ABSTRACT

Title of Dissertation: TRANSGENDER-INCLUSIVE HEALTH CARE SERVICES AMONG COLLEGE HEALTH CENTERS IN THE UNITED STATES

Jenna B. Messman, Doctor of Philosophy, 2019

Dissertation directed by: Leigh A. Leslie, Ph.D.

Associate Professor, Department of Family Science

Research demonstrates that transgender people face significant health disparities compared to their cisgender peers, experience harassment and mistreatment in health care settings, and that many health care facilities are ill-equipped to competently treat them. While there has been some evaluation of trans-inclusive services provided in large health care facilities, there has been no formal assessment of the competencies of college health care facilities to meet the needs of transgender students. A 43-item survey tool operationalizing the American College Health Association's (ACHA) *Guidelines for Trans-Inclusive College Health Programs* was developed and sent to representatives of ACHA's membership (n=1,005). The degree to which college health centers are meeting these 32 recommended guidelines was assessed. The data show that college health centers are overwhelming providing some degree of trans-inclusive health care and that the provision of such services varies greatly based on six institutional characteristics: control of institution (public vs.

private); religious affiliation (yes vs. no); transgender-inclusive laws and policies by state (low inclusion vs. high inclusion); size of institution (<1000, 1000-4999, 5000-9999, 10000-19999, 20000+); locale (city, suburban, town, rural); and region (Northeast, Midwest, South, West). These findings are notable in that many college health centers are providing more trans-inclusive care than most large health care facilities and are positioned to be leaders in trans-inclusive health care. Despite the provision of such services on college campuses, transgender students still face significant health disparities compared to their cisgender peers and more research is needed to better understand what colleges and communities can do to improve their health outcomes.

TRANSGENDER-INCLUSIVE HEALTH CARE SERVICES AMONG COLLEGE HEALTH CENTERS IN THE UNITED STATES

By

Jenna B. Messman

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Advisory Committee:

Leigh A. Leslie, Associate Professor, Chair
Elaine Anderson, Professor
Amy B. Lewin, Assistant Professor
Marilee Lindemann, Associate Professor
Mary Hoban, Chief Research Officer, American College Health Association

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Chapter 1: Introduction

A growing body of literature documents health disparities in transgender youth (Baum, Brill, Brown, Delpercio, Kahn, Kenney, & Nicoll, 2014) and adult populations (James, Herman, Rankin, Keisling, Mottet, & Anafi, 2016). Additionally, a significant amount of research demonstrates that transgender people in general experience inadequate clinical care, mistreatment in health care settings (James et al., 2016; Lambda Legal, 2010), and that many health care facilities are ill-equipped to competently treat transgender patients (Human Rights Campaign, 2017).

While the health outcomes of transgender youth and adults have been well documented, we know very little about the health outcomes or experiences of transgender college students. There has been no formal inquiry or assessment in the health care experiences of transgender college students, nor have the competencies of college health care facilities to meet the needs of transgender students been assessed. One of the only studies that specifically examines the health outcomes of transgender college students demonstrates that they experience health disparities at significant rates, similar to their youth and adult peers (Messman & Leslie, 2018). Therefore, it is critical that college health centers are equipped to meet the needs of transgender patients, and that we have an understanding of what college health centers are and are not providing in terms of health care for trans students.

Higher education experts state that campus leaders have an opportunity and obligation to improve resources for transgender students, including health care, mental health, and health insurance options (ACHA, 2015; Renn, 2017). However, there is no documentation of the current landscape of inclusive health care practice for transgender

college students. This study addresses this gap in the literature by formally assessing the competencies of college health care facilities to adequately care for transgender students.

Terminology

Prior to reviewing the literature, readers should have a common shared knowledge of terminology pertaining to gender and sexuality. The following terms and definitions, listed in alphabetical order, are referenced from Trans Student Educational Resources (2018).

Binary. Used to describe that sex and/or gender are limited exclusively to female/male or woman/man. For example, health forms that use binary sex or gender options would likely marginalize trans patients, as the form does not leave space for them to most accurately document their sex or gender in a way that could be helpful for clinical staff to best treat them.

Cisgender/cis. A term for someone who exclusively identifies as their sex assigned at birth. The term cisgender is not indicative of gender expression, sexual orientation, hormonal makeup, physical anatomy, or how one is perceived in daily life.

Gender expression. The physical manifestation of one's gender identity through clothing, hairstyle, voice, body shape, etc. (typically referred to as masculine or feminine). Many transgender people seek to make their gender expression (how they look) match their gender identity (who they are), rather than their sex assigned at birth.

Gender identity. One's internal sense of being male, female, neither of these, both, or other gender(s). For transgender people, their sex assigned at birth and their gender identity are typically not the same.

Sex assigned at birth. The assignment and classification of people as male, female, or intersex; assigned at birth often based on physical anatomy.

Sexual orientation. A person's physical, romantic, emotional, and/or other form of attraction to others. Gender identity and sexual orientation are not the same. Trans people can be straight, bisexual, lesbian, gay, asexual, etc. For example, a trans woman who is exclusively attracted to other women would often identify as lesbian.

Transgender/trans. An umbrella term for people whose gender identity differs from the sex they were assigned at birth. The term transgender is not indicative of gender expression, sexual orientation, hormonal makeup, physical anatomy, or how one is perceived in daily life.

Transition. A person's process of developing and assuming a gender expression to match their gender identity. Transition can include: coming out to one's family and/or friends; changing one's name and/or sex; and possibly (though not always) some form of hormone therapy and/or surgery. Transition is unique and personal to each person. Access to insurance, transition care, and safety can all play a large role in one's ability and decisions regarding transition.

Trans-inclusive care/gender affirming care. Refers to health care settings and professionals acknowledging and respecting one's gender identity (i.e. forms that have sex or gender options outside of the gender binary, using a patient's correct name and pronouns even if they differ from legal documents) as well as gender affirming interventions that one may choose during transition (i.e. hormone therapy, surgery, voice modification, facial hair removal, etc.).

Chapter 2: Literature Review

Several bodies of literature must be reviewed to understand the degree to which college health centers are adequately positioned to meet the needs of transgender students. First, estimates regarding the size and scope of the transgender college student population will be discussed. Next, overall health disparities among transgender youth, college, and adult populations will be shared with a specific focus on mental health, experiences of harassment and violence, sexual health, and substance use. Literature regarding the lack of training and education for both clinical and mental health professionals will be discussed as well as reports of inadequate facilities and discriminatory policies in health care. Studies that detail the experiences of transgender people in health care settings will be reviewed, and lastly, the critical role of college health professionals in ameliorating health disparities among transgender students will be examined. It should be noted that throughout the literature review, health disparities and experiences reported by all transgender youth and adult populations are cited considering there is minimal research specifically addressing transgender college student health and health care experiences.

Most research regarding transgender people aggregates them with lesbian, gay, and bisexual (LGB) individuals. While the communities grouped together under the LGBT umbrella acronym share some experiences as their marginalization involves sex, gender, and/or sexuality, it is incorrect to assume that these experiences are all the same. The use of the acronym in research treats LGBT health needs and experiences as singular and indistinguishable (Taylor, Jantzen, & Clow, 2013). Therefore, it is important to acknowledge that while each identity group, including transgender people, may have

some shared health needs, they also have unique needs and experiences that are critical to acknowledge in health care settings in order for all in the LGBT community to receive high quality and culturally competent care. Unless noted as an aggregate LGBT sample, the reader should assume that all sample populations referenced in the literature review are specifically transgender.

Size and Scope of Transgender College Student Population

The estimated number of transgender college students can be ascertained from using two resources: The Williams Institute (2017) and The American College Health Association's National College Health Assessment (ACHA-NCHA, 2018). The Williams Institute is a national leader in providing estimates about the size and demographic characteristics of those who identify as transgender in the United States; their most recent report uses data from the Behavioral Risk Factor Surveillance System which collects state-specific data on demographic characteristic factors across the 50 states, the District of Columbia, and the territories of the United States. These most recent data suggest that 0.7% of youth populations ages 13-17 and 0.6% of adult populations identify as transgender (Herman, Flores, Brown, Wilson, & Conron, 2017). The National Center for Education Statistics (2018) estimates that 20.4 million students are enrolled in colleges or universities in Fall 2017, which would suggest between 122,400 and 142,800 transgender students are enrolled in higher education during Fall 2017.

ACHA-NCHA (2018) data find that of the 104,648 respondents to the Spring 2018 survey, 3% of respondents identified as non-binary or another gender outside of the male or female binary. ACHA-NCHA is considered a representative sample of college students, which would suggest that more than 600,000 students enrolled in colleges and

universities identify as transgender or another gender outside of the binary. Despite research showing that trans youth are more likely to drop out of school and are less likely to pursue post-secondary education than their cisgender peers due to harassment and mistreatment in K-12 schools (Kosciw, Greytak, Giga, Villenas, & Danischewski, 2016), these estimates suggest that hundreds of thousands of transgender students are matriculating or enrolling in college each year.

Health Disparities Documented in the Transgender Population

Transgender people experience worse health outcomes than their cisgender peers (James et al., 2016), and we can only estimate the full extent of these outcomes due to a general lack of health data collection specifically including transgender individuals (Krehely, 2009). There are several interrelated factors that contribute to these disparities including: low rates of health insurance coverage; high rates of stress due to systematic harassment and discrimination; and a lack of cultural competency in the health care system (Institute of Medicine, 2011). While it is documented that transgender people have less access to preventive health screenings and are at a higher risk for cancer and other diseases (Institute of Medicine, 2011; Krehely, 2009), that is not the focus of this study, nor the disparities discussed in this review. This study cites the health disparities regarding health issues common to college students and of particular interest to the American College Health Association (ACHA): mental health, experiences of harassment and violence, sexual health, and substance use. These disparities demonstrate the crucial need to document and support trans-inclusive college health services.

Mental health. Mental health disparities are documented in youth, college, and adult populations. The 2015 U.S. Transgender Survey, the largest survey of transgender

life experiences with almost 28,000 respondents ranging in age from 18 to over 65 years and residents from all 50 United States and other U.S. Territories (James et al., 2016), found that 39% of transgender adults reported serious psychological distress, a rate nearly eight times that of the general population. Similar rates of unhappiness are reported in youth. The Human Rights Campaign surveyed 925 transgender and non-binary youth ages 13-17 and found only 4% reported being "very happy" compared to 27% of straight cisgender males (Baum et al., 2014).

Transgender college students report significantly more mental health symptoms compared to their cisgender peers. An analysis from the Cooperative Institutional Research Program (CIRP) Freshman Survey, which included responses from 678 transgender incoming freshman from 209 colleges and universities, found that incoming transgender students self-reported "below average" emotional health at a significantly higher rate (52.1%) than a national sample (12.7%). Additionally, the transgender subgroup reported a much higher rate of depression (47.2%) as compared to 9.5% of the national sample (Stolzenberg & Hughes, 2017). A secondary data analyses of the Fall 2013 ACHA's National College Health Assessment, which included over 32,000 college student responses and reports from 116 transgender students, found that transgender students report significantly more experiences of stress, depression, anxiety, and self-harm compared to cisgender peers. Difficulty sleeping, experiences of trauma, and difficulty coping with personal health issues were also reported at significantly higher levels by transgender students when compared to their cisgender peers. Lastly, transgender students were more likely to be diagnosed or treated for depression, anxiety,

and bipolar disorder than both cisgender female and male students (Messman & Leslie, 2018).

Suicidality is among one of the most concerning public health issues impacting transgender people of all ages. The 2015 U.S. Trans Survey reports that 48% of respondents considered suicide in the past year compared to 4% of the general population, and 40% reported a lifetime suicide attempt, nearly ten times that of the general population (4.6%) (James et al., 2016). Suicidality is also pervasive in youth and college populations. Significantly higher rates of suicidal ideation and suicide attempts were recorded among transgender college students compared to their cisgender peers (Messman & Leslie, 2018) and a recent study using retrospective chart review of 96 transgender adolescents and young adults ages 12-22 years found that 30% reported a history of at least one suicide attempt (Peterson, Matthews, Copps-Smith, & Conard, 2017).

Unsupportive family appears to increase suicidal ideation and attempts in youth and adult populations. In adults, unsupportive family increased rates of suicidality with 54% of those out to unsupportive family reporting a lifetime suicide attempt compared to 37% of those out to supportive family (James et al., 2016). Suicidal ideation in transgender youth and the impact of family support is captured in the TRANS Pulse survey, a community-based, mixed methods research project aiming to understand the health of trans people in Ontario through 433 participants ages 16 and over. Data found that consideration of suicide was reported in about 60% of youth whose parents were not supportive and reported almost half as frequently (35%) in youth whose parents were supportive. Particularly alarming is that nearly all (57%) of those with unsupportive

parents who considered suicide had attempted suicide in the past year. In contrast, only 4% of trans youth with strongly supportive parents attempted suicide (Travers, Bauer, Pyne, Bradley, Gale, & Papadimitriou, 2012).

Experiences of harassment and violence. Harassment and violence, particularly sexual violence, are public health issues disproportionately impacting transgender Americans. The 2015 U.S. Trans Survey found that almost half (47%) of respondents reported a sexual assault at some point in their lives with 10% reporting a sexual assault within the last year (James et al., 2016). The Campus Climate Survey on Sexual Assault and Sexual Misconduct (Cantor, Fisher, Chibnall, Bruce, Townsend, Lee, Thomas, & Bruce, 2015) found equally alarming reports of sexual violence among transgender undergraduate (24.1%) and graduate students (15.5%), both of these rates are higher than reports from female undergraduate (23.1%) and graduate (8.8%) students. The Campus Climate Survey (2015) includes questionnaire responses from over 150,000 undergraduate and graduate students, at least 18 years of age, at 26 institutions of higher education. The Fall 2013 ACHA-NCHA secondary data analyses show that transgender college students report significantly higher rates of victimization when compared to cisgender women in regard to physical assault, verbal threats, and sexual assault (Messman & Leslie, 2018).

The Gay, Lesbian & Straight Education Network's (GLSEN) 2015 National School Climate Survey used an online tool to survey almost 10,000 LGBT students about their experiences in school, ages 13-21 from all 50 states and the District of Columbia. While this sample aggregates the LGBT responses, 15.2% of the sample identified as transgender, 11.4% identified as genderqueer, and 11.7% identified as another gender

outside of the binary (Kosciw et al., 2016). Overall, the survey found that LGBT students reported high rates of harassment and victimization in K-12 schools, with 55% reporting verbal harassment, 20% reporting physical harassment, and 9% reporting physical assaults as a direct result of their gender identity which would presumably impact transgender youth more than their cisgender peers. Furthermore, 43.3% of LGBT students reported feeling unsafe at school because of their gender identity (Kosciw et al., 2016).

These rates of youth victimization are comparable to those reported by transgender adults, where in the past year 46% reported verbal harassment and 9% reported a physical attack specifically as a result of their gender identity (James et al., 2016). Even higher reports of harassment and violence were documented in a survey conducted by the DC Trans Coalition of over 520 transgender people living in the Washington, D.C. metropolitan area, where 74% reported verbal assaults and 42% reported physical assaults because they were perceived as transgender. Additionally, this study found that trans women and trans people of color are disproportionately victims of verbal, physical, and sexual violence (Edelman, Corado, Lumby, Gills, Elwell, Terry, & Emperador, 2015).

This violence can be fatal, as records of transgender homicides have been increasing in recent years. In 2017, 25 transgender people were killed which is more than in any year in at least a decade; and these numbers have been increasing each year since 2014 when there were 13 homicides (Lee, 2017). Violent and fatal crime statistics against transgender people are often incomplete and undercount the full scope of incidents because some victim's deaths may go unreported, while other victims may not be

identified as transgender, often because authorities, journalists and/or family members refuse to acknowledge their gender identity (Lee, 2017). What is clear about these violent crimes is that transgender women of color, particularly black trans women, are disproportionately targeted by hate violence and murdered. Seventy-four percent of transgender Americans murdered in the past year were Black trans women (Lee, 2017). The 2015 U.S. Trans Survey also shows that transgender women of color, particularly Black (11%) and Latina (11%) women, were nearly four times as likely to report that they were attacked with a gun compared to all trans women (3%) (James et al., 2016).

Sexual health. Sexual health disparities have also been documented in transgender youth, college students, and adults. The Canadian Trans Youth Health Survey, a large online survey which was open to people ages 14 to 25, identifying as trans or genderqueer, and living in Canada, assessed a wide-range of health topics from 923 participants. The survey recruited participants through social networks, social media, community organizations, and health professionals and found that transgender youth reported over six times greater likelihood of having been diagnosed with a sexually transmitted infection by a doctor (19%) than their cisgender peers (Veale, Watson, Adjei, & Saewyc, 2016).

