is the physical space welcoming to those who are transgender? Are there gender neutral bathrooms? Are there gender neutral bathrooms available to both patients and staff? Finally, it will be important to assess the staff. More specifically, what is the perceived comfort of providers in caring for transgender patients, and what training is provided to the staff? Are providers, medical assistants, and front desk staff appropriately trained to create an environment to care for the unique needs of transgender patients?

This project will be guided by the Context, Input, Process and Product (CIPP) Model (Stufflebeam, 1983). More specifically, this program evaluation will be guided by the four stages of evaluation of the CIPP model (Irawan & Prasetyo, 2020), which are context evaluation, input evaluation, process evaluation, and product evaluation (Stufflebeam & Zhang, 2017).

## **CHAPTER 4: REVIEW OF THE LITERATURE (ROL)**

### **Search Strategy**

The purpose of this literature review is multifold. The primary purpose of the literature review is to develop an understanding of the specific types of barriers faced by transgender patients, including physical space of clinics, EMR documentation systems, and provider knowledge. An additional goal of the literature review is to ascertain if strategies have been discovered and implemented in order to overcome these barriers.

This literature review was conducted based on expert guidance from the University of North Carolina at Chapel-Hill Health Sciences Librarian and Liaison to Nursing (UNC University Libraries, n.d.). Both PubMed and Cumulative Index to Nursing and Allied Health Literature (CINAHL) were utilized for this literature review. Search terms used included transgender, genderqueer, or gender binary, primary care, preventative care, and chart review, medical history, or electronic health record.

Due to the limited availability regarding the health care barriers faced by transgender patients, the literature search focused on the transgender population in its entirety. The following Mesh term was used to be inclusive of individuals who identify as transgender: “Transgender Persons”[Mesh] OR transgender OR gender non-conforming OR bi-gender OR gender diverse OR bigender OR gender-diverse.”

## **Description of Articles Selected**

The initial search found more than 600 articles. The articles used in this project were selected due to their focus on preventative primary care and barriers to care for transgender patients. Twenty-five articles were selected for review. Of the 25 studies selected for review, one was a retrospective cohort study that examined data from the 2015 U.S. Transgender Survey (Romanelli & Lindsey, 2020) and is regarded as level III evidence (Dang & Dearholt, 2017). A retrospective chart review was also included (Sokkary et al., 2020), which is regarded as level V evidence because of its focus on quality improvement (Dang & Dearholt, 2017). Five of the articles reviewed were literature reviews (Bizub & Allen, 2020; Clark et al., 2018; Edmiston et al., 2016; Lau et al., 2020; Nikolić et al., 2018). One of the articles reviewed case studies (Burgess et al., 2019); this is also regarded as level V evidence (Dang & Dearholt, 2017). All of these literature reviews are regarded as level V evidence (Dang & Dearholt, 2017).

Three articles utilized surveys (Bauer et al., 2014; Sequeira et al., 2020; Unger, 2015), while four articles utilized interviews (Dunne, et al., 2017; Guss et al., 2019; Taylor & Bryson, 2016; Sanchez, et al., 2009). These articles are considered level V evidence (Dang & Dearholt, 2017). One article examined case studies focused on the EMR (Burgess et al., 2019). The last article included in this study was a qualitative multi-case study (Ziegler et al., 2019) and is considered level III evidence (Dang & Dearholt, 2017). Three articles examined educational initiatives regarding the care of transgender patients, level III evidence (Kunte et al., 2020). Two of these studies looked at an educational initiative, with a pre- and post-test utilized to evaluate effectiveness (Hiller, 2019; Leslie, et al. 2017). The third article utilized a different design and distributed a cross-sectional nonprobability survey (Lim et al., 2015).



## **Themes in the Literature**

A few themes emerged. The first is the barriers faced by transgender patients within the healthcare system, limiting access to evidence-based primary preventative healthcare. This includes both discrimination from healthcare providers and an unwelcoming physical space. A second theme that emerged involves inconsistencies with EMR documentation.

### ***Barriers To Health Care and Discrimination Within The Healthcare System***

Transgender patients face barriers in accessing health care and face discrimination within the health care setting (Romanelli & Lindsey, 2020) as well as health disparities as compared to cisgender patients (Bizub & Allen, 2020). More specifically, barriers were reported regarding discrimination from providers, in addition to physical spaces that were unwelcoming. An additional barrier faced by transgender patients is cost. Barriers related to cost include inability to secure health insurance (Padula & Baker, 2017) and seeking insurance reimbursement for services routinely available to cisgender patients (Leslie, et al., 2018).

Additionally, it was reported that it was often cost-prohibitive to see a specialist (Sanchez., et al., 2009). A transgender patient may benefit from seeing specialists from psychology, psychiatry, social services, endocrinology, and surgery (Joseph, et al., 2017).

**Discrimination From Providers.** A 2010 Lambda Legal survey on healthcare discrimination found that 70% of transgender and gender non-conforming respondents experienced discrimination from healthcare providers (Bauer et al., 2014). Some forms of discrimination included providers using harsh or abusive language, patients being refused needed care, providers refusing to touch patients or using excessive precautions when touching patients, providers being physically rough or abusive, or patients being blamed for their health status.

**Unwelcoming Physical Space.** Transgender patients reported that in addition to having providers who are knowledgeable regarding the care of transgender patients, it is also important to have a welcoming physical space, including inclusive language being used on forms and intake paperwork, bathrooms being available regardless of gender identity, and visible cues in clinical and waiting spaces that signal a welcoming environment (Bizub & Allen, 2020). In one study on the experience of transgender adolescents, not having access to gender neutral bathrooms or being forced to wear a bracelet with the wrong name contributed to a negative experience (Guss et al., 2019).

The barriers encountered by this population are unique due to medical, social, and communication needs (Clark et al., 2018). These barriers are often intensified because of a lack of provider knowledge concerning transgender patients and their specific needs (Clark et al., 2018). Additionally, the barriers faced by transgender patients often lead to population-level disparities in health outcomes (Edmiston et al, 2016).

### ***Electronic Medical Record Documentation***

A second theme that emerged were inconsistencies with EMR documentation. Many EMRs do not facilitate the care of transgender patients (Lau et al., 2020). To address this shortcoming, each organization must create an organizational culture that acknowledges diversity, adopts applicable nondiscrimination, privacy, and confidentiality protection mechanisms, and trains health care staff on how to collect and use gender, sex, and sexual identity data (Lau et al., 2020).

A patient's gender identity and sexual orientation needs to be accurately documented (Sokkary, et al., 2020). To prevent the misgendering and misnaming of patients, EMRs must allow for a patient's pronouns, preferred name, and gender identifiers to be immediately visible

to all staff (Dunne et al., 2017). A survey distributed to transgender adolescents found that they requested that their preferred name be documented, even if their name had not been legally changed (Sequeira, et al., 2020).

In interviews with both patients and providers, providers commented that both a patient's sex assigned at birth and gender identity need to be documented (Dunne et al., 2017); having both documented may lead to improved patient health outcomes (Burgess, et al., 2019). However, the lack of proper documentation regarding a patient's gender identity and sex assigned at birth may lead to insufficient screenings and preventative care services (Dunne, et al., 2017). For example, research shows that female-to-male patients often do not receive cervical cancer screening and male-to-female patients routinely do not receive breast exams (Unger, 2015). The lack of appropriate screenings may lead to undiagnosed conditions, such as breast cancer (Nikolić, 2018) or gynecological cancers (Taylor & Bryson, 2016).

During these same interviews, both providers and patients discussed the need for pronouns and gender identifiers to be in a "forward-facing display" in order to prevent misgendering by clinic staff and providers (Dunne, et al., 2017). Additionally, both patients and providers recognized the need for a broader range of birth-assigned sex and gender options (Dunne, et al., 2017). The options need to allow for transgender patients and gender non-conforming patients the ability to express their gender preference.

### ***System Barriers***

The lack of an EMR that allows for the documentation of the physical exam of a transgender patient is one example of a systematic issue impacting care. A second systemic issue is the lack of training providers receive in school. On average, medical schools devote five hours to covering the care of LGBTQ patients (Leslie, et al., 2017). Nurse practitioner programs do not devote significant time to the teaching of care for LGBTQ patients (Hiller, 2019). One of

the barriers to nursing students being prepared to treat transgender patients is the shortage of faculty prepared to address these topics (Lim, et al., 2015).

Additional systemic issues include insurance policies that prohibit preventative health care for transgender patients (Safer, et al., 2016). For example, gender-specific preventive care, such as mammograms, are often not covered by insurance if a patient legally changes their sex on their birth certificate (Padula, et al., 2016). Additionally, the absence of evidence-based screening guidelines regarding the care of transgender patients from expert bodies and professional societies is a significant systems issue (Edmiston et al, 2016).

### ***A Need for Evaluation***

In order to address the barriers faced by transgender patients, the medical community must conduct a careful evaluation of primary care services offered for transgender individuals (Ziegler et al., 2019). This includes identifying gaps in service, creating safe space for patients, and providing more training and education in transgender care for primary care providers (Ziegler et al., 2019).

As previously mentioned, one gap in service is the need for a welcoming and safe space for transgender individuals. This includes using inclusive language on forms and intake paperwork. Are gender-neutral terms used, such as “parents” as opposed to “mother and father;” when obtaining family history? Do intake forms ask about a “partner” or “spouse” rather than a boyfriend, girlfriend, husband, or wife? (Bizub & Allen, 2020). Are there multiple options for gender, rather than the binary of male and female? Does the intake form allow for documentation of both gender at birth and gender identity (Bizub & Allen, 2020)?

The program evaluation can assess if the physical space is welcoming and inclusive. Does the artwork and décor identify that this space is welcoming of all individuals? And are the

bathrooms and/or changing rooms clearly labeled in a way that appropriately includes transgender individuals (Guss et al., 2019)? The most welcoming option is a single stall, gender neutral bathroom. However, if this is not available, is the bathroom labeled in such a way that is welcoming to a transgender patient (Bizub & Allen, 2020).

Another gap in service is the inconsistencies with EMR documentation (Dunne, et al., 2017). Are pronouns and preferred name documented and easily accessible to all staff? Does the EMR alert providers to recommended screenings that are due, regardless of gender identity? Does the EMR provide for space to document on a prostate, if the patient identifies as female but was male at birth? Finally, training and policies should be evaluated for inclusivity and consideration of all patients and made available at the clinic for all employees. What policies need to be reconsidered, as they relate to the care of all patients? These are just some of the questions that need to be addressed to work towards eliminating barriers faced by transgender patients.

### **Strengths And Weaknesses Of The Results**

One significant weakness found in the literature is the level of evidence utilized. It is important to find the highest level of evidence available to guide quality improvement (Burns, et al., 2011). None of the research reviewed for this particular project is considered level I or level II evidence. Only two of the 21 articles reviewed are regarded as level III evidence. The remaining 10 are regarded as level V evidence (Dang & Dearholt, 2017).

One strength of the literature is the diversity of the populations studied within the transgender community. There was a diversity in age. These populations included adults and transgender adolescents age 12 to 26 years old (Sequeira, et al., 2020). There was also research that focused on the older adults aged 50 and older (Fredriksen-Goldsen, et al., 2014).

Additionally, there was diversity in location. Data from the 2015 U.S. Transgender Survey was utilized (Romanelli & Lindsey, 2020), in addition to data from a qualitative multi-case study in Ontario, Canada (Ziegler, et al., 2019). There were also studies that focused on both urban (Sanchez, et al., 2009) and rural (Rowan, et al., 2019; Green-Morris, 2019) settings. Despite the diversity in both age and location universal themes emerged.

## **Recommendations**

The literature suggests transgender patients do not have the same access to competent primary care services as cisgender patients. Furthermore, these patients often experience discrimination within the health care system. Specific gaps in primary care services include insufficient preventative screenings, and lack of thorough and appropriate EMR documentation of pronouns, preferred names, sex at birth, and gender identity. In addition, there are barriers due to an unwelcoming physical space and lack of provider and staff knowledge.

A systematic evaluation of the care provided to transgender patients in the primary care setting is proposed to address this significant problem. This can effectively be addressed at the local level through program evaluation. A program evaluation, including a chart review, can determine gaps in care and areas for growth. The World Professional Association for Transgender Health, published a document entitled the “Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People” (The World Professional Association for Transgender Health, 2012). Currently in its seventh edition, this document can serve as a guide for this program evaluation. An additional resource for medical professionals is the “Guidelines for the Primary and Gender-Affirming Care of Transgender and Nonbinary

People, published by the University of California San Francisco (UCSF Transgender Care, 2016). Only by identifying areas that need improvement, can patient care and quality of life for transgender individuals be improved.

## **CHAPTER 5: CONCEPTUAL MODEL AND/OR THEORETICAL FRAMEWORK**

### **Program Evaluation: The CIPP Model**

Program evaluation became increasingly utilized in the 1960s (Madaus et al., 1983) as a means of evaluating educational programs. It was during this period that Daniel Stufflebeam developed the CIPP Model as an alternative to the models being utilized at the time. The previous models used for program evaluation had focused on objectives, testing, and experimental design (Stufflebeam, 1983). In contrast to these models, the CIPP model for evaluation is a decision-oriented model that systematically collects information related to a program to identify strengths and limitations in the content or delivery, to improve program effectiveness, and to plan for the future of the program (Stufflebeam, 1983; Zhang et al., 2011).

The CIPP model was first developed to evaluate projects that were funded through the Elementary Education Act of 1965 (Stufflebeam, 1983). Since its inception, the CIPP model has been used in a variety of contexts including educational evaluation of elementary school programs (Aziz et al., 2018), nursing programs (Lippe & Carter, 2018), and medical schools (Rooholamini et al., 2017). It has also been utilized by medical practices and medical providers to optimize patient outcomes in emergency medicine (Addison et al., 2017; Dunne et al., 2018) and primary care (Green-Morris, 2019).

The CIPP model utilizes four stages of evaluation (Irawan & Prasetyo, 2020). The first stage, context evaluation, focuses on the overall goal or mission while the second stage, input evaluation, examines plans and resources (Stufflebeam & Zhang, 2017). The third stage, process evaluation, evaluates the components or activities of the program (Stufflebeam & Zhang, 2017).



Finally, the fourth stage, product evaluation, involves the program outcomes or objectives (Yale Poorvu Center for Teaching and Learning, 2021). During each of these four stages, evaluators are able to identify important components to assess for possible revision, leading to continuous change (Yale Poorvu Center for Teaching and Learning, 2021).

### ***Context Evaluation***

In context evaluation, evaluators examine the existing resources and background of the program, such as the scope of the evaluation and the supports the program has in place (Yale Poorvu Center for Teaching and Learning, 2021). This includes an evaluation of overarching goals and an exploration of both background information and cultural context. More specifically, it involves examining the beneficiaries, resources, problems, and environment of the program (Yale Poorvu Center for Teaching and Learning, 2021). As it relates to this project, it will be important to examine the background information of PHS. Do providers and staff feel they are properly trained? Additionally, are there community resources available for the clinics, regarding the care of transgender patients?

### ***Input Evaluation***

The input evaluation stage can begin once goals have been sufficiently assessed. This includes identifying key stakeholders and examining the program strategies and budget (Yale Poorvu Center for Teaching and Learning, 2021). In this stage, it is also essential to collect key information about both potential planning and strategies for implementation, including both a timeline and the available human resources. This will involve examining PHS as a whole, and at the individual clinics. What community support exists for these clinics and what supports exist for transgender patients in these communities? Are there external resources, such as the LGBTQ center of Durham? (LGBTQ Center of Durham, 2021).

### ***Process Evaluation***

During process evaluation, the activities of the program are assessed with a focus on continuous improvement. It is important to ask questions such as, “what is being done well and what needs to be addressed for change?” (Yale Poorvu Center for Teaching and Learning, 2021).

It will be necessary to look at what is being done well regarding the care of transgender patients at PHS. It will also be important to identify areas that need improvement. Are the preventative services and immunizations up-to-date? Are the appropriate pronouns documented and consistently used throughout the patients’ charts? It will also involve examining the physical spaces of the clinics. Additionally, it will involve an assessment of the perceived knowledge and comfort level of the staff. PHS as an organization promotes itself as an organization that is accepting and welcoming of transgender patients (Piedmont Health, 2021b). Does the data collected for this project support this statement?

### ***Product Evaluation***

The fourth and final stage focuses on measuring the outcomes of the program and how effectively these outcomes are being addressed (Yale Poorvu Center for Teaching and Learning, 2021). During this stage of the CIPP model, it is an appropriate time to ask “what is the impact and how sustainable is the program?” (Yale Poorvu Center for Teaching and Learning, 2021).

After identifying areas for continual improvement, it will be necessary to prioritize which areas need to receive immediate attention, and which can easily be addressed. The CIPP model for evaluation is based on the understanding that the goal is not to prove an idea, but rather to improve a program (Stufflebeam, 1983). The four stages of evaluation proposed by Stufflebeam will provide a systematic way to approach the program evaluation at PHS.

## CHAPTER 6: DESIGN & METHODS

This program evaluation included three different components. The primary component was a chart review. A review of the physical space of the two clinics was also completed. A survey was distributed to staff and providers who have direct patient care regarding their attitudes and perceptions of transgender care at PHS. Two PHS clinics were examined for the purpose of this project. Clinic #1 is a multi-provider clinic within Orange County. Clinic #2 is a multi-provider clinic in Alamance County.

### **Chart Review**

The first part of the chart review was to examine the EMR and how it is being utilized in the care of transgender and gender non-binary patients. In May of 2021 PHS started using Athena Practice. This was a change from Centricity that had previously been used.

### ***Search Strategies***

One challenge was to identify those patients who identify as transgender or non-binary. There is no searchable designation in the PHS EMR to distinguish transgender patients from cisgender patients. As a result, two different search strategies were considered to identify transgender patients for the purpose of this chart review.

The first strategy considered was to search for ICD-10 codes that distinguish a transgender patient from a cisgender patient. There were several problems with this search strategy. First, not all transgender patients at PHS have a corresponding ICD-10 code reflecting their transgender identity or GAHT. Additionally, there is diversity in the ICD-10 codes utilized by providers. The following are several of the ICD-10 codes used:

- E34.9: Endocrine disorder, NOS
- E64.0: Transsexualism
- E64.8: Other gender identity disorders
- V49.89: Transgender
- V07.9: Hormone replacement therapy
- F64.9: Gender identity disorder, unspecified
- F64.1: Gender dysphoria in adolescents or adults

While this search strategy did identify a large number of transgender patients seeking care at the two PHS clinics, it did not, however, identify every transgender patient. Also, some transgender patients have at least two different ICD-10 codes in their chart that reflect their transgender identity or use of hormone therapy. It was impossible to determine if charts were being reviewed twice without recording patient identifying information.

The second strategy considered was to search for classes of medications that transgender patients often use. Gender-affirming hormone treatment (GAHT) is the administration of either feminizing or masculinizing hormone therapy, through the administration of exogenous hormones (D'hoore & T'Sjoen, 2022). For those seeking feminizing GAHT this will traditionally include an estrogen (UCSF Transgender Care, 2019). For those seeking masculinizing GAHT, this will include testosterone (UCSF Transgender Care, 2019). This search strategy does have its limitations. While many transgender patients will be interested in GAHT, it's presumptive to assume that all transgender patients and individuals will seek out GAHT. As a result, this search strategy will inherently exclude some patients.

While both search strategies utilized had certain inherent flaws, the search strategy that identified patients using medication class was more reliable, identifying 208 transgender

patients. Only one of these strategies could be used due to the fact that no personal identifying information was recorded. It was not possible to compare which charts had previously been reviewed without recording a patient's name. The IRB proposal for this project specified that no identifying personal information would be stored.

### ***Search Parameters***

An encounter form was created for each chart audit. Audit variables included: banner documentation of sex, gender identity, preferred name, and pronouns; utilization of preferred name and pronoun throughout the patient chart; ICD-10 codes related to transgender identity or GAHT; and status of preventative services (Appendix B).

### **Physical Space**

Another significant piece of this project is the evaluation of the physical space at the PHS clinics. This includes an examination of the bathrooms available to both patients and staff. Audit components evaluated included presence of gender-neutral bathrooms or signage indicating the option to choose the bathroom of their choice.

The clinical space was also evaluated to establish if there are visible clues or signage that indicate a welcoming and affirming space to those who are gender non-conforming or transgender. This evaluation included an examination not only of the physical building, but also the attire of the staff, i.e., do any staff members wear buttons or any item that identifies them as being welcoming and affirming?