The 2015 U.S. Transgender Survey found that transgender adults report over five times (1.4%) the national average (0.3%) of HIV infection (James et al., 2016) and the rate among Black respondents was substantially higher (6.7%) and the rate for Black transgender women was 19%. An alarming 21% of transgender people surveyed in Washington, D.C. metropolitan area self-reported as HIV positive (Edelman, Corado, Lumby, Gills, Elwell, Terry, & Emperador, 2015). Transgender college students do not

report significant differences in oral and vaginal sex, nor the condom use associated with those behaviors, yet they are disproportionately diagnosed with HIV, chlamydia, genital herpes, HPV, gonorrhea, and hepatitis B or C when compared to their cisgender peers. While transgender college students do report higher rates of engaging in anal sex than cisgender females and males, they also report higher rates of condom use associated with that behavior (Messman & Leslie, 2018).

Substance use. Increased rates of substance use are documented in transgender youth, college, and adult populations. Transgender youth report almost double the rate of alcohol and drug use experimentation (48%) as their straight cisgender peers (Baum et al., 2014). When compared to their cisgender female and male peers, transgender college students report significantly more illicit substance use, binge drinking, and non-prescription substance use. Subsequently, transgender students report more experiences of substance abuse and addiction (Messman & Leslie, 2018). The 2015 U.S. Trans Survey found that transgender adults report more marijuana use in both lifetime (64% vs. 47%) and current use (25% vs. 8%) when compared to the general population. Overall, almost one-third of transgender adults report using marijuana, illicit drugs, and/or non-prescription drugs in the past months, compared to 10% of the U.S. population (James et al., 2016).

Inadequate Clinical Training, Health Care Facilities, and Policies

There are several institutional and social drivers of these documented health outcomes and disparities, including: inadequate clinical training of health care providers; inadequate health care facilities; and discriminatory policies. Many health care providers are ill equipped to handle the health needs of this population due to lack of knowledge

and minimal training in clinical programs (Obedin-Maliver, Goldsmith, Stewart, White, Tran, Brenman, Wells, Fetterman, Garcia & Lunn, 2011; Rutherford, McIntyre, Daley, & Ross, 2012). This inadequate training combined with provider bias and stigma (White Hughto, Reisner, & Pachankis, 2015) can lead to trans individuals delaying (Seelman, Colon-Diaz, LeCroix, Xavier-Brier, & Kattari, 2017) or foregoing health care (James et al., 2016; Lambda Legal, 2010), which contribute to the numerous health disparities impacting this population. Additionally, when providers are not well trained and stigma and bias are unaddressed, transgender patients may receive hostile mistreatment when they do access health care (James et al., 2016; Lambda Legal, 2010).

The Joint Commission, a leader in the provision of quality health care, has stated that in order to address health disparities impacting marginalized communities, such as transgender people, it is critical for health care professionals to become educated and trained to provide patient-centered and culturally competent care (The Joint Commission, 2011). Furthermore, the Association of American Medical Colleges (AAMC) acknowledges that transgender individuals face several challenges in obtaining compassionate, evidence-based, and patient-centered care. AAMC generated a clinical resource for medical educators to begin to address clinical training gaps (AAMC, 2014). The preface of this clinical resource, *Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD,* states:

> long-standing ethical and humanitarian foundations of medicine compel physicians and other health care providers to alleviate suffering in individuals and to advocate for social justice as a means to eliminate the structural sources of

> those disparities…The challenges faced by individuals who are or may be LGBT…in accessing and receiving quality, personalized care commands the attention of all professions that are dedicated to human health. (AAMC, 2014, p. xii).

Inadequate training of medical professionals. Inadequate LGBT training for health care professionals is widely documented (Obedin-Maliver et al., 2011; Lim, Johnson, & Eliason, 2015; Moll, Krieger, Moreno-Walton, Lee, Slaven, James, Hill, Podolsky, Corbin, & Heron, 2014; Lurie, 2005; Rutherford, McIntyre, Daley, & Ross, 2012). A national survey of 739 online and traditional nursing faculty assessed knowledge, experience, and readiness for teaching LGBT health in baccalaureate nursing programs using a 23-item questionnaire. Findings indicated that inclusion of health topics in the curriculum is "limited and does not adequately address the complex needs of LGBT persons across the lifespan" (Lim, Johnson, & Eliason, 2015, p.144). A similar cross-sectional Internet based survey was distributed to deans or other lead curriculum administrators at all 148 allopathic medical schools (17 in Canada and 131 in the United States) and all 28 osteopathic medical schools in the United States. The 13-item survey specifically assessed coverage of LGBT-related health content in medical schools. The median combined hours dedicated to LGBT content was five hours and 33% of medical schools reported zero hours of LGBT content during clinical years (Obedin-Maliver et al., 2011). Likewise, a survey distributed through the Council of Emergency Medicine Directors and completed by program directors at 124 emergency medicine residency programs found that their programs averaged 44 minutes in LGBT health, suggesting a

substantial lack of education that emergency medicine residents receive on LGBT health needs (Moll et al., 2014).

Research also suggests that beyond a basic lack of attention to transgender related health care issues in medical training, even health care providers who regularly work with transgender clients feel ill prepared. A qualitative study of 13 health care providers affiliated with the New England AIDS Education and Training Center and who were involved in HIV-specific care and frequently worked with transgender clients found that although providers were committed to providing respectful care, they felt unprepared to treat their transgender patients with culturally competent health care (Lurie, 2005).

Another qualitative study assessing provider stigma and its impact on transgender patients (Poteat, German, & Kerrigan, 2013) was completed through one-hour interviews with 55 transgender people and 12 medical providers regarding topics of stigma, discrimination, and health care interactions. Many providers cite lack of clinical training in transgender health care needs as a barrier to providing quality care which can manifest itself as discrimination in care settings and perpetuate health disparities. Many transgender patients anticipate that providers will not know how to meet their needs, which impacts trust in the care they are receiving as well as credibility of the provider.

The Association of American Medical Colleges' recently published *Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD*, which provides recommendations for medical school curricula and medical educators to ensure that students master the knowledge and skills to provide culturally competent and

comprehensive care for LGBT patients. This recent publication may augment the amount of LGBT content in medical curriculum moving forward.

Inadequate training of mental health professionals. Similar inadequacies in training for LGBT care are found in mental health programs. When using a 26-item LGBT Assessment scale to evaluate the phobias, attitudes, and cultural competence of 173 social work students at a Midwestern American university, participants were found to have both limited knowledge and negative attitudes toward LGBT people. Social work students reported lack of training and feeling unprepared to provide culturally specific and competent care for transgender patients which leads to "unequal treatment and assessment, misunderstandings resulting in misdiagnosis, as well as pathologizing and deprecating this population" (Logie, Bridge, & Bridge, 2008, p. 206).

Additional interviews of eight mental health service providers including psychiatrists, social workers, psychotherapists, and psychologists further confirmed limited opportunities for providers to access professional development to gain LGBT expertise (Rutherford, McIntyre, Daley, & Ross, 2012). Participants in this qualitative study were identified through the Rainbow Health Ontario database and were required to have at least two years of experience working with sexual or gender minorities. No participants identified as heterosexual and all participants emphasized the lack of LGBT-specific training for mental health professionals. One psychologist writing for a special series in *Clinical Psychology: Science and Practice* with a goal of enhancing psychologists' cultural competency and skills in meeting the needs of sexual and gender minorities states, "very few psychologists have any formal training in these areas, but this work is vital to the health of LGBT people" (Shipherd, 2015, p. 104) and "as mental

health professionals, we owe it to ourselves and our field to consider ways to lessen this burden [on LGBT people] by improving our own training and those we teach in the treatment of sexual and gender minority people (Shipherd, 2015, p. 101).

Inadequate health care facilities and policies. Many health care facilities lack the structure or policies to provide culturally competent and inclusive care which is compounded by the limited training of clinical and mental health care professionals, The Human Rights Campaign Foundation's Health care Equality Index (HEI) surveys hundreds of large health care facilities nationwide on several measures of LGBT inclusion. Participating facilities voluntarily share their policies and procedures in order to receive feedback regarding facility strengths, challenges, and recommendations for improvement, as well as be recognized for their efforts in excellence.

Only two of the 590 participants in the 2017 survey represented college health centers, which demonstrates a gap and need to survey the trans-inclusiveness of college health services across the country. While the 2017 HEI findings are not representative of college health centers, they are the most expansive snapshot of trans-inclusivity in health care settings. Three hundred and ninety of the 590 participants in the 2017 survey were identified as leaders providing exemplary LGBT health care, therefore, one could presume that the general findings of the HEI represent some of the most LGBT-inclusive health care settings in the country. That being said, only 39% of the surveyed sites indicated that their facility has a policy specifically outlining procedures aimed at eliminating bias, insensitivity, and ensuring appropriate interactions with transgender patients. Twenty-seven percent indicated that they do not provide any transgender specific services. Seventy-one percent of participating sites do not have an explicit way to

capture a patient's current gender identity in a way that differentiates it from sex assigned at birth, which can be critical for providing affirming care and navigating matters related to insurance and billing (Human Rights Campaign, 2017). These findings speak to the inadequate resources and institutional barriers for transgender patients to receive equitable care found in even the most inclusive health care settings, and they speak to the importance of assessing where college health centers are in regard to servicing this population.

Transgender Patients Experiences in Health Care

There are several studies that specifically document the health care experiences of transgender people on the receiving end of such inadequate services, including the 2015 U.S. Trans Survey (James et al., 2016) and Lambda Legal's *When Health Care Isn't Caring* (2010). The Lambda Legal survey utilized over 100 national, state, and local LGBT and HIV-focused organizations in 35 states to distribute the survey to 4,916 participants.

These studies cite anywhere between 33% (James et al., 2016) to 70% (Lambda Legal, 2010) of individuals reporting that they endured negative experiences in health care related to being transgender, such as verbal harassment, refusal of treatment or service, or having to teach a provider about transgender people to receive appropriate care. Additionally, the Lambda Legal (2010) report found that 90% of transgender patients believed that there were not enough trained providers to address their medical needs and 73% believed that they would be treated differently because they are transgender. Examples of lack of training, discriminatory policies, and mistreatment are qualitatively detailed in both studies:

> Multiple medical professionals have misgendered me, denied to me that I was transgender or tried to persuade me that my trans identity was just a misdiagnosis of something else, have made jokes at my expense in front of me and behind my back, and have made me feel physically unsafe. I often do not seek medical attention when it is needed, because I'm afraid of what harassment or discrimination I may experience in a hospital or clinic (James et al., 2016, p. 96).

Another quote is from a participant reflecting on their experience in college:

> When I was in college, I had my health insurance list me as male, and then they denied coverage for my routine pap smear and a gynecological prescription due to my gender (James et al., 2016, p. 96).

A quote from a participant in *When Health Care Isn't Caring*:

> I called a gynecologist's office tying to schedule a hysterectomy. I told the receptionist that I was a transgender male. Two days later, I received a phone call telling me that the doctor did not take cases like mine and referring me to a hospital. I remember feeling like a freak. I called the second number. The receptionist told me they didn't deal with transgender men either. After I got over the hurt, I called another doctor's office. The receptionist told me that their office welcomed transgender clients. I told the doctor that I wanted a full hysterectomy. She performed an exam, Pap smear and ultrasound. She told me that the results showed that I was fine. I asked her again about the hysterectomy, this time telling her I would pay for it out of pocket. She continued to say that it would be unethical because there was nothing wrong with me. She was hiding her transphobia behind a bogus argument and dismissing a very real medical need. I

> told her that there was something wrong: "I am a man with a uterus. I need to have all female reproductive parts removed. I AM A MAN!" She refused. I left her office feeling like a freak again, vulnerable and depressed. (Lambda Legal, 2010, p. 13)

Inadequate training of health care professionals is linked to transgender people delaying or avoiding care, which is linked to general worse health outcomes for this population. Providers' uncertainty and inability to provide informed quality care is shown to limit the trust that patients have in their health care professionals (Poteat, German, & Kerrigan, 2013; Lambda Legal, 2010). This lack of trust combined with discrimination in health care settings (Lambda Legal, 2010; James et al., 2016) result in almost one-quarter of transgender individuals reporting that they did not see a doctor when they needed care because of fear of being mistreated as a transgender person (James et al., 2016).

Delayed health care due to fear of discrimination is strongly associated with worse general and mental health according to a study utilizing secondary data analysis of a community-based survey of 417 transgender adults in the Rocky Mountain region of the United States (Seelman, Colon-Diaz, LeCroix, Xavier-Brier, & Kattari, 2017). These findings are critical in connecting the lack of provider training and trust with worse health outcomes for transgender individuals. Additionally, distrust, lack of access, and experiences of discrimination in health care settings result in many transgender adults seeking medical procedures and hormones from someone other than a doctor or nurse (Xavier, Honnold, & Bradford, 2007) which can result in life-threatening risks. This was demonstrated through a quantitative survey of 350 participants seeking to identify risk

factors driving HIV infection and the social determinants of health status of transgender people in Virginia ages 18 and older.

The Critical Role of College Health

College health centers are uniquely positioned to address health disparities in their transgender student populations. Student health and wellness has been linked to student retention and academic capabilities since the 1800's. Over the past two centuries, institutions of higher education have been increasing and expanding wellness services available to students to support academic aptitude and social wellbeing (Turner & Hurley, 2002). One leader in this progress is the American College Health Association (ACHA), originally known as the American Student Health Association. ACHA has been the leading organization for advancing the health of college students and campus communities through advocacy, education, and research in the United States since 1920 (ACHA, 2017). ACHA connects college health professionals, provides and supports professional development to its membership, generates best practices, and works towards advancing the health and provision of health services for college students nationwide.

It is critical that college health professionals are thoroughly trained in responding to transgender health care needs as this population is more actively seeking health care services in college when compared to their cisgender peers (Messman & Leslie, 2018; Stolzenberg & Hughes, 2017). Approximately 75% of transgender rising freshmen plan on seeking college mental health services (Stolzenberg & Hughes, 2017) and almost 50% of current trans college students report that they have utilized campus mental health services to cope with life stressors (Messman & Leslie, 2018). Contact with a college

clinician is either an opportunity or threat to the student's wellbeing, depending largely on the training and competency of the health care professional they see.

ACHA developed the *Trans-Inclusive College Health Programs* guidelines (Appendix A) as a step in acknowledging their critical role in advising college health professionals in how to address health disparities experienced by transgender students (2015). These guidelines offer 32 recommendations for college health programs to create inclusive and affirming environments for "transgender, gender nonconforming, genderqueer, and similarly identified students" (ACHA, 2015, p. 1) and to mitigate barriers that trans students face when accessing health care services on campus. The 32 guidelines address six constructs: 1) access to health care; 2) health insurance; 3) names, identity, medical records, and health informatics; 4) personnel continuing education, and training; 5) mental health services; and 6) health promotion and prevention.

The *Trans-Inclusive College Health Programs* guidelines were developed collaboratively between ACHA's LGBTQ+ Health Coalition and the Consortium of Higher Education LGBT Resource Professionals. ACHA's LGBTQ+ Coalition has several purposes, including:

> a) to raise concerns of LGBT students and college health professionals while encouraging the development of culturally competent health services for members of the LGBT communities on campuses, b) to be a mechanism for the exchange of information, resources, and tools to address the health concerns of LGBT students and professional concerns of college health professionals who identify as either LGBT or allies supporting and educating members of the community, and

c) to identify and disseminate best practices addressing LGBT issues (ACHA, 2018).

The Consortium of Higher Education LGBT Resource Professionals' mission is to support individuals who work on campuses to educate and support people of diverse sexual orientations and gender identities, as well as advocate for more inclusive policies and practices and to foster collaborative relationships with higher education institutions and other organizations to advocate for more inclusive colleges and universities (The Consortium of Higher Education LGBT Resource Professionals, 2017).

ACHA's LGBTQ+ Health Coalition and the Consortium of Higher Education LGBT Resource Professionals based the *Trans-Inclusive College Health Programs* primarily on two models of best practice in transgender health. The first model of best practice used in the formation of ACHA's *Trans-Inclusive College Health Programs* guidelines was the World Professional Association for Transgender Health's (WPATH) Standards of Care, Version 7. According to their website, WPATH promotes "the highest standards of health care for individuals through the articulation of Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People. The Standards of Care are based on the best available science and expert professional consensus" (WPATH, 2017).

The second set of guidelines used to develop ACHA's *Trans-Inclusive College Health Programs* was from the Center of Excellence for Transgender Health in San Francisco. According to their website,

The Center of Excellence for Transgender Health combines the unique strengths and resources of a nationally renowned training and capacity-building

> institution…the ultimate Center of Excellence goal is to improve the overall health and wellbeing of transgender individuals by developing and implementing programs in response to community-identified needs. We include community perspectives by actively engaging a national advisory body of 14 transgender-identified leaders from throughout the country. The collective experience of our diverse and talented national advisory body assures that our programs address issues that are timely and relevant to the community (Center of Excellence for Transgender Health, 2018).

The Consortium of Higher Education LGBT Resource Professionals tasked ACHA's LGBTQ+ Health Coalition with aggregating and synthesizing these two models to develop a set of guidelines that were most applicable and feasible to implement in college health settings.

Unfortunately, while ACHA's *Trans-Inclusive College Health Programs* guidelines exist, there is no knowledge of the extent to which institutions of higher education and college health centers are adhering to them and providing the recommended care. Therefore, this project surveyed college health centers to assess the degree to which they are meeting the ACHA *Guidelines for Trans-Inclusive College Health Programs* and to measure the provision of trans-inclusive care in institutions of higher education. Documenting the current landscape is a critical first step in identifying capacities and needs of college health professionals and facilities to reduce health disparities and enhance outcomes among transgender college students.

Theory

This present research project is grounded in an ecological theoretical framework (Bronfenbrenner, 1979). An ecological approach focuses on both population-level and individual-level determinants of health and interventions. This framework considers health issues to be community and individually-based and that health is influenced by multiple nested levels (e.g., *public policy, community, institutional, interpersonal,* and *intrapersonal* factors) (McLeroy, Bibeau, Steckler & Glanz, 1988). *Public policy* includes local, state, national, and global laws and policies. The *community* level includes relationships among organizations, institutions, and informational networks within defined boundaries, such as health care and health care professionals. The *institutional* level includes the characteristics of one's specific environment, such as safety or campus climate. The *interpersonal* level includes formal and informal social networks and social support systems, such as family, work, and friends. Lastly, the *intrapersonal* level includes characteristics of an individual, such as knowledge, attitudes, behavior, and skills. These five interdependent levels comprise an ecosystem, an arrangement of mutual dependencies in a population by which the whole operates as a unit and in which an individual interacts, adapts, and develops based on their resources.

One basic assumption of ecological systems theory is that humans are dependent on their environment for sustenance and that humans can only survive in environments in which their biological needs are met (White & Klein, 2015). Furthermore, an ecology model suggests that environmental factors interact and affect individual behavior. These environmental factors may be the physical setting or place, the characteristics of the

people in the community, organizational and social climate, and/or characteristics of the surrounding community.

This research project can be understood by using an ecological model. ACHA's *Trans-Inclusive College Health Programs* guidelines aim to enhance health outcomes among transgender college students (*intrapersonal* level) through culturally competent care provided at the *institutional level* and through action, resources, and relationships at the *community* and *interpersonal levels*. These guidelines assume that interactions among the *public policy, community, institutional, and interpersonal levels* are drivers of individual health outcomes (*intrapersonal*). Furthermore, the ACHA guidelines are grounded in the theoretical assumption that humans can only survive in environments where their biological needs are met. This underscores the crucial need for trans-inclusive health care for transgender college students. If an institution is not able to meet their basic health care needs, the ability of the student to survive and thrive academically and in general is compromised.

> The *Trans-Inclusive College Health Programs* guidelines state that,
>
> college health programs work to support the overall goals of their institutions, providing trans-inclusive health care will enhance academic success for transgender students and comply with Title IX guidelines requiring educational institutions to not discriminate on the basis of gender identity in the provision of services. Likewise, under the Affordable Care Act, non-discrimination in health care on the basis of gender identity is increasingly emphasized (ACHA, 2015, p. 1).

This statement speaks directly to the power of *public policy* and its role in driving resources and services at the *community* and *institutional* levels to affect change at the *intrapersonal* level.

The guidelines continue:

> The following recommendations are designed to create climates and environments in college health that are inclusive and affirming of transgender, gender non-conforming, genderqueer, and similarly identified students…The following recommendations can help mitigate barriers that trans students face when accessing mental health, physical health and preventative services on campus (ACHA, 2015, p. 1).

This statement calls for intervention, services, and resources at the *institutional* level to affect change at the *intrapersonal* level. The guidelines go on,

> recognizing differences in campus size, funding, or other resource challenges, ACHA identifies these practices as best strategies to meet the needs of transgender students. Not all college health programs provide the same services and in circumstances with limited services, college health professionals should partner with other campus and community organizations to best meet the needs of transgender students (ACHA, 2015, p. 1).

This statement acknowledges the critical role of resources in affecting change at the *intrapersonal* level as well as calls for services, resources, and relationships at *community, institutional,* and *interpersonal* levels to impact individual outcomes (*intrapersonal)*.

Sexual Minority Stress Theory (Meyer, 2003) informs the ACHA *Trans-Inclusive College Health Programs* guidelines. Sexual Minority Stress Theory (Meyer, 2003), adapted from minority stress theory (Crocker, Major, & Steele, 1998; Link & Phelan, 2001), addresses the critical fact that marginalization in society impacts transgender individuals' access to resources and wellbeing. This theory suggests that prolonged experience, expectation, or perception of social discrimination in one's environment creates a chronic stress that directly diminishes individual wellbeing. This theory explains that stigma, prejudice, and discrimination create a hostile and stressful social environment that causes health problems.

According to Sexual Minority Stress Theory, individual's outcomes are largely tied to their experiences of their environment and their perception of that environment. This theory argues that individuals living in unsupportive environments and communities are at an increased risk for negative health outcomes. Conversely, supportive environments increased resiliency, decreased stress, and can lead to more successful outcomes (Fingerhut, 2010), which supports the potential impact of these guidelines on individual health outcomes.

Sexual Minority Stress Theory informs the ACHA *Trans-Inclusive College Health Programs* guidelines by recognizing that transgender individuals are a disenfranchised subset of the population with less access to resources in their ecosystems (James et al., 2016) and who are victims of discrimination in health care settings (James et al., 2016; Lambda Legal, 2010) Transgender individuals lack access to clinical providers with adequate training to meet their health care needs (Obedin-Maliver et al., 2011), and as a result delay care and have worse health outcomes (Poteat, German, &

Kerrigan, 2013). These guidelines seek to be both reactive to the current experiences of transgender students and proactive in addressing these issues at more policy and institutional levels. While Sexual Minority Stress Theory does not inform this specific research project, it informs the guidelines for which this project is based.

Purpose of the Research

The purpose of this research is three-fold. First, this project developed an instrument to operationalize ACHA's *Trans-Inclusive College Health Programs* guidelines. Secondly, this research tested the instrument by assessing the degree to which college health centers are providing culturally competent care as recommended in the ACHA *Trans-Inclusive College Health Programs* guidelines, and details specifics regarding the provision of trans-inclusive care among the ACHA membership. The third purpose of this research was to consider how overall provision of trans-inclusive health care and services varies by six institutional characteristics: control of institution (public vs. private); religious affiliation; transgender-inclusive laws and policies of the state in which the college is located; size of institution; locale (city, suburban, town, rural) and; region of the country. Data were obtained through a quantitative and qualitative *Trans-Inclusive College Health Programs* survey tool designed by the researcher to operationalize the recommended guidelines, although only quantitative measures were used for this project's analyses.

Chapter 3: Methodology

This study used a cross-sectional survey design to assess the extent to which ACHA member institutions, as well as individual members who are employed at institutions without an institutional ACHA membership, are providing trans-inclusive health care as outlined in the ACHA *Trans-Inclusive College Health Program's* 32 guidelines.

Sample

The 43-item electronic survey was sent to 1,005 ACHA members, which included representatives from member institutions and individual members who are employed at institutions without an institutional ACHA membership. ACHA membership fluctuates as some schools with memberships and individual members enroll and drop throughout the year, although ACHA typically has approximately 1,100 institutional and individual members combined at the end of each calendar year. ACHA membership is represented in all 50 states including Washington, D.C., the Virgin Islands, and Puerto Rico. Not all institutions of higher education are represented in ACHA membership. However, according to the Chief Research Officer at ACHA, their membership includes about 50% of institutions with college health services, which is the intended audience of this study. ACHA is not able to determine whether their membership is representative of all college health centers, although it does hold the largest professional membership for college health professionals (M. Hoban, personal communication, May 20, 2019).

ACHA Trans-Inclusive College Health Programs Survey Development

Each of the 32 guidelines will first be detailed and followed by the corresponding questions developed to measure that guideline. A full copy of the ACHA *Trans-Inclusive*

College Health Programs guidelines (Appendix A) and the full text of this project's Trans-Inclusive College Health Programs survey (Appendix B) can be found in the appendices.

Several of the guidelines required one or more lead-in questions to limit survey length, reduce response burden, and to provide more than one way to analyze the data. For example, when assessing the guideline that schools attempt to offer trans-inclusive health insurance, the survey first asked if the school provided any student health insurance. If the respondent said 'yes', then they were prompted to answer follow-up questions about trans-inclusiveness of that insurance policy. The follow-up questions are the ones actually measuring the adherence to the guidelines, not the lead-in questions. Creating the lead-in questions both lessened the number of questions that a participant needed to answer that do not pertain to their scope of services (i.e. not needing to answer questions about trans-inclusive student health insurance if your school does not provide any health insurance). Additionally, this approach allowed the researcher to compare the responses from those that provide certain services (i.e. trans-inclusive health insurance) to the entire sample (all schools regardless of whether or not they provide student health insurance) as well as the subset that provides a specific service but it is not trans-inclusive (only schools that provide student health insurance but it is not inclusive). While the former was used in these analyses, collecting the data in this way provides ample opportunity for follow-up analyses and future research, as these findings would have different implications.

Guideline #1. Include the perspectives of trans students in all college health trainings and use universal language that is inclusive of individuals outside the gender binary.

How this guideline is operationalized on the survey. The extent to which a center includes the perspectives of trans students in college health trainings is operationalized using questions 1 – 5. Question #1 is a lead-in question and Question #5 is a qualitative open response.

Question #1. "In the last 24 months, has your student health center solicited student perspectives to inform training or processes in the health center that affect patients (generally, not specifically for transgender patients)?" Respondents chose one of the three categorical options: 1) Yes; 2) In progress; or 3) No. If the respondent selected 'yes' or 'in progress' to Question #1, then they were prompted to answer Question #2. If the respondent selected 'yes' to Question #1, they were prompted to answer Question #3.

Question #2. "Select all of the ways that your student health center solicits student perspectives to inform your general practice:" Respondents chose one of the six categorical options: 1) SHAC (Student Health Advisory Committee); 2) Patient satisfaction surveys; 3) Comment or suggestion box; 4) Town hall; 5) Partnering with LGBTQ+ groups or: 6) Other (which includes an open text box).

Question #3. "Has your center SPECIFICALLY solicited transgender student perspectives to inform training or processes in the health center that affect transgender patients?" Respondents chose one of the three categorical options: 1) Yes; 2) In progress; or 3) No. If the respondent selected "Yes" or "In progress" to Question #3, then they

were prompted to answer Questions #4. If the respondent selected "Yes" to Question #3, then they were also prompted to answer Questions #5.

Question #4. "Select all of the ways that your student health center has specifically solicited transgender student perspectives." Respondents chose one of the six categorical options: 1) SHAC (Student Health Advisory Committee); 2) Patient satisfaction surveys; 3) Comment or suggestion box; 4) Town hall; 5) Partnering with LGBTQ+ groups; or 6) Other (which includes an open text box).

Question #5. If respondents answered 'yes' to Question #3, they were prompted with a qualitative open comment section that read, *"How was that information used to inform training or processes?"*

Guideline #2. Identify clinicians knowledgeable and supportive of the medical aspects of trans health to provide trans-specific health care services. Communicate availability of these providers through college health program's website and with relevant campus departments (e.g. counseling center, LGBT office).

Guideline #3. Identify mental health providers knowledgeable and supportive of trans mental health issues. Communicate availability of these providers to medical staff and other departments on campus to allow for appropriate referrals.

How these guidelines are operationalized on the survey. The extent to which centers identify knowledgeable medical and mental health professionals and how they communicate availability of these providers through college health program's website and with relevant campus departments is measured using Question #6 which was presented as a matrix, please reference Appendix B for reference.

Question #6. "Please answer the following regarding your MEDICAL and MENTAL HEALTH staff and/or services. Respondents were shown two columns, one for their responses for medical staff and one for their responses for mental health staff. Each column provided three response options (0 = no, 1 = yes, 2 = don't know) for each of the six prompts: 1) Are any of these staff providing care specific to the needs of transgender students (i.e. hormone readiness assessments, hormone maintenance); 2) Has your campus internally identified any specific providers as knowledgeable or supportive of transgender health care services?; 3) Are any of these providers externally identified as transgender health care resources on your website, to relevant campus departments, or other public-facing promotional materials; 4) Do any of these providers have experience writing letters for transitioning students to access hormones, undergo surgery, or affirm names/gender markers on legal documents (i.e. license, health insurance)?; 5) Do any of these providers have experience navigating health insurance questions and needs for students in transition?; and 6) Have any of these providers worked with other campus departments to inform, consult, or advance transgender-related initiatives in the last 24 months? Participants used this matrix to assess provision of care across these six prompts for both mental health and medical services.

Guideline #4. Have all gender (sometimes referred to as gender neutral) bathrooms available throughout the building.

How this guideline is operationalized on the survey. The extent to which a center has all gender bathrooms available throughout the building is operationalized using Questions #7 - #10. Questions #7 and #9 are lead-in questions and Questions #8 and #10 address the guideline directly.

Question #7: "Does your student health center have single-user restrooms?" Dichotomous response options were provided (0 = no, 1 = yes). If participants selected 'yes', then they were prompted to answer Question #8.

Question #8: "Are any of these single-user restrooms specifically identified as all-gender/gender-neutral? Dichotomous response options were provided (0 = no, 1 = yes).

Question #9: "Does your student health center have multi-user restrooms?" Dichotomous response options were provided (0 = no, 1 = yes). If participants selected 'yes', then they were prompted to answer Question #10.

Question #10: "Are any of these multi-user restrooms specifically identified as all-gender/gender-neutral?" Dichotomous response options were provided (0 = no, 1 = yes).

Guideline #5. Appoint one or more patient advocates and/or have a visible procedure for trans students (as well as other students) to report concerns and instances of suboptimal care and treatment. At least one patient advocate should be trained on the complexities of insurance coverage and medical care that trans-identified people often face.

How this guideline is operationalized on the survey. The extent to which a center has a visible procedure for trans students (as well as other students) to report concerns and instances of suboptimal care and treatment is operationalized using Question #11. The extent to which a center has appointed one or more patient advocates is operationalized using Question #12, a lead-in question. The extent to which a center has patient advocates specifically trained in marginalized populations, transgender

populations, and the complexities of insurance coverage and medical care that trans-identified people often face is operationalized using Questions #13-16. Question #13 is an additional lead-in question and Question #14 is a qualitative open response question.

Question #11: "Does your student health center promote instructions for patients who wish to report complaints about care or treatment?" Dichotomous response options were provided for this measure (0 = no, 1 = yes).

Question #12: "Does your center provide patient advocates?" Dichotomous response options were provided for this measure (0 = no, 1 = yes). If the respondent selected 'yes' to Question #12, they were prompted to answer Question #13.

Question #13: "Do those patient advocates specifically receive training in marginalized populations in health care?" Respondents chose one of the three categorical options: 1) Yes; 2) In progress; or 3) No. If the respondent selected 'yes' to Question #13, they were prompted to answer Questions #14 and #15.

Question #14: "What marginalized populations are included in your training?" A qualitative box was provided for open text.

Question #15: "Does the training specifically address transgender issues?" Dichotomous response options were provided for this measure (0 = no, 1 = yes). If the respondent selected 'yes' to Question #15, they were prompted to answer Question #16.

Question #16: "Do those patient advocates receive training in the complexities of insurance coverage and medical care that trans-identified people often face?" Dichotomous response options were provided for this measure (0 = no, 1 = yes).

Guideline #6. Include clear, complete information about accessing trans-related health care services on websites and in health center literature, including appropriate

representations of gender expressions across the spectrum of experience. Representations may include website content, trans-specific brochures, and pictures or posters.

How this guideline is operationalized on the survey. The extent to which a center includes information about accessing trans-related health care services on websites and in health center literature is operationalized using Question #6 which is more detailed above in Guideline #2; the specific prompt that addresses this guideline is Prompt #3 ("*Are any of these providers externally identified as transgender health care resources on your website, to relevant campus departments, or other public-facing promotional materials*.")

Guideline #7. Research and determine relevant campus and community agencies that complement and/or provide trans-affirming medical, mental health, and social support services. Develop plans to partner and/or refer as needed to these organizations.

How this guideline is operationalized on the survey. The extent to which a center researches and determines relevant campus agencies that complement and/or provide trans-affirming medical, mental health, and social support services, refers to these organizations, and partners with these organizations is operationalized using Questions #17 – #19.

Question #17: "These questions are about ON and OFF campus resources:" Respondents were shown two columns, one for ON-CAMPUS resources and one for ACCESSIBLE OFF-CAMPUS resources. Each column provided three response options (0 = no, 1 = yes, 2 = don't know) for the single prompt: *1) Are there other departments or agencies that are involved in support services for transgender people?* If a participant selected 'yes' for at least one of the on or off-campus columns, then they were prompted to answer Questions #18 and #19.