### **Provider and Staff Survey**

A third component of this project is to survey those providers and staff regarding their perception and attitudes regarding the care of transgender patients. The survey was modified from The Medical Practitioner Attitudes Towards Transgender Patients (MP-ATTS) survey and the Medical Practitioner Beliefs and Knowledge about Treating Transgender Patients (MP-

BKTTP) survey, that was sent to all faculty and resident physicians at West Virginia University Hospitals (Rowan, et al., 2019; Appendix A).

Survey monkey was used to house and distribute the modified survey. This survey was sent to all those who have direct patient care. This included 27 patient care coordinators (PCC), 14 medical assistants, three nurses, 20 providers, two care manager, and three behavioral health specialists. The email was sent out by a PHS administrative staff member.

## CHAPTER 7: EVALUATION DATA

### Chart Review

The foundation of this project was a chart review, done by examining the EMR used by PHS. In May of 2021, Piedmont started using Athena Practice. This was a change from Centricity.

### *Banners in the Electronic Medical Record*

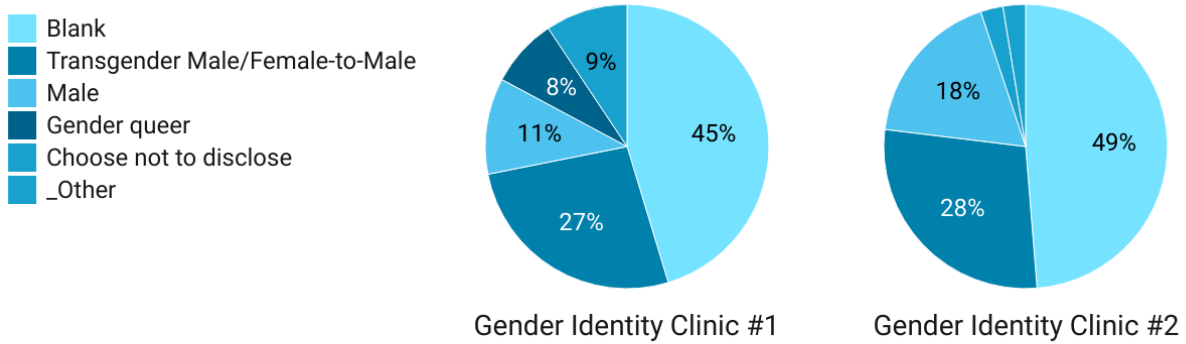
The first part of the chart review was to examine information in the banner. The banner has spaces that display a patient's name, preferred name, gender, and gender identity. For 13 patients, their gender and gender identity matched. They were listed as either female/female or male/male, but their sex at birth was not reflected in the banner. The patient's pronouns were not documented in the banner for 70 of the charts reviewed, or 33.6%.

**Gender and Gender Identity Documentation.** At clinic #1 for those transgender patients taking an androgen, 48 patients had their gender listed as “female,” 14 had their gender listed as “male,” and two had their gender documented as “undetermined.” At clinic #2, for those transgender and gender non-conforming patients taking an androgen, 24 patients had their gender listed as “female,” 14 had their gender listed as “male,” and one had their gender documented as undetermined. For the majority of patients at both clinics, their documented gender reflected their sex at birth.

There was even greater variation in how a patient's gender identity was documented, for those patients taking an androgen. Figure 1 depicts how gender identity was documented at both clinics.

## Figure 1

### *Androgens: Gender Identity*



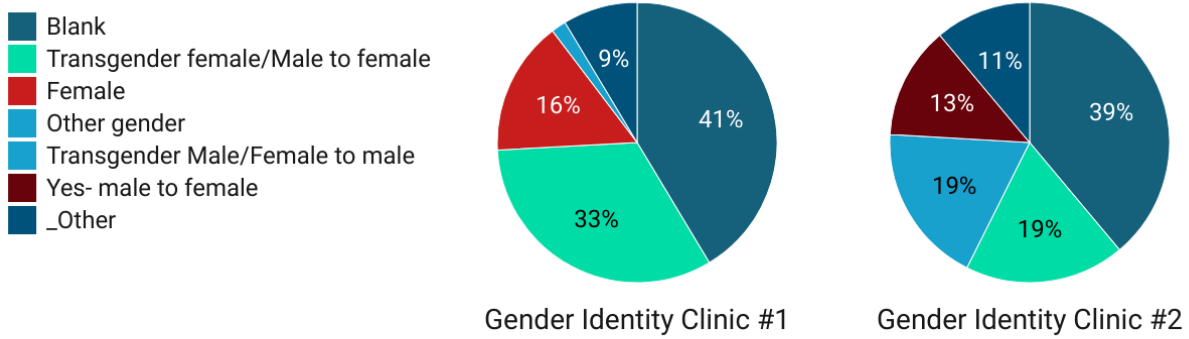
Created with Datawrapper

There was a great deal of discrepancy in how gender and gender identity were documented for those transgender patients taking an estrogen. At clinic #1, 25 patients were listed as “female,” 34 patients were listed as male, and two were listed as “undetermined.” At clinic #2 19 patients were listed as “female” and 25 patients were” listed as “male.” Similar to those transgender patients taking an androgen, there was a great deal of discrepancy in how the gender identity was documented for transgender or gender non-binary patients on an estrogen. Figure 2 displays how gender identity was documented at both clinics.



**Figure 2**

*Estrogens: Gender Identity*

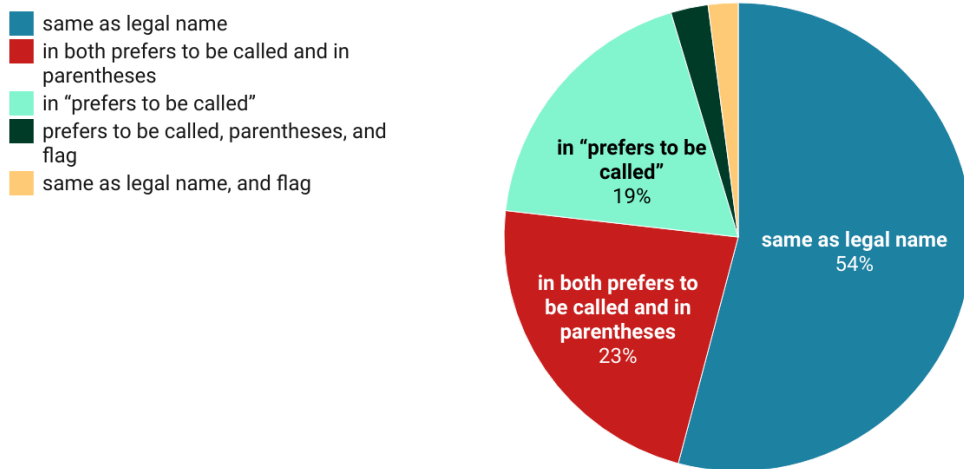


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**Preferred Name Documentation.** In addition to a patient’s legal name, there is space in the allotted for a patient’s preferred name. The EMR was evaluated for documentation of a preferred name documented in the “prefers to be called” area of the banner. Additionally, many patients also had their preferred name listed in parentheses as a part of their legal name. A few patients had their preferred name highlighted in a flag that would appear upon opening the chart. Figure 3 is a visual representation of the collected data.

**Figure 3**

*Preferred Name, Both Clinics*



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**Pronoun Documentation.** There is no designated space in the banner to document a patient’s pronouns. Many providers and staff would include a patient’s pronouns with the “prefers to be called” section and a few patients had flag alerts that displayed their pronouns. Of the charts evaluated, 110 patients’ pronouns were documented in the banner, while 98 patients’ were not. Only 52.8% of patients had their pronouns documented in the banner, where it would be visible to all staff.

***Usage of Banner Information Within the Chart***

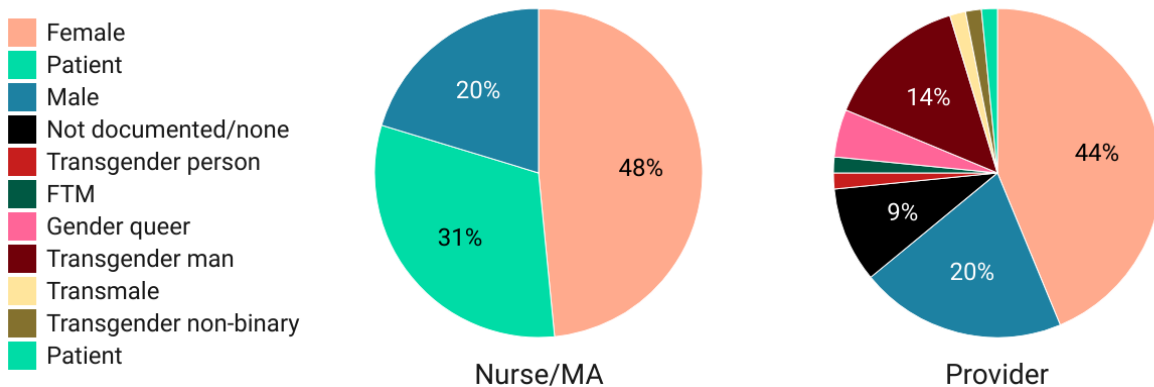
After recording what information was recorded in the banner, the next step in the evaluation was to examine how gender information was documented within a patient’s chart. Data included documentation of a patient’s gender by providers and support staff (nurses and MAs), how a patient’s pronouns were used, and if a patient’s preferred name was used.

**Gender Use in Chart.** In each patient’s visit, both a nurse/MA and the provider had the opportunity to document a patient’s gender. The nurse/MA typically documents a patient’s

gender within their vitals. A provider will often document the patient’s name and gender in the beginning of a patient’s history of present illness (HPI). Just as there was a large amount of variation in how a patient’s gender was documented in the banner, there was also a good deal of variation in how a patient’s gender was documented within a chart. This variation can be seen within figure 4 and figure 5. Figure 4 is the data collected from clinic #1 while figure 5 is the data collected from clinic #2.