Question #18: "These questions are about collaborative work with ON and OFF campus resources:" Respondents were shown two columns, one for ON-CAMPUS resources and one for ACCESSIBLE OFF-CAMPUS resources. Each column provided three response options (0 = no, 1 = yes, 2 = don't know) for the single prompt: *1) Has your department worked with any of these other campus units or community organizations in the past 24 months regarding transgender health conversations/trainings?*

Question #19: "These questions are about ON and OFF campus referrals:" Respondents were shown two columns, one for ON-CAMPUS resources and one for ACCESSIBLE OFF-CAMPUS resources. Each column provided three response options (0 = no, 1 = yes, 2 = don't know) for the single prompt: *1) Does your department have a referral process for students seeking on or off-campus resources regarding transgender identity, community, services, etc.*

Guideline #8. Strive to offer insurance coverage for gender affirming hormones and gender-affirming surgical procedures under university/college provided student health insurance plans.

How this guideline is operationalized on the survey. The extent to which a center offers insurance coverage for gender affirming hormones and gender-affirming surgical procedures under university/college provided student health insurance plans is operationalized using Questions #20 and #21. Question #20 is a lead-in question.

Question #20. "Does your campus provide a student health insurance plan?" Dichotomous response options were provided for this measure (0 = no, 1 = yes). If the respondent selected "yes" they were prompted to answer Question #21.

Question #21. "Does your student health insurance plan offer coverage for:" Respondents were shown two rows*: 1) Gender affirming hormone therapy (also known as cross-sex hormone treatment) and 2) Gender affirming surgical procedures*. Each row provided two response option columns (0 = no, 1 = yes).

Guideline #9. Ensure that only medically necessary information is collected; this includes avoiding questions that are not relevant to the specific patient interaction needed at that visit.

How this guideline is operationalized on the survey. The extent to which a center ensures that only medically necessary information is collected is operationalized using Question #22. Question #22 is a matrix question with seven prompts, see Appendix B for reference. Only Prompt #7 was used to operationalize Guideline #9, but all seven prompts are listed below and will be referenced later in additional guidelines.

Question #22: "In the past 24 months, has your student health center provided training to staff on the following (check all that apply):" Respondents were shown seven prompts: *1) Pronouns; 2) Transgender people's experiences in health care; 3) Health disparities faced by transgender people; 4) Gender-affirming hormone therapy (also known as cross-sex hormone treatment); 5) Preventative health care for transgender people; 6) Referrals for those seeking transition support/services/procedures/surgeries; and 7) Ensuring that only medically-necessary information is collected during appointments.* Each row has dichotomous response option columns (0 = no, 1 = yes).

Guideline #10. Allow for a patient/client to indicate their "sex assigned at birth" alongside their current gender.

Guideline #11. Revise standardized language across medical forms so that the language is the most inclusive possible. For example, use "relationship status" instead of "marital status."

Guideline #12. Enable students to indicate the name they use (sometimes referred to as "preferred name"), and not just their legal name, on intake forms. Use this chosen name when calling students in for appointments.

How Guidelines #10 - #12 are operationalized on the survey. The extent to which a center provides inclusive options for their forms including sex assigned at birth, gender identity, relationship status, and preferred name is operationalized using Questions #23 and #24.

Question #23: "Are the following demographic markers included in your health forms/medical records:" Respondents were provided dichotomous response options (0 = no, 1 = yes) for each of the four prompts: *1) Preferred name or name DIFFERENT than legal name; 2) Sex assigned at birth (DIFFERENT field than sex); 3) Gender identity; and 4) Relationship status (as opposed to marital status).* If 'yes' was selected for the prompt "preferred name or name DIFFERENT than legal name" then respondents were directed to Question #24.

Question #24: "You answered 'yes' to "preferred name or name different than legal name." Is there a policy or protocol to use this name when addressing students for appointments and at various points of contact when receiving health care (i.e. front desk, lab, pharmacy)?" Respondents chose one of the three categorical options: 1) Yes; 2) In progress; or 3) No.

Guideline #13. Train staff to recognize that students may prefer to use a pronoun that may not be obvious from their physical presentation.

How this guideline is operationalized on the survey. The extent to which a center trains staff to recognize that students may prefer to use a pronoun that may not be obvious from their physical presentation is operationalized using Question #22 – Prompt #1 detailed above with Guideline #9. ("*In the past 24 months, has your student health center provided training to staff on the following: Pronouns.")*

Guideline #14. Enable students to self-identify gender on the intake and, where there are limitations posed by electronic medical record (EMR) software, provide paper-based solutions to ensure a student is represented in ways that are appropriate to them.

How this guideline is operationalized on the survey. The extent to which a center allows patients to self-identify on the forms is measured by Question #25, a multi-column matrix question, see Appendix B for reference.

Question #25: "We asked you about what demographic options are available on your medical charts. Now we are asking WHO IS ABLE TO EDIT the patient's chart/record (check all that apply):" Respondents were provided four columns for who is able to edit the chart: *1) Patient; 2) Staff member; 3) N/A (this field cannot be edited); and 4) N/A (this field is not on our charts/records).* There were five prompts which correlated to the five different potentially editable items in patient charts*: 1) Name; 2) Preferred/affirmed name; 3) Sex; 4) Sex assigned at birth; and 5) Gender identity.*

Guideline #15. Work with the EMR provider to find solutions if there are challenges with an EMR system. In the meantime, provide the paper solution outlined above until the problem is resolved. Be aware of how an EMR system interacts with other

computer systems on campus (e.g., registrar), which may limit the control of a college health program.

How this guideline is operationalized on the survey. The extent to which a center works with the EMR provider to find solutions if there are challenges with an EMR system is operationalized using Questions #26 - 29. Questions #26 and #27 are lead-in questions and Question #29 is a qualitative open response question.

Question #26: "Does your student health care facility use electronic medical records (EMR) or electronic health records (EHR)?" Dichotomous response options were provided for this measure (0 = no, 1 = yes). If the respondent selected "Yes" they were prompted to answer Question #27.

Question #27: "Has your student health care facility encountered limitations with utilizing these EMR/EHR fields to affirm a patient's identity while they navigate care in your space (i.e. using preferred/affirmed name when greeting patients, billing legal name or sex while affirming a different name or gender when providing care, at the pharmacy or lab, etc.)?" Dichotomous response options were provided for this measure (0 = no, 1 = yes). If the respondent selected "Yes" they were prompted to answer Question #28.

Question #28: "Has your student health care facility worked with your EMR/EHR provider or other units to find solutions to affirm patient's identity while they navigate care in your space (i.e. using preferred/affirmed name when greeting patients, billing legal name or sex while affirming a different name or gender when providing care, at the pharmacy or lab, etc.)?" Respondents chose one of the three categorical options: 1) Yes; 2) In progress; or 3) No.

Question #29: Participants received this question if they selected 'yes' on Question #28. *"Please provide any comments or insight about your student health care facility's experience working with EMR/EHR and affirming patients' identities and names."* Participants had an open text box for comments.

Guideline #16. Write prescriptions and lab orders so that the name a student uses is called out at the pharmacy and lab.

How this guideline is operationalized on the survey. The extent to which a center writes prescriptions and lab orders so that the name a student uses is called out at the pharmacy and lab is operationalized using Questions #28 and #29, detailed above with Guideline #15.

Guideline #17. Provide written information about how a student can legally change their name, if they desire to do so. Some campuses allow a student's name to be changed at the registrar, even if the student has not changed it legally. Staff members need to be aware of applicable university policies.

How this guideline is operationalized on the survey. The extent to which staff members are aware of university policies regarding name change is operationalized using Question #30.

Question #30: "Does your campus allow students to change the following with the registrar (or other official campus entity): Respondents were shown two rows*: 1) Name and 2) Sex or gender marker.* Each row had three response option columns (0 = no, 1 = yes, 2 = don't know).

Guideline #18. Develop a policy that outlines procedures and practices for working with trans students to ensure quality care in all areas.

How this guideline is operationalized on the survey. The extent to which a center has a policy that outlines procedures and practices for working with trans students to ensure quality care in all areas is operationalized using Questions #24, detailed above with Guideline #12 (*Is there a policy or protocol to use this name when addressing students for appointments and at various points of contact when receiving health care?")* and Question #31.

Question #31: "Does your center have a policy that outlines procedures and practices for working with trans students (i.e. policies that address pronouns, hormones, referrals, or any other procedures that may be relevant to your practice and this population)?" Respondents chose one of the three categorical options: 1) Yes; 2) In progress; and 3) No.

Guideline #19. Work in concert with staff across the institution to care for a trans person's whole self and holistic wellness. Such cross-campus partnerships might include student services, counseling center, registrar, public safety, and university facilities.

How this guideline is operationalized on the survey. The extent to which a center works with staff across the institution in cross-campus partnerships is operationalized using Question #6 – Prompt #6, detailed above in Guideline #2 ("*Please answer the following regarding your MEDICAL and MENTAL HEALTH staff and/or services: Have any of these providers worked with other campus departments to inform, consult, or advance transgender-related initiatives in the last 24 months?")*, and Questions #18 ("*These questions are about collaborative work with ON and OFF campus resources: Has your department worked with any of these other campus units or community organizations in the past 24 months regarding transgender health*

conversations/trainings?") and #19 *("These questions are ON and OFF campus referrals: Does your department have a referral process for students seeking on or off-campus resources regarding transgender identity, community, services, etc.")* both detailed in Guideline #7.

Guideline #20. Hire trans-knowledgeable and trans-supportive college health professionals. Allow staff with subspecialties in trans health care to be identified so that a student may request that provider.

How this guideline is operationalized on the survey. The extent to which a center has staff with subspecialties in trans health care and allows them to be identified so that a student may request that provider is operationalized using Question #6 – Prompts #1, #2, #3, ("*Please answer the following regarding your MEDICAL and MENTAL HEALTH staff and/or services: 1) Are any of these staff providing care specific to the needs of transgender students; 2) Has your campus internally identified any specific providers as knowledgeable or supportive of transgender health care services?; 3) Are any of these providers externally identified as transgender health care resources on your website, to relevant campus departments, or other public-facing promotional materials?*"), all detailed in Guideline #2.

Guideline #21. Train college health staff at all levels to be aware of trans identities and needs. Train specific staff based on their role, e.g. train mental health professionals to author letters of referral for gender-affirming hormones and/or gender-affirming surgical procedures, and train clinical health care providers on the initiation and continuation of gender-affirming hormones.

How this guideline is operationalized on the survey. The extent to which a center trains specific staff based on their role, e.g. train mental health professionals to author letters of referral for gender-affirming hormones and/or gender-affirming surgical procedures is operationalized using Question 6 – Prompt #4 *("Do any of these providers have experience writing letters for transitioning students to access hormones, undergo surgery, or affirm names/gender markers on legal documents?")* and Prompt #5 *("Do any of these providers have experience navigating health insurance questions and needs for students in transition?")*, both detailed in Guideline #2. The extent to which a center trains college health staff at all levels to be aware of trans identities and needs is operationalized by using Question #22 – Prompts #3 and #5 (*"In the past 24 months, has your student health center provided training to staff on the following: 3) Health disparities faced by transgender people and 5) Preventative health care for transgender people"),* both detailed above in Guideline #9.

Guideline #22. Incorporate training and education about trans individuals and their experiences and their health care needs into regular meetings throughout the year. Training opportunities should be designed to be accessible for health care providers and staff at all levels.

How this guideline is operationalized on the survey. The extent to which a center incorporates training and education about trans individuals and their experiences in health care is operationalized by using Question #22 – Prompt #2 (*"In the past 24 months, has your student health center provided training to staff on the following: 2) Transgender people's experiences in health care),* detailed above in Guideline #9.

Guideline #23. Identify providers who are knowledgeable about trans mental health, including, but not limited to, those who have training and experience to write letters for transitioning students to access hormones or undergo surgery.

Guideline #24. Understand and be able to explain the required mental health services for students who are transitioning under the student health insurance plan.

Guideline #25. Provide access to mental health providers knowledgeable about gender transition medical procedures and their impact on mental health overall and the possible interactions with current medications.

How these guidelines are operationalized on the survey. The extent to which a center incorporates Guidelines #23 - #25 are operationalized using Questions #6 – Prompts #1, #2, #4, and #5 *("Please answer the following regarding your MEDICAL and MENTAL HEALTH staff and/or services. 1) Are any of these staff providing care specific to the needs of transgender students (i.e. hormone readiness assessments, hormone maintenance); 2) Has your campus internally identified any specific providers as knowledgeable or supportive of transgender health care services?; 4) Do any of these providers have experience writing letters for transitioning students to access hormones, undergo surgery, or affirm names/gender markers on legal documents (i.e. license, health insurance)?;* and *5) Do any of these providers have experience navigating health insurance questions and needs for students in transition?")* all detailed in Guideline #2 and Question #22 – Prompts #4 and #6 (*"In the past 24 months, has your student health center provided training to staff on the following: 4) Gender-affirming hormone therapy and 6) Referrals for those seeking transition support/services/procedures/surgeries")*, both detailed above in Guideline #9.

Guideline #26. Offer a support group for trans and gender nonconforming students.

Guideline #27. Develop marketing strategy for mental health services to highlight specialized care for trans students.

How these guidelines are operationalized on the survey. The extent to which a center offers a support group for trans and gender nonconforming students and markets such services are operationalized using Question #6 - Prompt #3 *("Are any of these providers externally identified as transgender health care resources on your website, to relevant campus departments, or other public-facing promotional materials?"),* detailed in Guideline #2 as well as Questions #32 and #33.

Question #32: "Does your campus offer a support group for transgender students?" Respondents chose one of three categorical options: 1) Yes; 2) In progress; or 3) No.

Question #33: "Does your campus specifically market or highlight these services to students? Dichotomous response options were provided for this measure (0 = no, 1 = yes).

Guideline #28. Develop prevention strategies to address issues that disproportionately affect transgender individuals. These strategies can include, but should not be limited to, violence prevention (including harassment/ bullying, relationship and sexual violence); HIV/AIDS and other STI prevention and treatment; substance abuse prevention and treatment; and mental health issues such as depression, suicidal ideation, and suicide prevention.

How this guideline is operationalized on the survey. The extent to which a center develops prevention strategies to address issues that disproportionately affect transgender individuals, include issues of violence prevention, HIV/STI prevention and treatment; substance abuse prevention and treatment; and mental health issues is operationalized using Questions #34 - #36. Question #34 is a lead-in question.

Question #34: "Does your campus have staff dedicated to health promotion/prevention/education?" Dichotomous response options were provided for this measure (0 = no, 1 = yes). If a participant selected 'yes', they were prompted to answer Question #35.

Question #35: "Do your health promotion/prevention/educational materials and programs include transgender students (i.e. through language, examples, etc.?" Dichotomous response options were provided for this measure (0 = no, 1 = yes). If a participant selects 'yes', they were prompted to answer Question #36.

Question #36: "Do your health promotion/prevention/education efforts specifically outreach to transgender students regarding health issues that disproportionately affect transgender individuals (i.e. substance use, STIs, relationship violence, mental health issues?") Respondents chose one of three categorical options: 1) Yes; 2) In progress; or 3) No.

Guideline #29. Acknowledge and address the intersection of race and ethnicity for trans people (i.e., ethnic and racial minorities may experience more discrimination and challenges as stigma and access to physical and mental health care can be compounded for some individuals).

How this guideline is operationalized on the survey. The extent to which a health promotion/prevention unit acknowledges and addresses the intersection of race and ethnicity for trans people is operationalized using Question #37.

Question #37: If respondents selected 'yes' on Question #36 they were prompted to answer: *"Does your health promotion/prevention/education outreach acknowledge the intersection of race and ethnicity for trans people (i.e. trans people who are also ethnic and racial minorities may experience compounded marginalization and discrimination)?"* Respondents chose one of three categorical options: 1) Yes; 2) In progress; or 3) No.

Guideline #30. Adapt appropriate education and prevention services to the trans population.

How this guideline is operationalized on the survey. The extent to which a health promotion/prevention unit adapts education and prevention services to the trans population is operationalized using Questions #35 (*"Do your health promotion/prevention/educational materials and programs include transgender students?")* and #36 (*"Do your health promotion/prevention/education efforts specifically outreach to transgender students regarding health issues that disproportionately affect transgender individuals (i.e. substance use, STIs, relationship violence, mental health issues)?"),* both detailed above in Guideline #28, as well as Question #38.

Question #38: "Do your health promotion/prevention/education efforts specifically engage the trans community as stakeholders in the development of

educational programs and services?" Respondents chose one of three categorical options: 1) Yes; 2) In progress; or 3) No.

Guideline #31. Develop education and prevention efforts in concert with the trans community as stakeholders. Provide these services in both trans-specific venues in addition to general education sessions.

How this guideline is operationalized on the survey. The extent to which a health promotion/prevention unit develops education and prevention efforts in concert with the trans community as stakeholders is operationalized using Questions #35 (*"Do your health promotion/prevention/educational materials and programs include transgender students?"),* #36 (*"Do your health promotion/prevention/education efforts specifically outreach to transgender students regarding health issues that disproportionately affect transgender individuals (i.e. substance use, STIs, relationship violence, mental health issues)?"),* and #38 (*"Do your health promotion/prevention/education efforts specifically engage the trans community as stakeholders in the development of educational programs and services?")*, detailed in Guidelines #28 and #30.