**Figure 4**

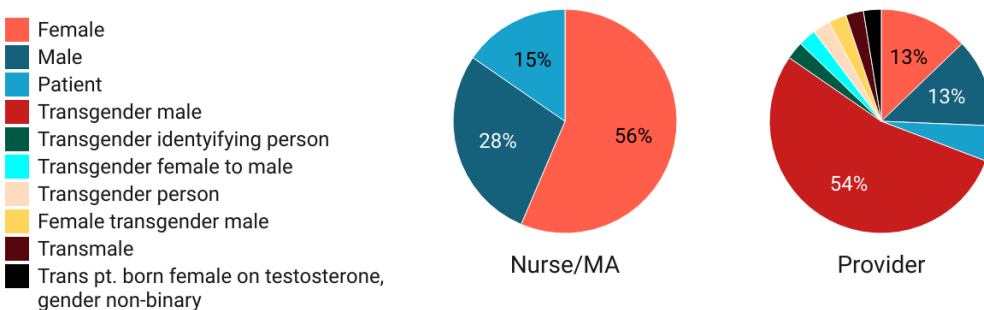
*Gender Usage for Patient’s on an Androgen, Clinic #1*



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**Figure 5**

*Gender Usage for Patient’s on an Androgen, Clinic #2*

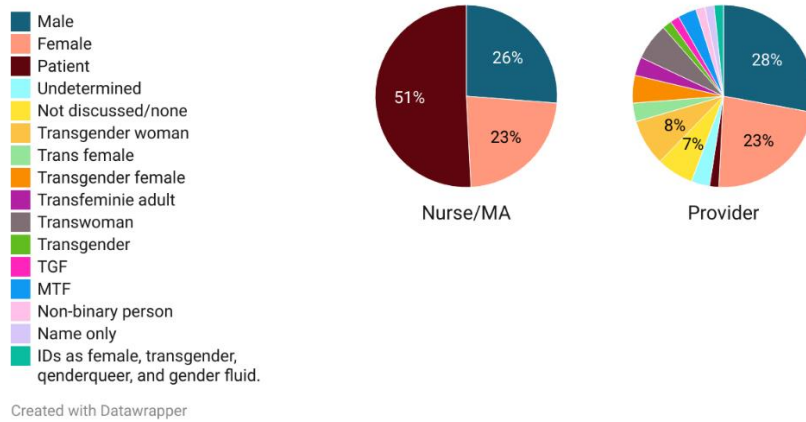


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There was similar variability concerning the documentation of gender for patients on an estrogen. The data from clinic #1 can be seen in figure 6, and the data from clinic #2 can be seen in figure 7. Of note, there was significantly less diversity in how gender was documented at clinic #2.

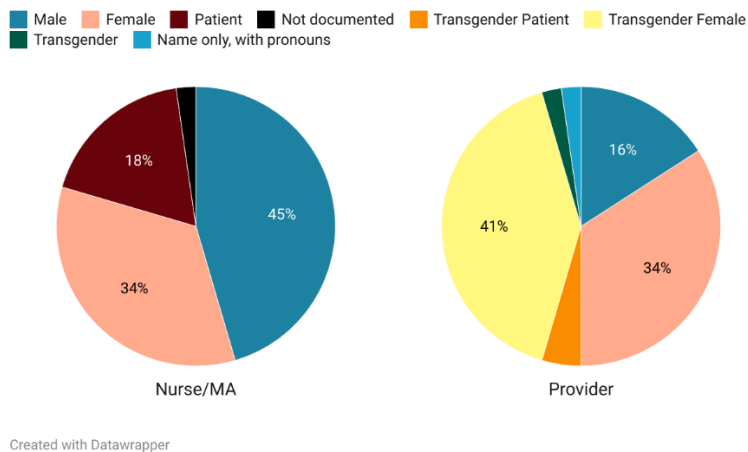
**Figure 6**

*Gender Usage for Patient's on an Estrogen Clinic #1*



**Figure 7**

*Gender Usage for Patient's on an Estrogen Clinic #2*



**Pronoun Use in Chart.** The chart review also examined whether a patient's pronouns were used in the chart according to their preference. There were five different categories that were considered. The first three looked at if the pronouns were recorded in the banner. Are the pronouns used in the chart in a way that reflects the patients preferences all the time, some of the time, or not at all. There were charts where a patient's pronouns were not documented in the banner or flag but were documented in the chart and used according to the patient's preferences. Finally, there were charts when the provider did not use pronouns in their documentation.

Data from both clinics was compiled. In the charts of 74 patients, where the pronouns were documented in the banner, the pronouns were used according to the patient's preference.

There were three occurrences where a patient's pronouns were not used according to their documented preference and 11 instances where they were sporadically used appropriately. There were 50 charts where pronouns were omitted from the chart and 70 additional charts where a patient's pronoun preferences were not documented in the banner but were used according to the patient's preference.

**Use of Preferred Name in Chart.** It was important to examine whether or not a patient's preferred name was used in the chart including documentation by the provider and use of the patient's name in letters. There were five categories for this evaluation. First was the patient's name used exclusively in the chart, always, never, or sometimes. There were occurrences where a patient's name was not used at all. And finally, there were occurrences where a provider or staff member would use both, with the preferred name in either parentheses or quotation marks. There were six charts where a patient's name was not used within the documentation. There were 29 charts where both a patient's legal name and preferred name were used. There were 125 charts where the patient's preferred name was exclusively used, 31

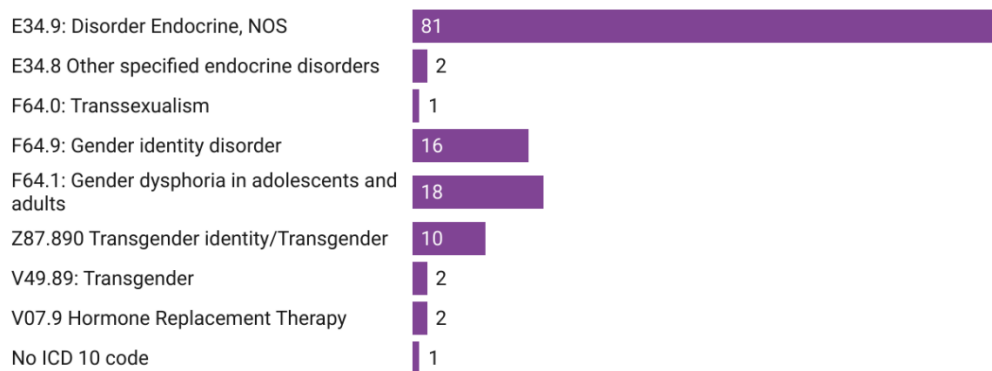
charts where only a patient’s legal name was used, and 17 charts when a patient’s preferred name was occasionally

**Preventative Care.** For the purpose of this project, only one preventative care service was examined. For patients for whom a cervical cancer screening would be recommended according to age appropriate guidelines, was this service documented in their chart? Of the patients eligible for cervical cancer screening, only 43.9% had documented screening.

**ICD-10 Codes.** One final data point that was extracted from the chart was the ICD-10 code associated with a patient’s transgender identity and treatment. At Clinic #1, one patient did not have an ICD-10 code associated to their transgender identity. For the other patients eight different ICD-10 codes were utilized, some with different terminology depending on the provider. For example, E34.9 was the most used ICD-10 code with it appearing in 81 charts. While it was most often written as “Disorder Endocrine, NOS,” it also appeared as “hormone imbalance,” “disorder of endocrine system,” “endocrine disorder,” “hormone disorder,” or “unspecified endocrine disorder.” Figure 8 depicts the variation in ICD-10 codes used at clinic #1.

**Figure 8**

*ICD-10 Codes, Clinic #1*

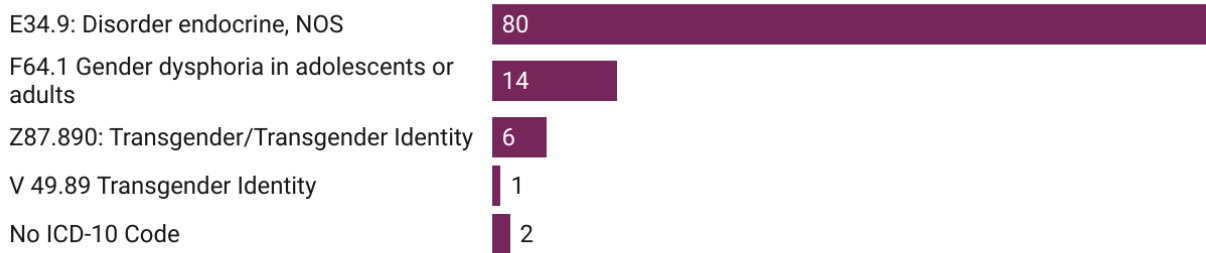


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E34.9 was also the most used ICD-10 code at clinic #2, appearing in 80 charts. There were three additional ICD-10 codes that were found in the charts of patients at clinic #2. Two patients had no ICD-10 code associated with their transgender identity and treatment. This data can be seen in figure 9.

**Figure 9**

*ICD-10 Codes, Clinic #2*



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**Physical Space**

Evaluation of the physical space at the PHS clinics was conducted as part of this program evaluation. Specifically, the clinics were evaluated to assess if gender neutral bathrooms were available and for any signage that indicated an inclusive and welcoming space.

***Bathrooms***

At clinic #2 there are gender neutral bathrooms, one designated for staff and one for patient use. At clinic #1 there are several gender neutral bathrooms throughout the clinic designated for patients. There are two bathrooms for staff, however, that are designated as either “male” or “female.” There is no signage outside of these bathrooms to indicate that these bathrooms are welcoming to those individuals who are gender non-conforming or transgender.

### *Clinical Space*

At the various clinics there are a variety of symbols and signs that there are providers at PHS clinics who are welcoming of transgender patients. This includes symbols worn by individual providers and pamphlets in the exam rooms.

**Providers and Welcoming Symbols.** At each clinic, there is at least one provider that wears symbols that they are welcoming of transgender and other LGBTQIA+ patients. This includes lapel pins and buttons that display either the LGBTQIA+ or transgender flags.

**Pamphlets.** Pamphlets are prominently displayed for patients in some of the exam rooms at clinic #2 titled “Do Ask Do Tell” (Appendix C).

**Artwork.** There is little artwork present in either clinic. There are some enlarged photographs on the walls of clinic #2. These are staged pictures of patients being seen at the clinic. These pictures overall do not distinguish whether the patients pictured are transgender or cisgender. These pictures do not appear to discriminate against those who are gender non-conforming; however, they also do not signal to transgender patients that this is a welcoming space.

### **Provider and Staff Survey**

Of the 69 people who received this survey 14 responded, for a response rate of 20.2% (Appendix D). It was clear from the responses that there was an overall desire to care for and provide evidence-based medical care according to the unique needs of transgender patients. In response to the survey item “Transgender patients deserve the same level of quality care from medical institutions as cisgender patients,” 92.86% of respondents said that they strongly agree. The remaining respondents stated that they agreed.

The survey did demonstrate that many staff and providers would appreciate more education, training, and experience. 42.86% percent of respondents stated that they agree with



the following: “when I first meet someone, I assume they are cisgender (transgender).” This may be an indicator that there is little exposure to this population. In response to the question of, “I would need to be better educated about transgender patients to provide appropriate medical care,” 28.57% said they strongly agree. Another 21.43% stated that they agree.

One of the questions asked, “I am willing to treat transgender patients within my scope of practice.” 64.29% of respondents said that they strongly agree, while another 28.57% said they agree. Only one respondent stated that this question was “Not Applicable” to their position. Overall this survey demonstrates that among the respondents, providers and staff see the unique needs of the transgender population and have a desire to care for this population.

## CHAPTER 8: DISCUSSION

### **Electronic Medical Record**

One significant theme that emerged in the literature is that EMRs do not allow for the documentation of pronouns or preferred name (Lau., et al., 2020) or that auto-populate male or female specific organs in either the review of systems or physical assessment charting (Portillo, 2021). This program evaluation demonstrated that the same is true at PHS.

### ***Electronic Medical Record Banner***

One fundamental flaw of the EMR currently used by PHS is the format of the banner. There is space only to document a patient's gender and gender Identity. The data presented above shows the great variation in how providers a staff record a patient's gender and gender identity in the banner, which can be problematic for many different reasons.

It is important to distinguish between sex and gender. The World Health Organization (WHO) provides the following definitions of gender and sex. Gender refers to socially constructed characteristics of men, women, boys, and girls. This includes behaviors, norms, roles, and relationships with other individuals. As a social construct construct, gender varies from society to society and can change over time (WHO, 2022a).

The WHO (2022b) provides the following working definition of sex: "sex refers to the biological characteristics that define humans as female or male. While these sets of biological characteristics are not mutually exclusive, as there are individuals who possess both, they tend to differentiate humans as males and females." With these definitions in mind, it is important to understand that sex is considered a binary variable. However, in contrast, gender is a continuous

variable defined by the patient, including a range of characteristics varying with age, ethnicity, geographic location, education, and culture (Gökalp, et al., 2020).

In order to provide appropriate, evidence-based, patient-centered care, it is important for a provider to know a patient's sex at birth and gender identity. Sex differences in disease prevalence, manifestation, and response to treatment are rooted in the genetic differences between males and females (Mauvais-Jarvis, et al., 2020). For this reason, it is helpful to know a patient's "sex at birth." Rather than identifying a patient's gender and gender identity in the banner of a patient's chart, it would be more beneficial to providers to know a patient's sex at birth and gender identity.

It is also necessary for providers and staff to know a patient's gender identity when providing patient care. The literature review conducted for this project showed that transgender patients often have a mistrust of health care institutions and providers due to the fact that they often experience discrimination, stigmatization, and insensitive attitudes in healthcare settings (Sundus, et al., 2021). Acknowledging a patient's gender identity and using a patient's preferred name and pronouns is one way to address this mistrust. Not using a patient's preferred name and pronouns can lead to continued mistrust and may hinder patients in seeking preventative medical services.

A second flaw regarding the banner is that it is not inherently clear how to change the information in the banner. There is a "Registration" link on the left side of the chart where a staff member or provider can update the registration information for a patient. This includes but is not limited to name, address, phone number, insurance information, and gender identity. However, information that is changed in the registration tab is not reflected in the banner. In order to change the banner, it must be changed during an active encounter or visit. For a provider, any

encounter is a billable visit for a patient. Other administrative staff are able to utilize non-billable encounters to change this information. The workflow for updating the patient banner is not intuitive or obvious.

For 13 patients, their gender and gender identity matched. However, for these 13 patients their sex at birth was not reflected in the banner. This could be problematic, especially at a larger clinic, if a patient was coming in for a same-day appointment to see a provider that was not their PCP. As previously mentioned it is important for providers to know both a patient's gender and sex-at-birth.

There is also no designated space in the banner for a provider or staff member to document a patient's pronouns. Seventy of the charts reviewed, or 33.6%, had the patient's pronouns documented within a note but not in the banner which impacts the interactions of front desk and other support staff with these patients. Without this information readily available, a staff member at the front desk may not greet the patient using their preferred pronouns. This interaction is the first the patient has and could set the tone for the rest of their visit. The literature review conducted for this project showed that a well-documented link exists between experiences of discrimination and marginalization and poor mental and physical health outcomes (James, et al.).

### ***ICD-10 Codes***

Overall, there was a large discrepancy in what ICD-10 codes were utilized. There was less variability at clinic #2, where all but two of the patients had the same PCP. Two patients did not have an ICD-10 code that was connected to their transgender identity. There were four different ICD-10 codes used at clinic #2, with E34.9 being used 79.2% of the time.

At clinic #1 there was more variability which may be in part due to the higher number of providers who were designated as a patient's PCP. There was one patient that did not have an

ICD-10 code that related to their transgender identity. There were eight different ICD-10 codes utilized. E34.9 was used the most frequently, at 61.36%.

### ***Medical Assistant and Provider Documentation***

There exists a large discrepancy in how a nurse/MA uses a patient's gender in the chart, compared to how a provider documented a patient's gender in the chart. For example, at clinic #2 in regard to the patients on an androgen a nurse/MA documented that a patient was female 56% of the time. This documentation reflects their sex at birth, not their gender. At the same clinic, providers documented that the patients were female 13% of the time.

There were differences between the clinics in regards to the same patient population. For example, at clinic #1, the Nurse/MA documented that 48.4% of patients were female while 31.2% of patients were documented simply as "patient." The use of the patient at clinic #1 was used far more frequently than at clinic #2. At clinic #1 43.75% of providers referred to patients on an androgen as "female."

These discrepancies point to two things. First is that there needs to be a standardization in terminology. At clinic #1 there were 11 different ways that providers referred to the gender of a patient on an androgen. Simplifying the terminology would allow for straightforward communication among providers and staff. This also speaks to the need for training, not just for providers but for nurses, MAs, and front desk staff. While providers are the one caring for the complex needs of these patients, the nurses, MAs, and front desk staff play a critical role in helping patients feel welcome.

### ***Quick Text***

There are a set of quick text commands that facilitates faster charting. From my experience at different PHS clinics, one frequently used quick text is ".to." This will import a patient's name and gender directly into the chart, a convenient way for many providers to start

the HPI. However, this quick text pulls data from a patient's legal name and gender. It does not use a patient's preferred name or gender identity. The use of this quick text is convenient; however, it does not facilitate charting that is reflective of the identities of transgender patients.

### **Welcoming Space for Both Patients and Staff**

The literature review showed that it is important to have a welcoming physical space. This includes visible cues in clinical and waiting spaces that signal a welcoming environment (Bizub & Allen, 2020). At PHS, with the exception of a few providers at each clinic wearing a button that identified that they are welcoming of LGBTQIA+ patients and pamphlets inside the exam rooms, there are not overt signs that PHS clinics are a welcoming space for transgender patients.

### ***Gendered Bathroom for Staff at Clinic #1***

While the literature review focused on discrimination faced by patients, it's important to think about the discrimination faced by providers and staff as well. Particularly it's important to think about how the physical space is unwelcoming to providers who identify as transgender. At clinic #1 there are gendered bathrooms available for staff use. While the gender-neutral bathroom reflects a welcoming environment to patients, the same cannot be said for the staff bathrooms.

### **Preventative Care**

Data collected in the literature review showed that transgender patients often do not receive the necessary preventative care and screening. Together this results in poor health outcomes for transgender patients (Romanelli & Lindsey, 2020; Seelman et al., 2017). This program evaluation only focused on one aspect of preventative care, whether cervical cancer screening was performed and documented for those eligible patients according to evidence-based recommendations. Only 43.8% of these patients had documented cervical cancer screening.

## **CHAPTER 9: PROGRAM EVALUATION OUTCOMES**

### **Context Evaluation Outcomes**

A significant piece of the context evaluation that was mentioned in the proposal was related to the training staff and providers received regarding the care of transgender patients. When surveyed on the following statement, 50% of survey respondents selected either agree or strongly agree: “I would need to be better educated about transgender patients to provide appropriate medical care.” This information supports improving education around the care of transgender patients and should begin at the start of a person’s tenure at PHS and at regular intervals.

It is also important to evaluate what kind of community support exists for each clinic. Clinic #1 is within the Raleigh-Durham-Chapel Hill area, and therefore has a good amount of support available. For example, the LGBTQ center in Durham (LGBTQ Center of Durham, 2021) is within a 30-minute drive. This organization provides a wealth of information, resources, and support. There are less resources available for clinic #2, situated in Alamance County.

### **Input Evaluation Outcomes**

One significant piece of the input evaluation stage was to identify stakeholders both at PHS and outside the organization. Throughout this project providers and staff members, both at the clinics and at the main office, that are strong advocates for transgender patients and all LGBTQIA+ patients were identified.

### **Process Evaluation Outcomes**

The process evaluation was done by looking at the program, and assessing what is done well and what needs improvement. There were several areas identified that need improvement and these will be addressed in more detail in the recommendations section of the paper. Another component of the process evaluation was to look at the perceived knowledge and comfort level of the staff, since PHS is an organization that promotes itself as welcoming of transgender patients (Piedmont Health, 2021b). While only 20% percent of individuals responded to the survey, the responses did reflect a welcoming attitude.

### **Product Evaluation Outcomes**

The goal of the product evaluation was to identify strengths and limitations in the care of transgender patients and to identify areas for improvement. This program evaluation did successfully identify both strengths and weakness as it relates to the care of transgender patients at PHS. One clear strength that came from the survey, is the desire to care for transgender patients and the desire to learn more. There is a clear understanding that transgender patients have unique needs, and that it is important for PHS to be prepared to meet those needs. One significant weakness is the EMR, and the ability to document information that is significant for transgender patients in a way that is visible to all staff. This will be addressed further in the recommendations section.



## **CHAPTER 10: PROJECT LIMITATIONS AND STRENGTHS**

There were several limitations to this project that need to be identified. The first is the lack of a search strategy within the EMR that would identify all transgender and gender non-binary patients seeking care at the two clinics. Several search strategies were considered, and the one utilized was one that would identify a large percentage of patients, without recording any personal identifying information. However, not all patients who identify as transgender or gender non-binary will be seek GAHT. As a result, some patients were inevitably left out from this project.