Guideline #32. Ensure that language and examples allow for inclusion of trans people in both written and verbal education efforts.

How this guideline is operationalized on the survey. The extent to which a health promotion/prevention unit ensures that language and examples allow for inclusion of trans people in both written and verbal education efforts is operationalized using Questions #35 (*"Do your health promotion/prevention/educational materials and programs include transgender students?"),* detailed in Guideline #28 above, and Question #39, a qualitative open response question.

Question #39: If participants selected 'yes' on Question # 39 they were prompted to answer, *"Please provide any examples of this health promotion/prevention/education outreach."* An open text box will be provided for comment.

Additional survey questions. The survey included one consent question and three additional survey questions that are not related to the 32-specific ACHA guidelines. The question numbers in this paper are sequential to the order of the guidelines, not how they are represented on the survey (complete survey and question sequence found in Appendix C). These remaining four questions are not attached to any guidelines and are therefore described last in this paper. Please note that Questions #40 and #41 were asked first on the survey, and Questions #42 and #43 were asked last.

Question #40: Consent question: *"This assessment serves as a dissertation project for an ACHA member at the University of Maryland and will result in final report made available to the membership. Your responses will be de-identified by ACHA before the data are shared with the researcher for analysis. The researcher will not be able to connect your responses to you as an individual nor to your institution. The final report will aggregate all responses and will not specifically share the responses from any individual institution or member. ACHA will not in any way reward or punish members and institutions based on their responses to this survey. Completion of this survey may take collaboration of health center, mental health, health promotion professionals, and/or your campus LGBTQ+ resources. Please coordinate the appropriate information from the various professionals to complete this survey to the best of your ability and submit ONE survey response for your institution. Members who complete the survey will be entered into a raffle for one of four $100 VISA gift cards. ACHA will select four*

random winners from the total sample of participants and send the email addresses only, separate from any survey responses, to the researcher so that they can send out the gift cards accordingly. This will keep the participants' responses confidential while allowing for the researcher to contact the participants with their gift cards. Please contact Jenna Messman (jbeckwit@umd.edu) if you would like a copy of this consent for your records or if you have questions about this project. This research has been reviewed according to the University of Maryland, College Park Institutional Review Board (IRB) procedures for research involving human subjects. If you have questions about your rights as a research participant, please contact the UMD IRB: E-mail: irb@umd.edu Telephone: 301-405-0678. By agreeing to participate, you are indicating that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study." This was the first question on the survey. Participants selected from "yes" and "no", only those that selected "yes" were provided the remaining survey questions.

Question #41: "What is your primary area of practice?" Participants had 15 response options: *1) Administrator; 2) Dietician/Nutritionist; 3) Faculty; 4) Health Educator; 5) Medical Records Specialist; 6) Nurse; 7) Nurse Director; 8) Nurse Practitioner; 9) Pharmacist; 10) Physician; 11) Physician Assistant; 12) Psychiatrist; 13) Psychologist or Counselor; 14) Social Worker; or 15) Other.* If a respondent selected 'other' then they were prompted with an open text box to write their primary area of practice.

Question #42: "We understand that in order for you to answer all of these questions, you may have had to consult with other service providers, departments, or units. For example, some campuses may have one department that provides all of these services and another campus may have several different units each responsible for specific services (i.e. group counseling, education, clinical services). Please check all whose services are included in your responses:" Participants selected from the following five options: *1) Student Health Services; 2) Mental Health or Counseling Services; 3) Health Promotion; 4) LGBT Services or Centers; and 5) Other units or departments, please list* (participants will be given an open text box to comment here).

Question #43: "Please provide any comments about your campus' successes, challenges, or strategies in providing quality health care to transgender patients or provide more insight into responses where you noted in progress." Participants were provided an open text box to comment.

Trans-Inclusive College Health Programs Survey Recodes

All 'yes' survey responses were coded = 1, all 'no' survey responses were coded = 0, all 'in progress' survey responses were re-coded as 'yes' = 1, and all 'don't know' survey responses were re-coded = missing. This transformed all of the three-response items into dichotomous items. While the 'in progress' response option provides interesting options for different analyses in future research, which will be detailed in the discussion, the nuance of progress does not address the main research question, which is the provision or lack thereof of these services. The 'don't know' option was never intended to be included in the analyses, but was required as the researchers knew that many respondents may not be aware of these possibly new or specialty trans-inclusive

services and without the ‘don’t know’ option they may make an incorrect guess that doesn’t accurately reflect their services.

A response of ‘in progress’ was deemed worthy of a ‘yes’ response because it demonstrated an institutional effort and commitment to trans-inclusive health care, despite being a new or incomplete initiative. Furthermore, if a respondent who works in the clinical space responded ‘don’t know’ because they are unaware of a trans-inclusive service, it doesn’t necessarily mean that service doesn’t exist on the campus, but it is less likely that students who are not as closely involved with the scope of clinical services are going to be informed about such services. Therefore, these were coded as missing, as they are not a distinctive ‘no’ or ‘yes’.

Recodes to address missingness due to survey design and display logic. Recoding several variables was required in order to most accurately assess the provision of services on a national scale. The survey design included display logic to limit survey length and reduce response burden. For example, all participants were asked, *“Does your campus provide a student health insurance plan?”* If someone answered ‘no’ then they were not presented the follow-up question, “*Does your student health insurance plan offer coverage for 1) Gender affirming hormone therapy* or *2) Gender affirming surgical procedures?”*)

Due to the survey design and display logic, it was important to recode the variables in such a manner where the ‘yes’ responses of these follow-up and more guideline-specific questions could be compared to the entire sample and not just those who reported that service. Therefore, those that answered ‘no’ to the lead-in question (*“Does your campus provide a student health insurance plan?”)* and did not get the

specific question addressing the guideline ("*Does your student health insurance plan offer coverage for: 1) Gender affirming hormone therapy* or *2) Gender affirming surgical procedures?")* were re-coded as if they answered 'no' to the follow-up question even though they didn't receive it. This way the researcher could better assess the provision of trans-inclusive health insurance among the entire membership instead of "to what degree are those colleges that offer student health insurance providing trans-inclusive student health insurance."

Assuming a 'no' on these follow-up items is a practical way to handle these missing items because if a respondent answered 'no' on the lead-in question, then there is no reasonable explanation for them to answer 'yes' to the follow-up question. For example, if someone reports that their school does not offer any student health insurance option, it is unlikely to impossible for them to report 'yes' on a follow-up question asking about the trans-inclusive nature of their non-existent health insurance policy. Lastly, assuming a 'no' and recoding as such on the selected items where there was an initial lead-in question enhances the researcher's ability to determine statistical significance as this will address a missingness issue where one exists on various items.

Trans-Inclusive College Health Programs Survey Construct Validity

Construct validity was considered in the development of this survey. Once the researcher developed the 43-item survey, feedback was solicited from ACHA's research unit and representatives from the group who wrote the ACHA *Trans-Inclusive College Health Programs* guidelines, to assure the instruments accurately assessed the guidelines.

ACHA's research unit provided feedback to include "no, but interested" as additional options to "yes", "no", and "in progress" on several measures, specifically

where the researcher could gauge member interest in meeting a guideline. However, the project research team agreed that while this was interesting, the "no, but interested" response option did not provide valuable differentiation regarding service provision at institutions, nor did it directly help to answer the research question and was therefore not included in the final version of the survey. Current members from ACHA's LGBTQ+ Health Coalition and Sexual Health Education and Clinical Care Coalition (SHECC) were contacted to review the survey; they provided no further revisions or comments.

Phone conversations with two members from the group that wrote the *Trans-Inclusive College Health Programs* guidelines, one LGBTQ+ Health Coalition representative and one former Consortium of Higher Education LGBT Resource Professionals representative, confirmed that when these guidelines were written there was no plan or intention of crafting a tool to measure the degree to which institutions were meeting them nor were they written to serve as a discrete checklist. As a result, while these 32 guidelines are comprehensive in terms of recommended practice in providing trans inclusive health care, the six constructs were not mutually exclusive and included some overlap between constructs. Additionally, many of the guidelines included more than one recommendation in a single guideline. How this overlap was addressed for purposes of analysis is discussed in the Scale Development section.

Both members agreed that there was substantial benefit and purpose in developing this project's survey and that the practical implications for the findings are consistent with the guideline's original intent, even if original constructs could not be used as the basis for analysis. Both members verbally affirmed that the questions on this survey tool

measured the constructs and guidelines and enhanced the original intended purpose of creating them.

The LGBTQ+ Health Coalition representative from the original writing group commented that language regarding LGBTQ+ identities is evolving and that some terminology used in the original guidelines from 2015, specifically the term "gender-neutral", may not be used today and could be deemed "outdated" by some taking the survey in present time. They recommended that the researcher use both "gender-neutral" and "all gender" (the more updated term and also used in the original guidelines) in the survey to stay consistent with the language used in the original guidelines and to make note of the importance of terminology in the discussion section of the paper.

Procedure

The ACHA research unit routinely surveys their membership and therefore sent the ACHA membership sample (n = 1,005) an electronic invitation (Appendix C) and survey link to the 43-item online questionnaire (Appendix B). The researcher developed the online survey in the Qualtrics survey platform and shared the survey link with the ACHA research team so that they could copy the file, send the survey from their account, and keep the identifiable dataset blind to the researcher. The survey took approximately 30 minutes to complete, although the time likely varied due to display logic questions that only present information relevant to someone based on previous responses in the survey. Consultation with other staff to get complete answers about their campus practices and services was likely needed for some respondents, which may have required additional time.

The ACHA research unit sent three survey completion reminders to non-responders one week later and again at three and five weeks post-launch. The survey was open for five and a half weeks and received 272 responses. The American College Health Association was responsible for de-identifying the data and shared it with the researcher six weeks after the survey closed.

Measures

Institutional characteristics. The American College Health Association does not store campus demographics in their membership database, rather they record the Integrated Postsecondary Education Data System (IPEDS) number for each member in the United States which allows them to pull from the 250+ variables that the Department of Education records for more than 7,500 colleges, universities, and technical and vocational institutions in the United States (National Center for Education Statistics, 2018). IPEDS characteristics that were included in this study include: control of institution (public vs. private); religious affiliation (yes vs. no); size of institution (<1000, 1000-4999, 5000-9999, 10000-19999, 20000+); locale (city, suburban, town, rural); and region (Northeast, Midwest, South, West). These five measures were selected, as they are common institutional characteristics used by ACHA to differentiate the membership.

An additional institutional characteristic variable was created for this project, Transgender Inclusive Laws and Policies. This variable was generated using the Movement Advancement Project's gender identity equality map (Movement Advancement Project, 2019). This report looks at legal equality for transgender people across the country to generate an inclusion tally comprised of 25 state laws and policies in five key categories: 1) Non-Discrimination; 2) LGBT Youth; 3) Health and Safety; 4)

Ability to Correct the Name and Gender Marker on Identity Documents; and 5) Adoption and Parenting. According to the Movement Advancement Project, 19 states score "negative", 11 states score "low", 4 states score "medium" and 16 states plus D.C. score "high" on the gender identity law and policy inclusion tally (Movement Advancement Project, 2019).

An example of a law or policy included in the non-discrimination category is whether or not state non-discrimination law protects workers from employment discrimination based on gender identity. An example of a law or policy included in the LGBT youth category is whether or not state law prohibits discrimination in schools based on gender identity. An example of a law or policy included in the health and safety category is whether or not state policy prohibits transgender-specific exclusions in health insurance service coverage. An example of a law or policy included in the identity and documents category is whether or not the state allows residents to identify as something other than male or female on driver's licenses. An example of a law or policy included in the adoption and parenting category is whether or not state law prohibits discrimination in adoption based on gender identity of parent(s) (Movement Advancement Project, 2019).

For the purposes of this project, the four rankings (negative, low, medium, and high inclusion) were collapsed into binary categories of negative/low vs. medium/high. The researcher provided the ACHA research unit with the Transgender Inclusive Laws and Policies rankings (Appendix D) before survey launch so that member ID would connect those responses to a state and its' corresponding inclusion scale (0 = negative/low, 1 =medium/high) while keeping the specific state information blind to the

researcher. This was done to ensure the confidentiality of respondents because knowing state information along with other institutional characteristic information may have made it possible to identify a specific school.

Scale development. As previously discussed, there is substantial overlap in the six constructs in the *Trans-Inclusive College Health Programs* guidelines which meant that items could not be organized and combined to create mutually exclusive and independent scales by the six constructs originally detailed in ACHA's *Trans-Inclusive College Health Programs*: 1) Access; 2) Health insurance; 3) Names, identity, medical records, and health informatics; 4) Personnel, continuing education, and training; 5) Mental health services; and 6) Health promotion and prevention. For example, the construct of *access* included the guideline, *"Identify mental health providers knowledgeable and supportive of trans mental health issues. Communicate availability of these providers to medical staff and other departments on campus to allow for appropriate referrals."* Measuring whether a school identifies knowledgeable and supportive mental health and communicates that availability to others on campus are two separate questions and need to be analyzed separately. Furthermore, the ACHA guidelines have an entire different construct titled *mental health services*, which demonstrates thematic overlap between the constructs.

Additionally, several individual guidelines address more than one recommendation and require several questions to measure them. For example, Guideline #5 that states, *"Appoint one or more patient advocates and/or have a visible procedure for trans students to report concerns and instances of suboptimal care and treatment. At least one patient advocate should be trained on the complexities of insurance coverage*

and medical care that trans-identified people often face. Six questions on the survey (Questions #11 – 16) address this one guideline.

In order to both reduce the need to individually analyze each of the survey items and to look for meaningful grouping of trans-inclusive practices and services, two researchers involved in this project proposed eight independent and non-overlapping preliminary scales to assess the 32 guidelines using 43 items, these scales were: 1) Trans-Inclusive Training and Staffing; 2) Trans-Inclusive Mental Health Staff and Services; 3) Trans-Inclusive Medical Staff and Services; 4) Trans-Inclusive Health Records; 5) Trans-Inclusive Restrooms; 6) Trans-Inclusive Programs, Services, Policies; 7) Campus and Community Collaboration and Referrals; 8) and Marketing of Trans-Inclusive Programs.

The two researchers (one in college health and one in clinical services) independently coded all survey items as to which scale they belonged in and saw that the agreement level was low on two scales: Trans-Inclusive Programs, Services, Policies and Marketing of Trans-Inclusive Programs. After looking at areas of disagreement, the two researchers made modifications to these eight scales by adding two additional scales and by enhancing specificity and clarity in their titles.

These revisions resulted in ten scales. All survey items were then independently re-coded again by the two researchers, as well as two additional experts (one in policy and one in college health), as to which scales they belonged in. The ten proposed scales coded by the four researchers were: 1) Trans-Inclusive Training for Staff; 2) Trans-Inclusive Mental Health Staff and Services; 3) Trans-Inclusive Medical Staff and Services; 4) Trans-Inclusive Health Promotion/Education and Services; 5) Trans-Inclusive Restrooms; 6) Trans-Inclusive Health Records; 7) Trans-Inclusive Campus and

Health Center Policies; 8) Soliciting Input and Collaboration with Transgender Students; 9) Campus and Community Collaboration and Referrals; and 10) Marketing of Trans-Inclusive Programs.

Final scales consisted of only those items in which three of the four raters placed that item in the scale. Three items that had poor interrater reliability (a consensus of less than three out of four raters) and did not make it onto scales were identified. One of these four items (Question #21) was used to create a new scale: Trans-Inclusive Health Insurance. The remaining two items (Question #25 and Question #30) were analyzed as individual items and can be found in the individual item measurement section.

The addition of the Trans-Inclusive Health Insurance scale brought the total number of proposed scales to eleven and Cronbach's alpha was run on each scale to assess internal consistency. Two of the eleven scales (Trans-Inclusive Campus and Health Center Policies and Trans-Inclusive Restrooms) had low internal consistency and were removed from the final scale list, which brought the final scale count to nine. The four items from these two removed scales (Trans-Inclusive Campus and Health Center Policies – Questions #24 and #31 and Trans-Inclusive Restrooms – Questions #8 and #10) were added to the list of items to be analyzed individually.

Scale composition. To review the final nine scales, the guidelines being addressed in that scale were first be identified followed by the specific corresponding questions used to assess the guideline. No lead-in items are discussed in this section, only the exact items that comprise the final nine scales. As previously discussed in the section about recoding, all items originally marked as 'in progress' were recoded as 'yes' = 1,

and all items originally marked as 'don't know' were recoded as 'missing' – these recodes are noted in the scales.

Scale #1 Trans-inclusive health insurance. This scale addresses one guideline: Guideline #8 - Strive to offer insurance coverage for gender affirming hormones and gender-affirming surgical procedures under university/college provided student health insurance plans. This scale is comprised of two items and has a Cronbach's alpha = .889. Both items on this scale come from Question #21, "*Does your student health insurance plan offer coverage for: 1) Gender affirming hormone therapy* and *2) Gender affirming surgical procedures."* Each dichotomous item is coded (0 = no, 1 = yes) so this scale has a 0-2 range.