Additionally, the primary researcher for this project did clinical rotations at both of the clinics. One of the assigned preceptors for these clinical rotations was extremely passionate about the care of LGBTQIA+ patients, particularly transgender and gender non-binary patients. This provider spent some administrative time making sure patients under her care had their preferred name and pronouns documented. These efforts are extremely beneficial to both the patients and the clinic. However, it would have been helpful to have done a chart review both before and after these changes.

One limitation is that the primary focus on this project was a chart review. There was no interaction with patients. Part of the literature review was based on interviews and surveys with patients, in order to better understand their experience. It is fundamentally problematic to try and assume what kind of discrimination patients feel when coming to the clinic. This project only looks at objective data points that may lead to experiences of discrimination.

Additionally, this project only examined the medical records of patients who identify as transgender. More specially, this project only examined the medical records of those transgender and gender non-binary patients taking either an estrogen or an androgen. There was no comparison between cisgender and non-cisgender patients. This kind of comparison would have led to a more in-depth analysis. For example, are non-cisgender patients receiving immunizations, such as influenza and COVID-19, at the same rate as cisgender patients? Likewise, is this population receiving other age appropriate evidence based recommendations, such as mammogram, colonoscopy, or hepatitis C screening? Additionally, it would be helpful to know how many cisgender patients are receiving cervical cancer screening when recommended.

One strength of this project is that the primary researcher did clinical rotations at both clinics, and was able to spend a significant amount of time observing the physical space. It was also beneficial to see the process of how patients were checked in, and greeted first by the front desk staff and MA/nurse, prior to seeing a provider.

## CHAPTER 11: RECOMMENDATIONS

Out of this program evaluation, there are several recommendations that emerged. They have to do with the EMR, training, and staff bathrooms. There are additionally recommendations for future research.

### **Recommendations Specific to Piedmont Health Service**

#### ***Electronic Medical Record***

The primary recommendation relates to the EMR. First, it would be important to restructure the banner as this is the first place staff and providers look to get a quick snap shot about a patient's age, name, sex, gender, and language preference, among other things. The labels of gender and gender identity need to be changed to either sex or sex-at-birth and gender or gender identity. As previously mentioned, it is imperative that providers know both a patient's sex-at-birth and gender identity in order to provide complete, evidence-based care.

Additionally, there should be a place in the banner for a patient's pronouns to be listed. This is helpful for providers, MAs, and the front desk staff. The front desk staff are the first people to greet a patient and can set the tone for a visit; however, they do not always have this information available.

Once these changes have been made, it would be helpful for providers to have a quick text option that pulls in information regarding a patient's sex at birth, gender, pronouns, and preferred name that could be used to start an HPI. These quick texts are very helpful for providers; however, it would be important to develop one that would appropriately capture

necessary information regarding the name, sex, pronouns, and gender of both cisgender and transgender patients.

### ***Training***

As previously mentioned, 50% of survey respondents reported that they felt more training would be necessary to equip them to appropriately care for transgender patients. The recommendation is that training be a part of the on-boarding experience for all staff and providers across the organization. Providers should be afforded the opportunity to attend conferences related to the care of transgender patients annually, if desired.

Front-desk staff should have training upon their hiring and intermittent refresher sessions, based on an assessment of competencies. The same should be done for MAs and nursing staff. There should be a point person designated at each clinic who could coordinate these trainings. This point person could also be a resource for any questions or concerns. These individuals could collaborate together, to get create a leadership team.

### ***Leadership Team***

It would be beneficial to have a team of individuals who are dedicated to staying up-to-date on the most evidence based recommendations. This team could also be available for patients to provide input. This team could provide regular updates, and would also define the standard of care so that there was consistency in charting. For example, this team could provide recommendations on the most appropriate ICD-10 codes and language to use within charts. A more consistent approach to charting would allow for less confusion when a patient is seeing multiple providers within the PHS system.

### ***Bathrooms***

All gendered bathrooms should have signage that invites patients or staff members to use the bathroom of their choosing. While this project primarily focused on transgender and gender

non-binary patients, it is important to extend the same welcome to transgender and gender non-binary staff members. Truly being a welcoming and affirming community should be reflected at all levels.

### **Recommendations for Future Research**

This project had certain limitations that did not allow it to address all concerns identified in the literature review. An additional project could include surveys to patients to examine their experience. It would be important to examine if there was a correlation between a patient's experience with how their gender, name, and pronouns appear both in the banner and in the chart.

Additionally, it would be important to do a study where the charts of cisgender and transgender patients were examined. This research study could focus on preventative care, and more specifically whether or not transgender patients are receiving the same preventative services as cisgender patients.

## **CHAPTER 12: CONCLUSION**

This project confirmed that PHS is indeed a health care organization where providers recognize the importance of providing affirming and competent health care to transgender individuals (Piedmont Health, 2021b). As a network of clinics in North Carolina that focuses on providing comprehensive quality health services and education to all members of the community, PHS is a valuable resource to transgender and gender non-binary patients. The clinics provide a safe space to receive compassionate, affirming care.

While this project identified many positive things taking place at PHS, there are still some significant things that need to be addressed. Making these changes would create a culture and an EMR that would set-up staff and providers with necessary resources to provide evidence-based, compassionate care.

## APPENDIX A: SURVEY

Survey is modified from The Medical Practitioner Attitudes Towards Transgender Patients (MP-ATTS) survey and the Medical Practitioner Beliefs and Knowledge about Treating Transgender Patients (MP-BKTTP) survey, that was sent to all faculty and resident physicians at West Virginia University Hospitals (Rowan, et al., 2019).

Instructions: The first 13 questions are designed to measure the way you feel about your experiences with transgender individuals in the medical community at Piedmont Health Services (PHS). Read each item carefully and choose the option that most accurately reflects your feeling: 1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Strongly agree, or N/A=Prefer not to answer.

1. As a medical provider, it is important for me to know about my patients' gender identity.  
(N/A=Prefer not to answer)
2. When I first meet someone, I assume they are cisgender (non-transgender). (N/A=Prefer not to answer)
3. Transgender patients deserve the same level of quality care from medical institutions as cisgender patients. (N/A=Prefer not to answer)
4. At PHS, have you witnessed a physician or advanced practice provider exhibit attitudes or beliefs about the transgender population that you feel are barriers to care? (N/A=Prefer not to answer)
5. At PHS, have you witnessed the front desk staff exhibiting attitudes or beliefs about the transgender population that you feel are barriers to care? (N/A=Prefer not to answer)
6. At PHS, have you witnessed the nursing staff exhibiting attitudes or beliefs about the transgender population that you feel are barriers to care? (N/A=Prefer not to answer)


7. At PHS, have you witnessed the facilities staff exhibiting attitudes or beliefs about the transgender population that you feel are barriers to care? (N/A=Prefer not to answer)
8. Have you ever been involved in the treatment of a transgender patient? (N/A=Prefer not to answer)
9. I would need to be better educated about transgender patients to provide appropriate medical care. (N/A=Prefer not to answer)
10. Transgender patients have unique health risks and needs. (N/A=Prefer not to answer)
11. I am willing to treat transgender patients within my scope of practice. (N/A=Prefer not to answer)
12. I would prefer not to treat transgender patients. (N/A=Prefer not to answer)
13. I am comfortable treating transgender patients. (N/A=Prefer not to answer)



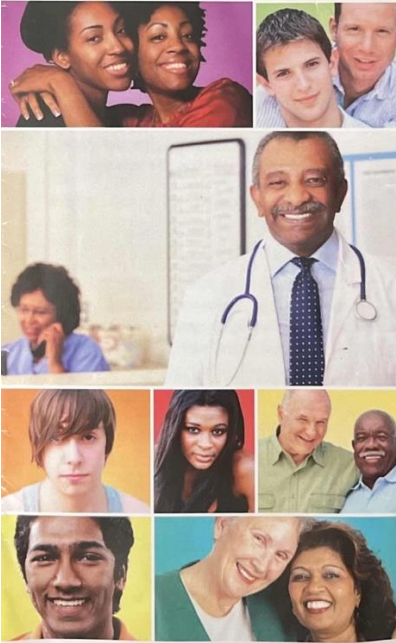
## APPENDIX B: AREAS FOR CHART REVIEW

Pronouns:	<ul style="list-style-type: none"> <li>• Are pronouns documented?</li> <li>• Are they used consistently throughout the chart/notes?</li> </ul>
Name:	<ul style="list-style-type: none"> <li>• Is a patient's preferred name documented in the banner, and visible to all staff?</li> <li>• Is the patient's preferred name used throughout the chart?</li> </ul>
Sex and Gender:	<ul style="list-style-type: none"> <li>• Is the sex assigned at birth documented?</li> <li>• Is the patients gender identity documented?</li> <li>• Is the patients gender identity used consistently through the chart by both providers and support staff?</li> </ul>
ICD-10 Code:	<ul style="list-style-type: none"> <li>• What ICD-10 codes are utilized?</li> </ul>
Preventative Services:	<ul style="list-style-type: none"> <li>• Are preventative services being offered to patients, regardless of their gender identity?</li> </ul>

## APPENDIX C: DO ASK, DO TELL PAMPHLET



**Do Ask, Do Tell:**  
Talking to your health care provider about being LGBT



### ACCESS TO CARE AND RESOURCES

There are many resources for LGBT patients seeking medical care and advice. Here are a few you may be interested in.

Want more information about LGBT health care? The National LGBT Health Education Center has publications and resources for patients and providers: [www.lgbthealtheducation.org](http://www.lgbthealtheducation.org)

Want more information about transgender health issues? The Center of Excellence for Transgender Health has many resources: [www.transhealth.ucsf.edu](http://www.transhealth.ucsf.edu)

Want information about health care organizations that demonstrate a commitment to LGBT health care? The Human Rights Campaign (HRC) publishes a Health Equality Index yearly: [www.hrc.org/hej](http://www.hrc.org/hej)

Want additional support for your friends or family? Parents and Friends of Lesbians and Gays (PFLAG) publishes lists of organizations it partners with and local groups for support, education, and advocacy: [www.pflag.org](http://www.pflag.org)



### FREQUENTLY ASKED QUESTIONS

**I don't want anyone besides my provider to know that I'm gay/lesbian/bi/trans. Will this information be shared?**  
Your provider will keep conversations you have confidential. Your health care provider is bound by laws and policies to keep your information private. If you are under 18, these laws will vary by state and policies may vary by medical practice. You can also ask your provider not to enter this information into your medical record.

**What if my provider uses the wrong terms or pronouns when referring to me or my spouse/partner?**  
Providers may not always know what terms you prefer to use. Let them know how you describe yourself and your partner(s), and they should start to use those words.

**What if I still don't feel comfortable coming out to my current provider?**  
There are several ways to find a provider you connect with. To start, you can talk to friends or use the resources in this brochure. Finding a provider you are comfortable with is essential to your all-around health and wellness.

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## COMING OUT TO YOUR PROVIDER

Coming out to your health care provider is an important step to being healthy. Many people are not aware that lesbian, gay, bisexual and transgender (LGBT) people face unique health risks, such as higher smoking rates, a greater risk of suicide attempts, and a higher chance of getting certain sexually transmitted diseases. Talking with your provider can help you overcome these issues and access the care you need most. Being open about your sexual orientation, sexual behavior, and gender identity not only helps your provider, it helps you!

### Reasons to come out:

- Your provider can offer care that is personalized and most relevant to you.
- Your provider can offer referrals to specialists, like behavioral health providers and other wellness providers, who are welcoming to LGBT people.
- Your provider can be sensitive to current health trends that affect LGBT people.
- Health care is about the whole person. By being open with your provider, you allow him/her to provide you with comprehensive care that supports your mind, body and spirit.



## BEHAVIORAL AND PHYSICAL HEALTH

LGBT people often experience prejudice, stereotyping, and harassment or bullying by others. This kind of discrimination can be very stressful, which can put you at risk for depression, anxiety, substance abuse, feelings of loneliness, and even suicide. Being open not only about your sexual orientation and gender identity, but also about any substance use or mental health needs, allows your provider to give you the best possible care.

Exercise and healthy eating are important components of wellness for everyone. Physical health plays an important role in feeling emotionally healthy, too! Research has shown that LGBT people are more likely to smoke, lesbians are at higher risk for obesity, and some gay men struggle with poor body image. If you discuss these issues with your health care providers, they can advise you on healthy diets and self-image, smoking cessation, and exercise routines.

Lesbians, bisexual women, and some transgender people should also make sure they are getting routine gynecologic screenings, including Pap smears, and routine breast cancer screening.



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## SEXUAL AND REPRODUCTIVE HEALTH

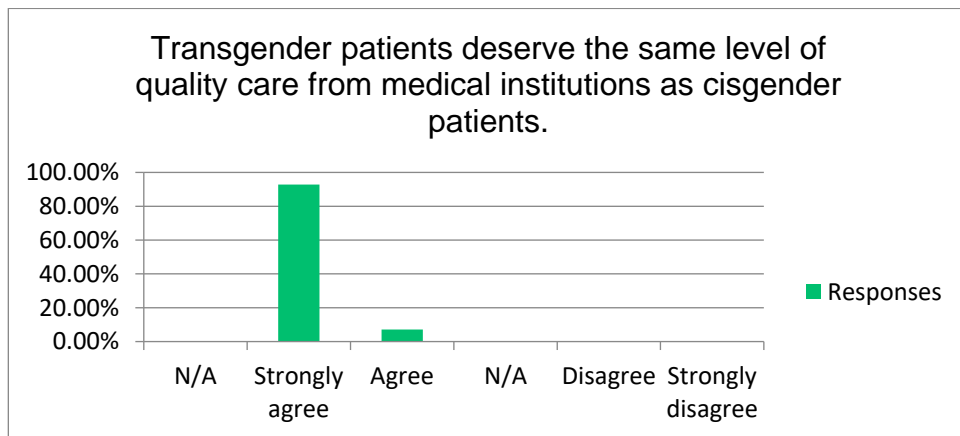
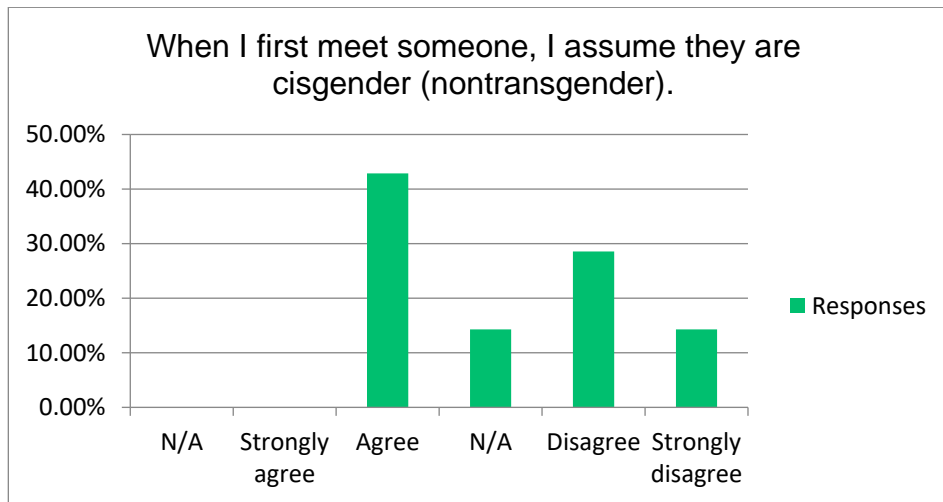
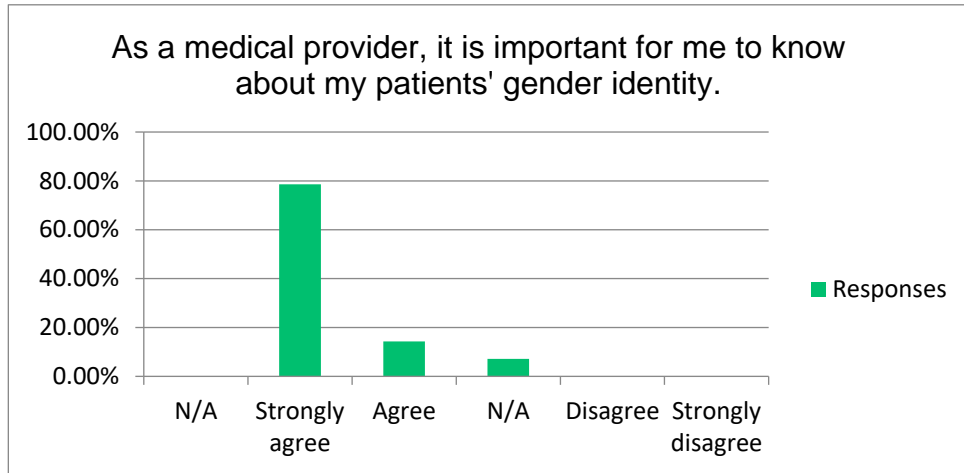
Talking to your provider about your sexual health isn't easy. However, there are many benefits to discussing your sexual function and behaviors with a provider. Each person's needs will differ, but some of the sexual health issues that may be important to discuss are:

- Screening for STDs and HIV
- Getting vaccinated for HPV and hepatitis A and B
- Using condoms or other barrier methods
- Safer sex education and counseling
- Problems with sexual function or satisfaction
- Plans to adopt or conceive children

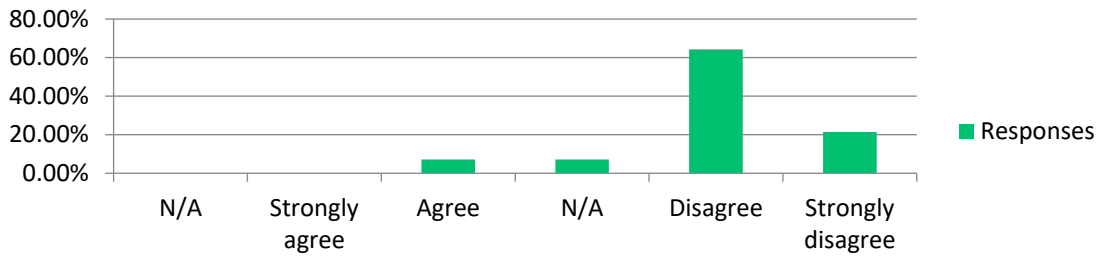
All LGBT people should feel comfortable talking to providers about family life issues, such as partner abuse (feeling safe at home), and living wills.



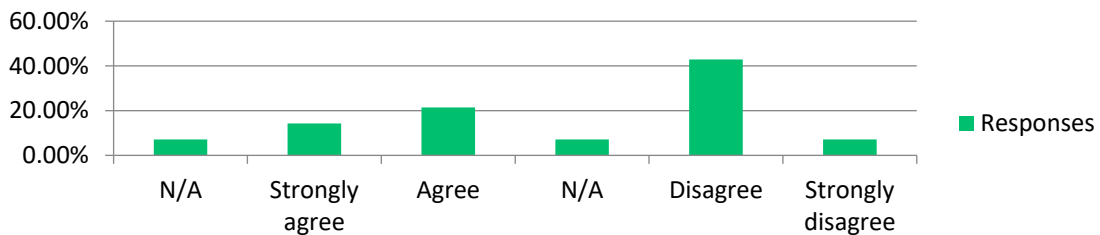
**APPENDIX D: PROVIDER AND STAFF SURVEY RESPONSES**



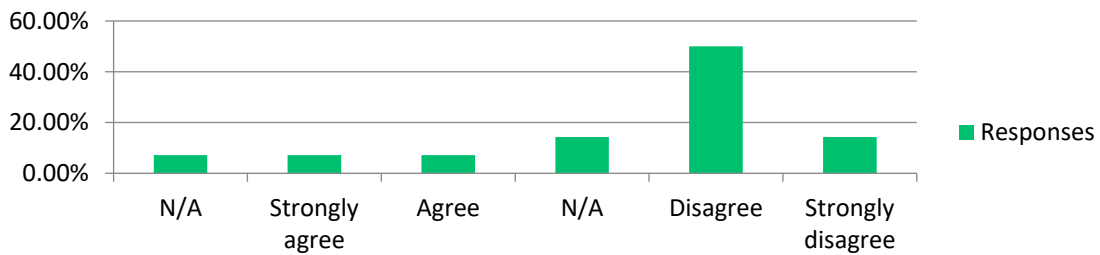
At PHS, have you witnessed a physician or advanced practice provider exhibit attitudes or beliefs about the transgender population that you feel are barriers to care?