Scale #2 Trans-inclusive training for staff. This scale addresses eight guidelines: Guideline #1 - Include the perspectives of trans students in all college health trainings and use universal language that is inclusive of individuals outside the gender binary; Guideline #5 -Appoint one or more patient advocates and/or have a visible procedure for trans students (as well as other students) to report concerns and instances of suboptimal care and treatment. At least one patient advocate should be trained on the complexities of insurance coverage and medical care that trans-identified people often face; Guideline #9 – Ensure that only medically-necessary information is collected; this includes avoiding questions that are not relevant to the specific patient interaction needed at that visit; Guideline #13 - Train staff to recognize that students may prefer to use a pronoun that may not be obvious from their physical presentation; Guideline #19 - Work in concert with staff across the institution to care for a trans person's whole self and holistic wellness. Such cross-campus partnerships might include student services, counseling

center, registrar, public safety, and university facilities; Guideline #21 - Train college health staff at all levels to be aware of trans identities and needs. Train specific staff based on their role, e.g. train mental health professionals to author letters of referral for gender-affirming hormones and/or gender-affirming surgical procedures, and train clinical health care providers on the initiation and continuation of gender-affirming hormones; Guideline #22 - Incorporate training and education about trans individuals and their experiences and their health care needs into regular meetings throughout the year. Training opportunities should be designed to be accessible for health care providers and staff at all levels; and Guideline #23 - Identify providers who are knowledgeable about trans mental health, including, but not limited to, those who have training and experience to write letters for transitioning students to access hormones or undergo surgery.

This scale is comprised of nine items and has a Cronbach's alpha = .879. The nine items come from Question #15 (*"Does the training specifically address transgender issues?"),* Question #16: *("Do those patient advocates receive training in the complexities of insurance coverage and medical care that trans-identified people often face?"),* and the seven items that comprise Question #22 (*"In the past 24 months, has your student health center provided training to staff on the following:" 1) Pronouns; 2) Transgender people's experiences in health care; 3) Health disparities faced by transgender people; 4) Gender-affirming hormone therapy (also known as cross-sex hormone treatment); 5) Preventative health care for transgender people; 6) Referrals for those seeking transition support/services/procedures/surgeries; and 7) Ensuring that only medically-necessary information is collected during appointments.")* Each of these nine items are dichotomous and coded (0 = no, 1 = yes) so this scale has a 0-9 range.

Scale #3 Trans-inclusive mental health staff and services. This scale addresses seven guidelines: Guideline #2 - Identify clinicians knowledgeable and supportive of the medical aspects of trans health to provide trans-specific health care services. Communicate availability of these providers through college health program's website and with relevant campus departments (e.g. counseling center, LGBT office); Guideline #3 - Identify mental health providers knowledgeable and supportive of trans mental health issues. Communicate availability of these providers to medical staff and other departments on campus to allow for appropriate referrals; Guideline #20 - Hire trans-knowledgeable and trans-supportive college health professionals. Allow staff with subspecialties in trans health care to be identified so that a student may request that provider; Guideline #23 - Identify providers who are knowledgeable about trans mental health, including, but not limited to, those who have training and experience to write letters for transitioning students to access hormones or undergo surgery; Guideline #24 - Understand and be able to explain the required mental health services for students who are transitioning under the student health insurance plan; Guideline #25 - Provide access to mental health providers knowledgeable about gender transition medical procedures and their impact on mental health overall and the possible interactions with current medications; and Guideline #26 - Offer a support group for trans and gender nonconforming students.

This scale is comprised of five items and has a Cronbach's alpha = .779. Four of the five items comes from Question #6, the large matrix question assessing the provision of both mental health and medical care services, see Appendix B for reference. The specific four items on this scale from Question #6 regard only mental health staff and

services and include Prompt #1 (*"Are any of these staff providing care specific to the needs of transgender students?"),* Prompt #2 *("Has your campus internally identified any specific providers as knowledgeable or supportive of transgender health care services?"),* Prompt #4 (*"Do any of these providers have experience writing letters for transitioning students to access hormones, undergo surgery, or affirm names/gender markers on legal documents (i.e. license, health insurance)?"),* and Prompt #5 *("Do any of these providers have experience navigating health insurance questions and needs for students in transition?")* The last item on this scale is Question #18 (*"Does your campus offer a support group for transgender students?")* Each of these five items are dichotomous and coded (0 = no, 1 = yes) so this scale has a 0-5 range.

Scale #4 Trans-inclusive medical staff and services. This scale addresses four guidelines: Guideline #2 - Identify clinicians knowledgeable and supportive of the medical aspects of trans health to provide trans-specific health care services. Communicate availability of these providers through college health program's website and with relevant campus departments (e.g. counseling center, LGBT office); Guideline #20 - Hire trans-knowledgeable and trans-supportive college health professionals. Allow staff with subspecialties in trans health care to be identified so that a student may request that provider; Guideline #21 - Train college health staff at all levels to be aware of trans identities and needs. Train specific staff based on their role, e.g. train mental health professionals to author letters of referral for gender-affirming hormones and/or gender-affirming surgical procedures, and train clinical health care providers on the initiation and continuation of gender-affirming hormones; and Guideline #24 - Understand and be able

to explain the required mental health services for students who are transitioning under the student health insurance plan.

This scale is comprised of four items and has a Cronbach's alpha = .801. All four items come from Question #6, the large matrix question assessing the provision of both mental health and medical care services, see Appendix B for reference. The specific four items on this scale from Question #6 regard only medical staff and services and include Prompt #1 *("Are any of these staff providing care specific to the needs of transgender students?"),* Prompt #2 (*"Has your campus internally identified any specific providers as knowledgeable or supportive of transgender health care services?"),* Prompt #4 (*"Do any of these providers have experience writing letters for transitioning students to access hormones, undergo surgery, or affirm names/gender markers on legal documents (i.e. license, health insurance)?"),* and Prompt #5 (*"Do any of these providers have experience navigating health insurance questions and needs for students in transition?")* Each of these four items are dichotomous and coded (0 = no, 1 = yes) so this scale has a 0-4 range.

Scale #5 Trans-inclusive health promotion/education and services. This scale addresses five guidelines: Guideline #28 -Develop prevention strategies to address issues that disproportionately affect transgender individuals. These strategies can include, but should not be limited to, violence prevention (including harassment/ bullying, relationship and sexual violence); HIV/AIDS and other STI prevention and treatment; substance abuse prevention and treatment; and mental health issues such as depression, suicidal ideation, and suicide prevention; Guideline #29 - Acknowledge and address the intersection of race and ethnicity for trans people (i.e., ethnic and racial minorities may

experience more discrimination and challenges as stigma and access to physical and mental health care can be compounded for some individuals); Guideline #30 - Adapt appropriate education and prevention services to the trans population; Guideline #31 - Develop education and prevention efforts in concert with the trans community as stakeholders. Provide these services in both trans-specific venues in addition to general education sessions; and Guideline #32 - Ensure that language and examples allow for inclusion of trans people in both written and verbal education efforts.

This scale is comprised of three items and has a Cronbach's alpha = .780. The three items include Questions #35 (*"Do your health promotion/prevention/educational materials and programs include transgender students?)*, #36 ("*Do your health promotion/prevention/education efforts specifically outreach to transgender students regarding health issues that disproportionately affect transgender individuals*?"), and #37 (*"Does your health promotion/prevention/education outreach acknowledge the intersection of race and ethnicity for trans people?)* Each of these three items is dichotomous and coded (0 = no, 1 = yes) so this scale has a 0-3 range.

Scale #6 Trans-inclusive health records. This scale addresses three guidelines: Guideline #10 - Allow for a patient/client to indicate their "sex assigned at birth" alongside their current gender; Guideline #12 - Enable students to indicate the name they use (sometimes referred to as "preferred name"), and not just their legal name, on intake forms. Use this chosen name when calling students in for appointments; and Guideline #14 - Enable students to self-identify gender on the intake and, where there are limitations posed by electronic medical record (EMR) software, provide paper-based solutions to ensure a student is represented in ways that are appropriate to them.

This scale is comprised of three items and has a Cronbach's alpha = .653, which while slightly below standard, is relatively high given that this is only a three-item scale (Streiner, 2003). All items on this scale come from three of the four prompts on Question #23 ("*Are the following demographic markers included in your health forms/medical records: 1) Preferred name or name DIFFERENT than legal name; 2) Sex assigned at birth (DIFFERENT field than sex); and 3) Gender identity.")* The scale range is 0 – 3, as all three items are dichotomous and coded (0 = no, 1 = yes).

Scale #7 Soliciting input and collaboration with transgender students. This scale addresses three guidelines: Guideline #1 - Include the perspectives of trans students in all college health trainings and use universal language that is inclusive of individuals outside the gender binary; Guideline #30 - Adapt appropriate education and prevention services to the trans population; and Guideline #31 - Develop education and prevention efforts in concert with the trans community as stakeholders. Provide these services in both trans-specific venues in addition to general education sessions.

This scale is comprised of three items and has a Cronbach's alpha = .712. The three items on this scale come from the 5th checkbox in Question #2 (*"Select all of the ways that your student health center solicits student perspectives to inform your general practice: 5) Partnering with LGBTQ+ groups*), Question #3 (*"Has your center SPECIFICALLY solicited transgender student perspectives to inform training or processes in the health center that affect transgender patients?")*, and Question #38 (*"Do your health promotion/prevention/education efforts specifically engage the trans community as stakeholders in the development of educational programs and services?")* The scale range is 0 – 3, as all three items are dichotomous and coded (0 = no, 1 = yes).

Scale #8 Campus and community collaboration and referrals. This scale addresses two guidelines: Guideline #7 - Research and determine relevant campus and community agencies that complement and/or provide trans-affirming medical, mental health, and social support services. Develop plans to partner and/or refer as needed to these organizations and Guideline #19 - Work in concert with staff across the institution to care for a trans person's whole self and holistic wellness. Such cross-campus partnerships might include student services, counseling center, registrar, public safety, and university facilities.

This scale is comprised of eight items and has a Cronbach's alpha = .688. Two of the eight items come from Question #6, the large matrix question assessing the provision of both mental health and medical care services, see Appendix B for reference. The items included in the scale come from responses to Prompt #6 regarding both medical and mental health staff and services ("*Please answer the following regarding your MEDICAL and MENTAL HEALTH staff and/or services: Have any of these providers worked with other campus departments to inform, consult, or advance transgender-related initiatives in the last 24 months?"*). Responses for medical and/or mental health staff are each two separate items. An additional two items come from Question #17 assessing both on and off-campus referrals individually (*"Are there other departments or agencies that are involved in support services for transgender people?"*), so a response for on and off-campus are each two separate items. An additional two items come from Question #18 ("*Has your department worked with any of these other campus units or community organizations in the past 24 months regarding transgender health conversations/trainings?");* similarly a response for on and off-campus is each one item.

The last two items come in a similar format from Question #19 ("*Does your department have a referral process for students seeking on or off-campus resources regarding transgender identity, community, services, etc.?"*) The scale range is 0 – 8, as all eight items are dichotomous and coded (0 = no, 1 = yes).

Scale #9 Marketing of trans-inclusive programs. This scale addressed five guidelines: Guideline #2 - Identify clinicians knowledgeable and supportive of the medical aspects of trans health to provide trans-specific health care services. Communicate availability of these providers through college health program's website and with relevant campus departments (e.g. counseling center, LGBT office); Guideline #3 - Identify mental health providers knowledgeable and supportive of trans mental health issues. Communicate availability of these providers to medical staff and other departments on campus to allow for appropriate referrals; Guideline #6 - Include clear, complete information about accessing trans-related health care services on websites and in health center literature, including appropriate representations of gender expressions across the spectrum of experience. Representations may include website content, trans-specific brochures, and pictures or posters; Guideline #20 - Hire trans-knowledgeable and trans-supportive college health professionals. Allow staff with subspecialties in trans health care to be identified so that a student may request that provider; and Guideline 27 – Develop marketing strategy for mental health services to highlight specialized care for trans students.

This scale is comprised of three items and has a Cronbach's alpha = .769. Two of the eight items come from Question #6, the large matrix question assessing the provision of both mental health and medical care services, see Appendix B for reference. The items

included come from responses to Prompt #3 regarding both medical and mental health staff and services (*"Are any of these providers externally identified as transgender health care resources on your website, to relevant campus departments, or other public-facing promotional materials?"*) Responses for medical and/or mental health staff are each two separate items. Lastly, a new variable was created, RCQ20MarketingProvidingAnyTransCarePlusSupportGroup, to assess whether a health center had marketed any of their trans-inclusive services or programs. This variable assessed whether a respondent answered 'yes' to at least one medical or mental health item in Question #6 and/or responded 'yes' to Question #32 about having a support group for transgender students. This was coded as no (0) – don't have any of these services OR don't market these services and yes (1) have at least one of these services AND markets them.

Addressing missingness on the scales. Some of the scales had a substantial number of missing responses for two reasons: 1) some had eight or nine items which increases the likelihood that there is at least one missing response from a participant on that scale; and 2) some scales included measures where the 'don't know' responses were recoded as missing to create a dichotomous variable and look more specifically at those schools that were more definitively providing or not providing a trans-inclusive service.

The missingness on the scales was managed by running a single intrascale imputation, meaning that if respondent had left one item missing from a scale, an SPSS-generated estimate was imputed for that item by comparing their response patterns to others like them and imputing a statistical guess for how this participant would have likely responded to that item. This was only done if a respondent was missing one item

on a scale; if they were missing more than one item on a scale then they were dropped from analyses. A single intrascale imputation is appropriate given that all the scales used demonstrated good internal consistency

Individual item measurement. Eleven items were identified for individual analyses as a result of low interrater reliability and lack of consensus in placing them on the same scales. Two of these eleven items were collapsed into one variable, which resulted in a final ten items that were analyzed individually. In reviewing these final ten individual items, the guideline associated with the item is first discussed followed by the corresponding question. As previously discussed in the section about recoding, all items originally marked as 'in progress' were recoded as 'yes' = 1, and all items originally marked as 'don't know' were recoded as 'missing' – these recodes are noted in the individual items.

Individual item #1: Trans-inclusive restrooms. The gender inclusive bathroom item addresses Guideline #4 - Have all gender (sometimes referred to as gender neutral) bathrooms available throughout the building. Questions #8 (*"Are any of these single-user restrooms specifically identified as all-gender/gender-neutral?")* and #10 (*"Are any of these multi-user restrooms specifically identified as all-gender/gender-neutral?")* were combined to create a gender inclusive bathroom item. If respondents selected 'yes' to Question #8 AND/OR Question #10, then they were given a score of 1 whereas both of these items were originally coded (no = 0 and yes = 1). All other participants were coded as a 0 either because they reported that that did not specifically identify either single stall or multi-user restrooms as gender-inclusive or because they do not have these restrooms available. This recoding allowed the researcher to compare those that specifically identify

all gender restrooms to the rest of the entire sample instead of only comparing them to those who report having single stall or multi-user restrooms. Furthermore, the guideline did not specify whether the bathrooms should be single or multi-user, but rather that they be available, so a recode in this manner best addresses the guideline.

Individual item #2: Policy for working with trans patients. The policy for working with trans patients addresses one guideline: Guideline #18 - Develop a policy that outlines procedures and practices for working with trans students to ensure quality care in all areas.

This was measured with one question Question #31 ("*Does your center have a policy that outlines procedures and practices for working with trans students?"*) This was recoded as a dichotomous variable 0 = no, 1 = yes.

Individual item #3: Policy or protocol to use patients' affirmed name. The policy or protocol for using patient's affirmed name addresses two guidelines: Guideline #12 - Enable students to indicate the name they use (sometimes referred to as "preferred name"), and not just their legal name, on intake forms. Use this chosen name when calling students in for appointments and Guideline #18 - Develop a policy that outlines procedures and practices for working with trans students to ensure quality care in all areas.

This item was measured with one question because of an initial lead-in question where those that responded that their medical charts included options for "preferred name or name different than legal name" were prompted to answer Question 24 (*"You answered yes to 'preferred name or name different than legal name' Is there a policy or protocol to use this name when addressing students for appointments and at various*

points of contact when receiving health care (i.e. front desk, lab, pharmacy)?") This was recoded as a dichotomous variable 0 = no, 1 = yes.

Individual items #4, #5, #6, #7, and #8: Can medical charts be edited to affirm patients. The five editable chart items (name, affirmed name, sex, sex assigned at birth, gender identity) address three guidelines: Guideline #10- Allow for a patient/client to indicate their "sex assigned at birth" alongside their current gender; Guideline #12 - Enable students to indicate the name they use (sometimes referred to as "preferred name"), and not just their legal name, on intake forms. Use this chosen name when calling students in for appointments; and Guideline #14 - Enable students to self-identify gender on the intake and, where there are limitations posed by electronic medical record (EMR) software, provide paper-based solutions to ensure a student is represented in ways that are appropriate to them.

Whether or not these five items can be edited on a patients' chart is measured with Question #25 (*"We asked you about what demographic options are available on your medical charts. Now we are asking WHO IS ABLE TO EDIT the patient's chart/record (check all that apply):" 1) Patient; 2) Staff member; 3) N/A (this field cannot be edited); and 4) N/A (this field is not on our charts/records).* There were five prompts which correlated to five different potentially editable items in patient charts*: 1) Name; 2) Preferred/affirmed name; 3) Sex; 4) Sex assigned at birth; and 5) Gender identity.* Each of these five items were recoded as a dichotomous variables, 0 = N/A (this field cannot be edited) OR N/A (this field is not on our charts/records), 1 = Patient AND/OR Staff member can edit. This recoding allowed the researcher to capture whether

or not a patient can have these fields edited on their chart, which best addresses the corresponding guideline.

Individual items #9 and #10: Name and gender marker changes with campus registrar. The name and gender marker changes with campus registrar addresses one guideline: Guideline #17 - Provide written information about how a student can legally change their name, if they desire to do so. Some campuses allow a student's name to be changed at the registrar, even if the student has not changed it legally. Staff members need to be aware of applicable university policies.

This item was measured with one question and two corresponding variables in Question #30 ("*Does your campus allow students to change the following with the registrar (or other official campus entity): 1) Name and 2) Sex or gender marker.*") Dichotomous response options were provided (0 = no, 1 = yes) for each item.

Chapter 4: Results

In sum, nine scales and ten individual items were tested across six predictors: control of institution (public vs. private), religious affiliation (yes vs. no), transgender inclusive laws and policies (low inclusion vs. high inclusion), size of institution (<1000, 1000-4999, 5000-9999, 10000-19999, 20000+), locale (city, suburban, town, rural) and, region (Northeast, Midwest, South, West). Table 1 provides the characteristics of both the entire membership surveyed at the time of the study (n=1,005) as well as the characteristics of the 272 responding institutions that comprise the sample for this study. Table 1 demonstrates that the responding member institutions approximates the percentages of schools in those groups for the overall sample, with some predictors (i.e. Transgender Inclusive Laws and Policies, region, and locale) having nearly the same exact percentages in each group. In regard to the control of institution category for the overall membership, 0.5% (private-for profit) is missing from the table; no one from private-for profit institutions responded to this research survey. Table 2 provides a breakdown of the primary area of practice for ACHA respondents and demonstrates more representation from administrators and medical staff compared to health educators or mental health staff. All but one respondent answered this question.

Table 1. Characteristics of ACHA Member Institutions & Respondents				
Characteristic	**Frequency of responding ACHA representatives (n=272)**	**% responding ACHA representatives (n = 272)**		**% all surveyed ACHA representatives (n=1005)**
Control of Institution				
Public (n=160)	160	58.8		50.4
Private (n=112)	112	41.2		49.1
Religious Affiliation				
No (n=219)	219	80.5		73.6
Yes (n=53)	53	19.5		26.4
Transgender Inclusive Laws & Policies				
Low or Negative (n=119)	119	43.75		43.3
Medium or High (n=153)	153	56.25		56.7
Region				
Northeast (n=75)	75	27.6		30.4
Midwest (n=67)	67	24.6		24.4
South (n=81)	81	29.8		27.5
West (n=49)	49	18		17.7
Locale				
City (n=145)	145	53.3		50
Suburb (n=71)	71	26.1		26.5
Town (n=46)	46	16.9		19.1
Rural (n=10)	10	3.7		4.5
Size of Institution				
Under 1,000 (n=6)	6	2.2		3.6
1,000 to 4,999 (n=82)	82	30.1		41.8
5,000 to 9.999 (n=56)	56	20.6		19.4
10,000 to 19,999 (n=53)	53	19.5		17.8
20,000 and above (n=75)	75	27.6		17.2

Table 2. Primary Area of Practice for Respondents (n=271)		
Primary Area of Practice	**Frequency**	**%**
Administrator	85	31.3
Faculty	3	1.1
Health Educator	7	2.6
Medical Records Specialist	1	0.4
Nurse	13	4.8
Nurse Director	50	18.4
Nurse Practitioner	40	14.7
Physician	48	17.6
Physician Assistant	4	1.5
Psychologist or Counselor	12	4.4
Other	8	2.9

Analyses

Before looking at differences in the nine scales and ten individual items by the six institution predictors of interest, it is important to note that the overall sample reported a considerable amount of trans-inclusive health care, services, and programs. For example, 80.5% of all schools reported that they provide some form of trans-inclusive training for their staff, 90.7% report that to some degree they have trans-inclusive heath records, 92.3% report at least some form of trans-inclusive mental health staff and services, and 100% of all participants reported some degree of campus and community collaboration and referrals for transgender students and services. This is particularly noteworthy because the sample approximates the overall ACHA national membership. Chart 1 demonstrates the percentage of institutions in the overall sample that scored greater than 0 on the various scales, meaning they provide some degree of the trans-inclusive care measured on the scale. A complete list of overall sample percentages by scale can be found in Table 3.

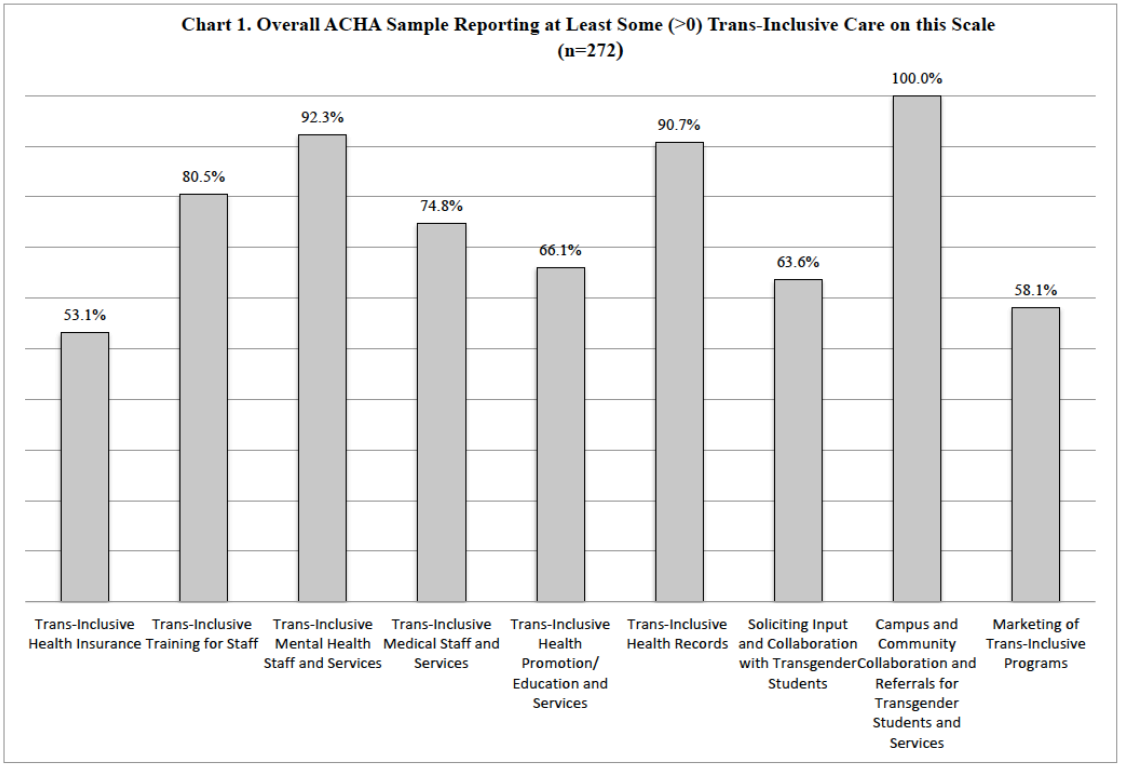

Table 3. Percentage of institutions above or equal to scale median									
	Trans-Inclusive Health Insurance n= 271	Trans-Inclusive Training for Staff n = 272	Trans-Inclusive Mental Health Staff and Services n = 271	Trans-Inclusive Medical Staff and Services n = 250	Trans-Inclusive Health Promotion/ Education and Services n = 271	Trans-Inclusive Health Records n=268	Soliciting Input and Collaboration with Transgender Students n=272	Campus and Community Collaboration and Referrals for Transgender Students and Services n=257	Marketing of Trans-Inclusive Programs n=272
Overall Sample > 0 (some degree of this care)	53.1%	80.5%	92.3%	74.8%	66.1%	90.7%	63.6%	100%	58.1%
Scale Range	0-2	0-9	0-5	0-4	0-3	0-3	0-3	0-8	0-3
Scale Median	1	5	3	2	1	2	1	7	1
Control of Institution			~		*	*	*		*
Public (n=160)	51.6%	59.30%	69.1%	58.5%	77.4%	76.2%	70%	57.8%	63.8%
Private (n=112)	55.4%	52.70%	56.3%	57.3%	50%	61.6%	54.5%	47.6%	50%
Religious Affiliation	*	*	*	*	*	*	*	*	*
No (n=219)	58.3%	60.5%	69.3%	62.5%	73.8%	76.8%	70.3%	56.2%	63.1%
Yes (n=53)	32.1%	41.5%	41.5%	40%	34%	43.4%	35.8%	42.5%	37.8%
Transgender Inclusive Laws & Policies	*	*		*		*		*	*
Low or Negative (n=119)	44.5%	49.5%	63%	46.3%	65.3%	62.5%	64.6%	49.1%	47.9%
Medium or High (n=153)	59.8%	62.3%	64.4%	66.9%	66.7%	76.2%	62.7%	57.1%	66%
Region	*	*	*	*					*
Northeast (n=75)	61.3%	65.1%	66.2%	69.1%	65.3%	75.3%	66.7%	60.6%	65.3%
Midwest (n=67)	46.2%	43.2%	47.7%	50.8%	65.7%	62.7%	65.6%	49.2%	47.7%
South (n=81)	49.4%	54.3%	70.4%	47.9%	67.6%	67.1%	64.2%	47.3%	54.3%
West (n=49)	56.2%	65.2%	71.4%	67.4%	65.2%	77.5%	55.1%	59.1%	67.3%
Locale	*								*
City (n=145)	59%	60.6%	64.8%	59.4%	69.5%	74.3%	63.4%	57%	65.5%
Suburb (n=71)	56.4%	52%	62.8%	60%	56.3%	66.7%	64.8%	47%	45.1%
Town (n=46)	26.1%	47.9%	58.7%	50%	71.7%	64.4%	65.3%	52.3%	50%
Rural (n=10)	70%	70%	80%	60%	60%	60%	50%	62.5%	80%
Size of Institution	*	*	*	*	*	*	*	*	*
Under 1,000 (n=6)	50%	16.7%	33.4%	66.7%	50%	50%	50%	66.6%	50%
1,000 to 4,999 (n=82)	42.7%	42.6%	54.9%	42.4%	49.9%	56.8%	52.5%	42.1%	39.1%
5,000 to 9.999 (n=56)	31%	48.2%	52.7%	51%	54.5%	61.8%	46.4%	49.1%	46.4%
10,000 to 19,999 (n=53)	58.4%	69.9%	71.8%	63.4%	77.3%	72.6%	75.4%	55.7%	69.8%
20,000 and above (n=75)	53.2%	71.9	78.6%	73.6%	66%	90.6%	81.4%	66.7%	58%

* Statistically significant ($p<.05$)
~Marginally statistically significant ($.05<p<.10$)

Scale analyses. Descriptive statistics were run on the extent to which the ACHA membership is providing the care detailed in each of the nine scales (Table 3). All comparisons were done by aggregating all schools and then grouping them based on the various institutional categories, no responses were evaluated from individual schools. None of the nine scales were normally distributed, nor were they distributed in a manner for which a transformation would be appropriate. Therefore, nonparametric tests were selected to analyze each of the nine scales. A point biserial Spearman Rank-Sum correlation was used to analyze binary (control of institution, religious affiliation, state-wide policies regarding transgender inclusion) and ordinal predictors (size of institution). This analysis provides a rho (**ρ)** score that is equivalent to the t-test's t-value. A Kruskal Wallis test was used to analyze categorical variables (locale and region) and a follow-up Dunn test was used for pairwise comparisons. This analysis provides an H statistic that is equivalent to ANOVA's F statistic. Medians are used because none of the scales were normally distributed, and mean scores would not have been the most accurate measure of centrality.

Table 3's columns represent each of the nine scales and give both a percentage of those that provide any degree of trans-inclusive service, meaning that they have a scale score of > 0 which is noted as "% yes", as well as a median score for the scale. The value represented in each column is the percentage of institutions in each predictor category that are above or equal to the scale median. This demonstrates how each predictor category varies above or below the overall sample median by scale variables. Only significant and marginally significant findings are detailed below by scale.

Scale: Trans-inclusive health insurance. Fifty-three percent of the overall sample provided some degree of trans-inclusive health insurance; the median score for this scale was a 1 with a range 0-2. There were significant differences in the Trans-Inclusive Health Insurance scale based on Religious Affiliation, Transgender Inclusive Laws and Policies, Region, Locale, and Size of Institution. Religiously affiliated institutions had significantly less inclusive health insurance compared to schools without religious affiliation (**ρ** = -.165, p =.006). Schools in states with more transgender inclusive laws and policies provided significantly more inclusive health insurance compared to schools in states with less inclusion (**ρ** = .221, p <.001).

While a significant difference (p =.046) was found in the distribution of the Trans Inclusive Health Insurance Scale across the category of Region, a follow-up pairwise Dunn test showed only one marginally significant difference between South and Northeast, with more schools in the Northeast providing trans inclusive health insurance (Dunn Z = 2.42, p =.093). In regard to Locale, a significant difference was found between Town and City (Dunn Z = 3.50, p =.003) with cities providing more health insurance as well as Town and Suburb (Dunn Z = 2.82, p =.028) which provided more of this service. Lastly, larger institution size was associated with more inclusive health insurance (**ρ** =.259, p <.001).

Scale: Trans-inclusive training for staff. Eighty percent of the overall sample provided some degree of trans-inclusive training for staff; the median score for this scale was a 5 with a range 0-9. There were significant differences in Trans-Inclusive Training for Staff scale based on Religious Affiliation, Transgender Inclusive Laws and Policies, Region, and Size of Institution. Religiously affiliated institutions had significantly less inclusive training for staff compared schools without religious affiliation (**ρ** = -.195, p =.001). Schools in states

with more transgender inclusive laws and policies provided significantly more training for staff compared to schools in states with less inclusion (**ρ** =.157, *p* =.01).

In regard to Region, a significant difference was found between the Midwest and the West (Dunn Z = -2.96, *p* =.018) which provided more of this service. A marginally significant difference was found between the Midwest and the Northeast (Dunn Z = 2.63, *p* =.052) which provided more of this service. Lastly, larger institution size was associated with greater transgender inclusive training for staff (**ρ** =.304, *p* <.001).

Scale: Trans-inclusive mental health staff and services. Ninety-two percent of the overall sample provided some degree of trans-inclusive mental health staff and services; the median score for this scale was a 3 with a range 0-5. There were significant differences in the Trans-Inclusive Mental Health Staff and Services Scale based on Religious Affiliation, Region, and Size of Institution. Marginally significant differences were found based on Control of Institution. Religiously affiliated institutions had significantly less inclusive mental health staff and services compared to schools without religious affiliation (**ρ** = -.272, *p* <.001). A significant difference was found in the distribution of the Trans-Inclusive Mental Health Staff and Services Scale across the predictor of Region, specifically between the Midwest and Northeast (Dunn Z = 2.78, *p* =.032) which provided more of this service. There was a marginally significant difference found between the Midwest and the West (Dunn Z = -2.44, *p* =.089) which provided more of this service. Larger institution size was associated with more inclusive mental health staff and services (**ρ** =.281, *p* <.001) and a marginally significant difference was found between provision of mental health services in public and private institutions (**ρ** =-1.00, *p* =.10)

Scale: Trans-inclusive medical staff and services. Seventy-five percent of the overall sample provided some degree of trans-inclusive medical staff and services; the median score for this scale was a 2 with a range 0-4. There were significant differences in the Trans-Inclusive Medical Staff and Services Scale based on Religious Affiliation, Transgender Inclusive Laws and Policies, Region, and Size of Institution. Religiously affiliated institutions had significantly less inclusive medical staff and services compared to schools without religious affiliation (**ρ** = -.231, <.001). Schools in states with more transgender inclusive laws and policies provided significantly more inclusive medical staff and services compared to schools in states with less inclusion (**ρ** =.187, *p* =.003).

Statistically significant differences were found across several predictors of Region. The Midwest differed from both the West (Dunn Z = -3.28, *p* =.001) and the Northeast (Dunn Z = 2.648, *p* =.049) which both provided more of this service. Furthermore, the South was significantly different than the West (Dunn Z = -2.87, *p* =.024) which provided more of this service. Lastly, larger institution size was associated with more trans-inclusive medical staff and services (**ρ** =.313, *p* <.001).