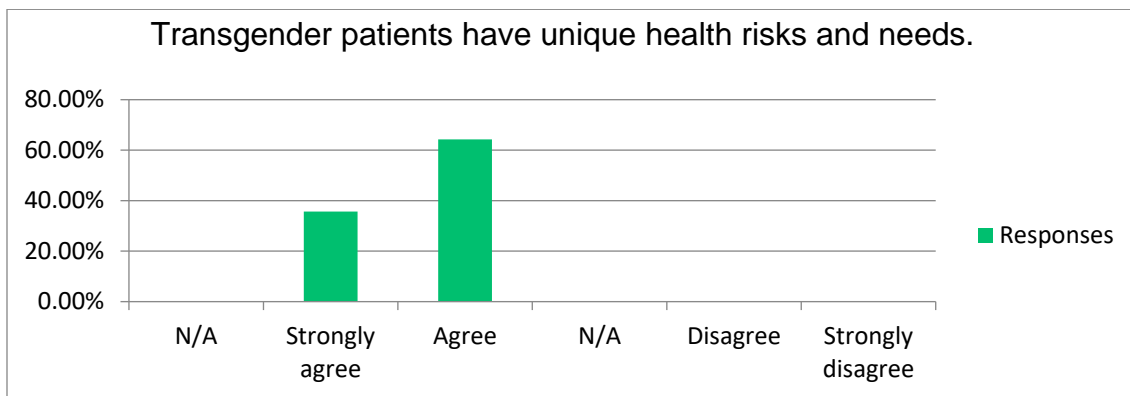
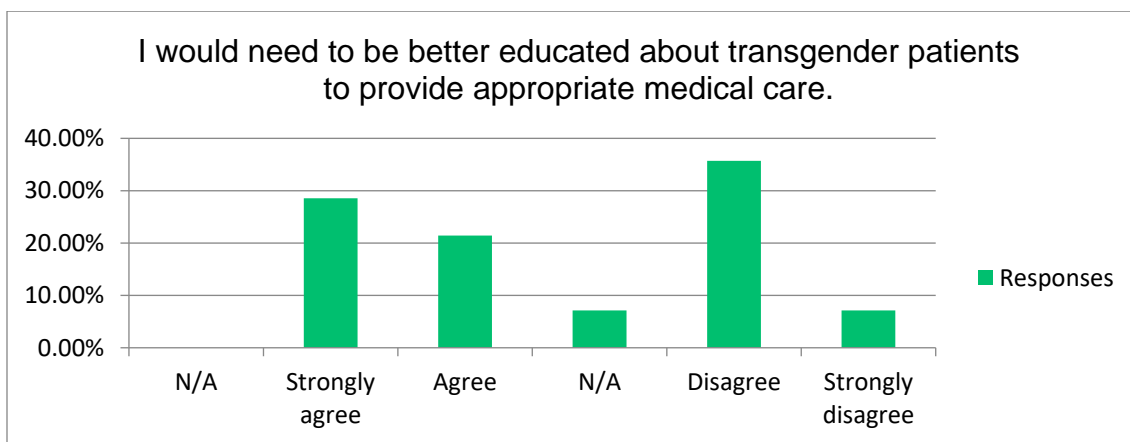
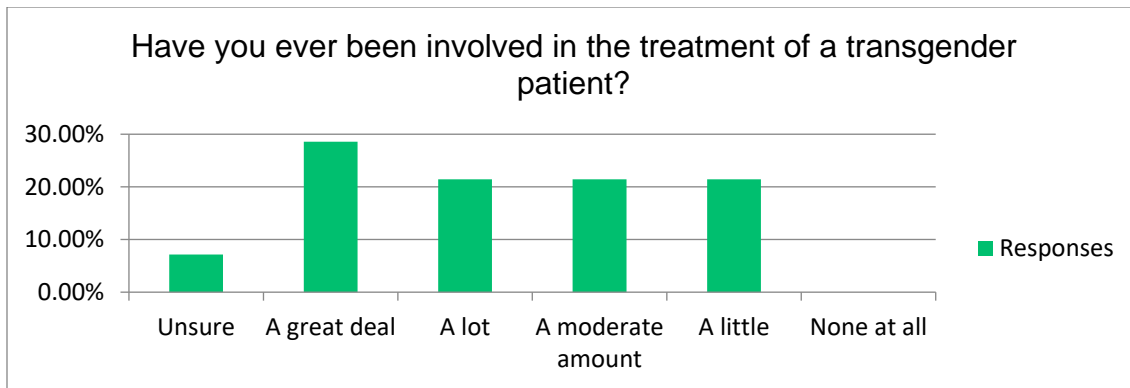


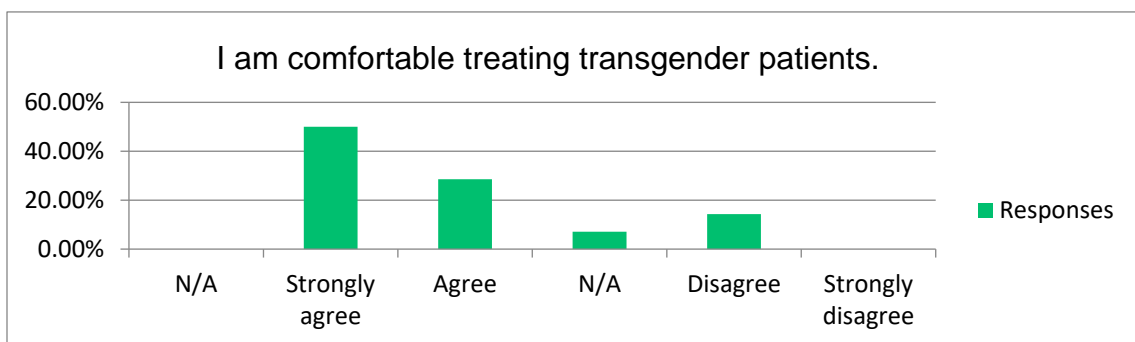
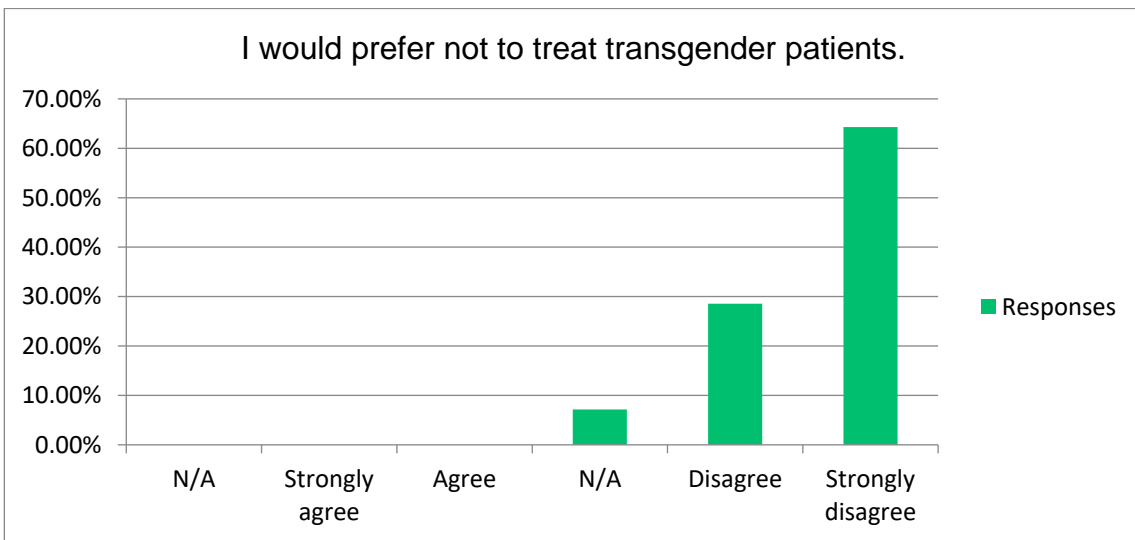
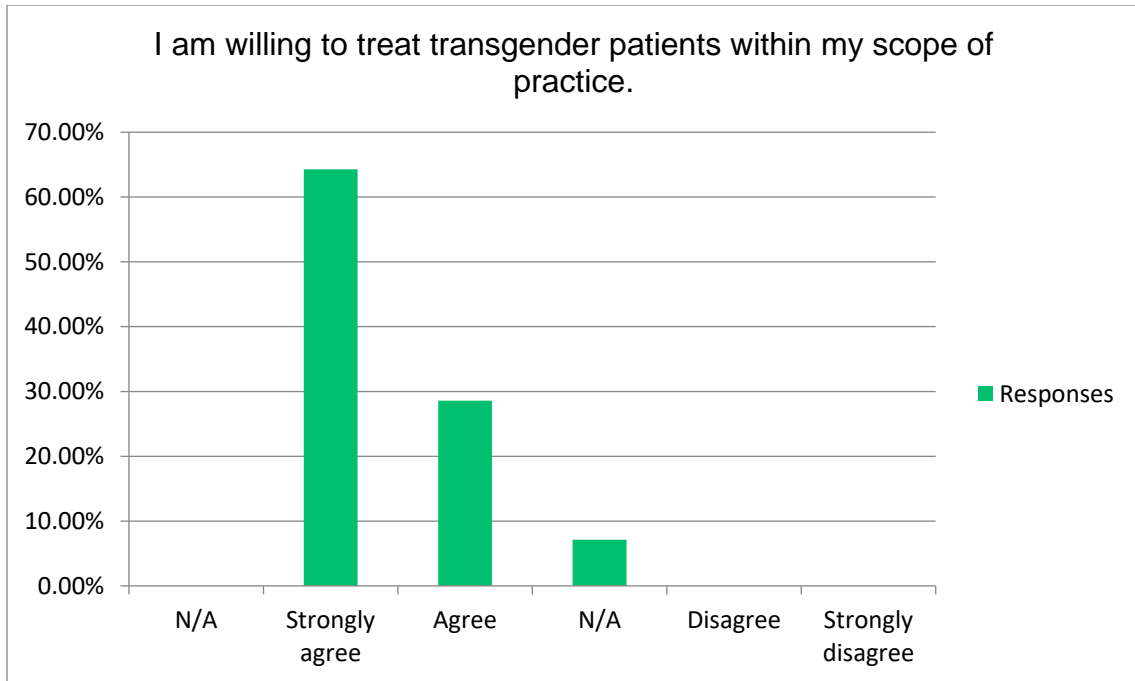
At PHS, have you witnessed the front desk staff exhibiting attitudes or beliefs about the transgender population that you feel are barriers to care?



At PHS, have you witnessed the nursing staff exhibiting attitudes or beliefs about the transgender population that you feel are barriers to care?







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