Scale: Trans-inclusive health promotion/education and services. Sixty-six percent of the overall sample provided some degree of trans-inclusive health promotion/education services; the median score for this scale was a 1 with a range 0-3. There were significant differences in the Trans-Inclusive Health Promotion/Education and Services Scale based on Control of Institution, Size, and Religious Affiliation, and Size. A significant difference was found between public and private institutions (**ρ** =-.238, *p* <.001) and larger institution size was associated with greater transgender inclusive health promotion and education services (**ρ** =.304, *p* <.001). Additionally, religiously affiliated institutions had significantly less inclusive

health promotion and education compared to schools without religious affiliation (**ρ** = -.279, <.001).

Scale: Trans-inclusive health records. Ninety-one percent of the overall sample provided some degree of trans-inclusive health records; the median score for this scale was a 2 with a range 0-3. There were significant differences in the Trans-Inclusive Health Records Scale based on Control of Institution, Religious Affiliation, Transgender Inclusive Laws and Policies, and Size. A significant difference was found between public and private institutions (**ρ** =-.147, *p* =.016) and larger institution size was associated with more inclusive health records (**ρ** =.316, *p* <.001). Additionally, religiously affiliated institutions had significantly less inclusive health records compared to schools without religious affiliation (**ρ** = -.275, <.001) and schools in states with more transgender inclusive laws and policies provided more inclusive health records compared to schools in states with less inclusion (**ρ** =.130, *p* =.034).

Scale: Soliciting input and collaboration with transgender students. Sixty-four percent of the overall sample solicited input and collaboration with transgender students to some degree; the median score for this scale was a 1 with a range 0-3. There were significant differences in the Soliciting Input and Collaboration with Transgender Students Scale based on Control of Institution, Religious Affiliation, and Size of Institution. A significant difference was found between public and private institutions (**ρ** =-.205, *p* <.001) and larger institution size was associated with higher reports of soliciting input and collaboration with transgender students (**ρ** =.331, *p* <.001). Additionally, religiously affiliated institutions reported significantly less soliciting input and collaboration with transgender students compared to schools without religious affiliation (**ρ** = -.279, <.001).

Scale: Campus and Community Collaboration and Referrals for Transgender Students and Services. One hundred percent of the overall sample reported campus and community collaboration and referrals for transgender students; the median score for this scale was a 7 with a range 0-8. There were significant differences in the Campus and Community Collaboration and Referrals for Transgender Students and Services Scale based on Religious Affiliation, Transgender Inclusive Laws and Policies, and Size of Institution. Religiously affiliated institutions reported significantly less campus and community collaboration and referrals for transgender students compared to schools without religious affiliation (**ρ** = -.137, *p* =.028) and schools in states with more transgender inclusive laws and policies provided significantly more campus and community collaboration and referrals for transgender students compared to schools in states with less inclusion (**ρ** =.131, *p* =.036). Lastly, larger institution size was associated with higher reports of soliciting input and collaboration with transgender students (**ρ** =.195, *p* =.002).

Scale: Marketing of Trans-Inclusive Programs. Fifty-eight percent of the overall sample provided some degree of marketing their trans-inclusive programs; the median score for this scale was a 1 with a range 0-3. There were significant differences in the Marketing of Trans-Inclusive Programs scale based on Control, Religious Affiliation, Transgender Inclusive Laws and Policies, Region, Locale, and Size of Institution. A significant difference was found between public (63.8%) and private (50%) institutions (**ρ** =-.139, *p* =.022) and religiously affiliated institutions provided significantly less marketing of trans-inclusive programs compared to schools without religious affiliation (**ρ** = -.196, *p* =.001). Schools in states with more transgender inclusive laws and policies provided significantly more marketing of trans-inclusive programs compared to schools in states with less inclusion (**ρ** =

.212, p <.001). Additionally, larger institution size was associated with more marketing of trans-inclusive programs (**ρ** =.350, p <.001).

A significant difference was found in the distribution of the Marketing of Trans-Inclusive Programs scale across the category of Region, specifically between the West providing more than the Midwest (Dunn Z = 2.804, p =.030). A marginally significant difference was found between the Midwest and the Northeast (Dunn Z = 2.564, p =.062) which provided more of this service. A significant difference was found in the distribution of the Marketing of Trans-Inclusive Programs scale across the category of Locale, specifically between Suburb and City (Dunn Z = 2.816, p =.029) which provided more of this service.

Chart 2. Overall ACHA Sample Reporting that they Provide this Trans-Inclusive Service or Option (n=272)

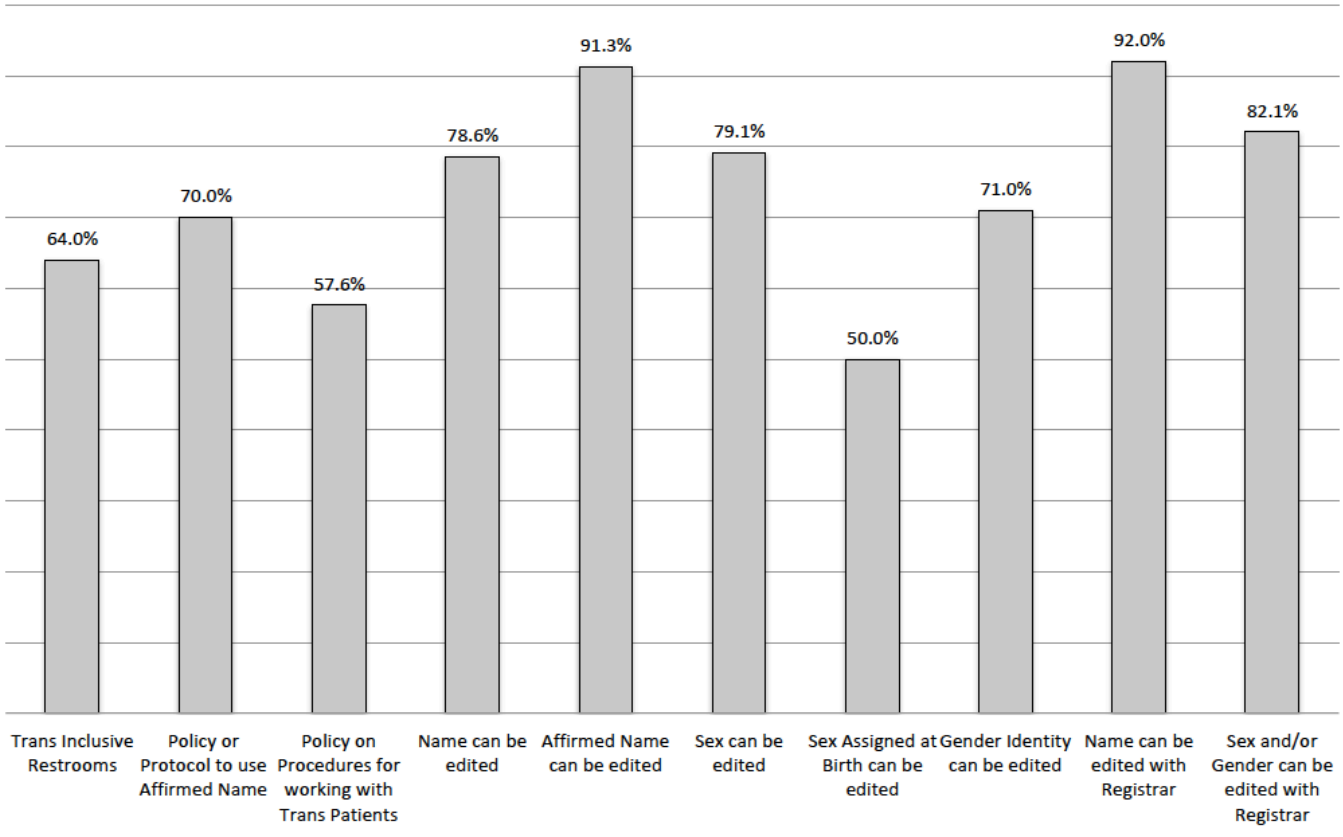

Table 4. Percentage of institutions responding 'yes' to the individual item										
	Trans Inclusive Restrooms n=272	Policy or Protocol to use Affirmed Name n= 267	Policy on Procedures for working with Trans Patients n=269	Name can be edited n=252	Affirmed Name can be edited n=264	Sex can be edited n=239	Sex Assigned at Birth can be edited n=254	Gender Identity can be edited n=262	Name can be edited with Registrar n=201	Sex and/or Gender can be edited with Registrar n=140
Overall Sample "Yes"	64%	70%	57.6%	78.6%	91.3%	79.1%	50%	71%	92%	82.1%
Control of Institution							*			
Public (n=160)	64.4%	72.3%	60.5%	77.4%	92.2%	78.8%	55.7	73.2%	90.1%	80.0%
Private (n=112)	63.4%	67.0%	53.6%	80.2%	90.0%	79.6%	41.9%	67.9%	95.0%	86.0%
Religious Affiliation	*	*	*				*	*		
No (n=219)	67.1%	74.3%	61.6%	78.2%	92.5%	77.2%	54.1%	73.9%	91.7%	81.3%
Yes (n=53)	50.9%	52.8%	41.5%	80.0%	86.5%	88.1%	32.7%	58.8%	93.8%	88.2%
Transgender Inclusive Laws & Policies	~	*								
Low or Negative (n=119)	58.0%	62.4%	56.8%	82.1%	89.6%	81.9%	50.0%	70.2%	92.8%	84.3%
Medium or High (n=153)	68.6%	76.0%	58.3%	75.7%	92.6%	76.9%	50.0%	71.6%	91.5%	80.9%
Region						*				
Northeast (n=75)	68.0%	76.7%	65.8%	69.6%	93.1%	67.2%	40.0%	67.6%	95.0%	80.5%
Midwest (n=67)	64.2%	67.2%	53.0%	84.6%	92.4%	85.2%	54.5%	65.2%	86.7%	75.0%
South (n=81)	58.0%	62.0%	54.3%	82.4%	87.0%	81.4%	49.3%	75.0%	89.7%	81.1%
West (n=49)	67.3%	77.1%	57.1%	77.3%	93.9%	84.1%	58.0%	77.6%	97.4%	93.3%
Locale							~	*		
City (n=145)	66.2%	70.8%	58.0%	81.6%	94.4%	78.8%	57.5%	79.4%	92.3%	83.1%
Suburb (n=71)	60.6%	71.0%	53.5%	75.0%	88.2%	76.3%	38.8%	57.4%	91.3%	76.9%
Town (n=46)	56.5%	70.5%	60.0%	73.8%	86.0%	82.1%	44.2%	62.8%	90.0%	81.5%
Rural (n=10)	90.0%	50.0%	70.0%	80.0%	90.0%	88.9%	50.0%	80.0%	100.0%	100.0%
Size of Institution		*	*				*	*		
Under 1,000 (n=6)	33.3%	66.7%	50.0%	83.5%	83.3%	80.0%	33.0%	50.0%	75.0%	75.0%
1,000 to 4,999 (n=82)	61.0%	55.6%	51.9%	80.0%	86.1%	83.3%	38.2%	66.7%	93.0%	82.4%
5,000 to 9.999 (n=56)	60.7%	67.0%	44.6%	75.0%	92.6%	70.2%	44.0%	66.0%	92.5%	75.9%
10,000 to 19,999 (n=53)	71.7%	74.5%	60.8%	85.1%	96.1%	74.0%	53.1%	66.7%	92.3%	82.8%
20,000 and above (n=75)	66.7%	85.0%	72.0%	75.0%	93.2%	84.5%	66.0%	83.8%	91.8%	86.4%

* Statistically significant ($p<.05$)
~Marginally statistically significant ($.05<p<.10$)

Individual item analyses. Descriptive statistics were run on the extent to which the ACHA membership is providing the care detailed in each of the ten individual items (Table 4). The ten items analyzed individually were all binary, therefore a Chi-square was used to analyze binary (control of institution, religious affiliation, state-wide policies regarding transgender inclusion) and categorical (locale and region) predictors, while a Spearman Rank-Sum correlation was used to analyze ordinal variables (size of institution). Follow-up pairwise Chi-square tests were done for the categorical predictors.

Chart 2 demonstrates the percentage of institutions in the overall sample that reported that they provide the trans-inclusive option or service measured by the individual item. Table 4's columns represent each of the ten individual items. The value represented in each column is the percentage of institutions in each predictor category that responded 'yes' to the dichotomous item and therefore provides some degree of that trans-inclusive service. Six of the ten individual items showed significance on at least one institutional characteristic predictor, therefore only those six individual items are detailed below.

Individual item: Trans-inclusive restrooms. The total percent of all responding institutions that replied 'yes' to having trans-inclusive restrooms was 64%. Religiously affiliated institutions provided significantly less trans-inclusive restrooms compared to schools without religious affiliation ($x^2 = 4.85$, $p = .028$). Schools in states with more transgender inclusive laws and policies showed marginal significance in their increased access to trans-inclusive restrooms compared to schools in states with less inclusion ($x^2 = 3.29$, $p = .070$).

Individual item: Policy or protocol to use affirmed name. The total percent of all responding institutions that replied 'yes' to having a policy or protocol to use affirmed name was 70%. Religiously affiliated institutions were significantly less likely to report an institutionalized policy or protocol to use a patients' affirmed name when receiving service in their center compared to schools without religious affiliation ($x^2 = 9.33$, $p = .002$). Schools in states with more transgender inclusive laws and policies were significantly more likely to have such a policy or protocol compared to schools in states with less inclusion ($x^2 = 5.79$, $p = .016$). Lastly, a larger institution size was significantly associated with increased reports of trans-inclusive policies to affirm a patients' name (**ρ** $= .245$, $p < .001$).

Individual item: Policy for working with trans students. The total percent of all responding institutions that replied 'yes' to having a policy or procedure for working with trans patients was 57.6%. Religiously affiliated institutions were significantly less likely to have a policy that outlines procedures and practices for working with trans patients compared to schools without religious affiliation ($x^2 = 7.02$, $p = .008$). Additionally, larger institution size was significantly associated with increased reports of such policies (**ρ** $= -.172$, $p = .005$).

Individual item: Sex field in medical chart can be edited. The total percent of all responding institutions that replied 'yes' that the sex field in the medical chart can be edited was 78.6%. Statistically significant differences were found across the Region category between Northeast and Midwest ($x^2 = 5.58$, $p = .018$) with the Midwest more likely to provide this option, between Northeast and West ($x^2 = 3.88$, $p = .049$) with the West more likely to provide this option, and marginally significant differences between

Northeast and South ($x^2 = 3.58$, $p = .058$) with the South more likely to provide this option.

Individual item: Sex assigned at birth field in medical chart can be edited. The total percent of all responding institutions that replied 'yes' that the sex assigned at birth field in the medical chart could be edited was 50%. Religiously affiliated institutions were significantly less likely to have a policy that outlines procedures and practices for working with trans patients compared to schools without religious affiliation ($x^2 = 7.31$, $p = .007$). A significant difference was also found between public and private institutions ($x^2 = 4.69$, $p = .030$). Larger institution size was significantly associated with increased ability to edit the sex assigned at birth field in a patients' medical chart ($\boldsymbol{\rho} = -.224$, $p < .001$). Marginally significant differences were found across Locale between Suburb and City ($x^2 = 6.22$, $p = .013$) with cities more likely to provide this option.

Individual item: Gender identity field in medical chart can be edited. The total percent of all responding institutions that replied 'yes' that the gender identity field in the medical chart could be edited was 71%. Religiously affiliated institutions were significantly less likely to report that the gender identity field in a medical chart can be edited (58.8%) compared to schools without religious affiliation ($x^2 = 4.55$, $p = .033$). Statistically significant differences were also found in Locale between Suburb and City ($x^2 = 11.15$, $p = .001$) and Town and City ($x^2 = 4.940$, $p = .026$) with City more likely to provide this option in both cases. Lastly, larger institutions are significantly more likely to provide options to patients to edit a gender identity field on their medical chart ($\boldsymbol{\rho} = .152$, $p = .014$).

Chapter 5: Discussion

Summary of Findings

In sum, the sample reported a considerable amount of trans-inclusive health care services and programs, which speak to the incredible work that college health centers are doing to support the health and wellbeing of their transgender students. More than half (53.1%) of the ACHA membership provides a trans-inclusive health insurance option to students and markets (58.1%) their trans-inclusive services to the campus community. About two-thirds (64%) of the membership have trans-inclusive restrooms in their facilities, provide trans-inclusive health promotion and education services (66.1%), as well as solicit input and collaboration with transgender students on their campuses (63.6%). Eighty-percent of college health centers provide some degree of trans-inclusive training for their staff, which is critical to provide culturally competent care and equitable health care. While a substantial 75% of college health centers report trans-inclusive medical staff and services, 92.3% report that same trans-inclusivity in their mental health staff and services. Remarkably, 90.7% of the membership stated that they have some trans-inclusive fields on their health records and 100% of respondents reported some degree of campus and community collaboration and referrals for transgender students and services.

In addition to having trans-inclusive fields on their health records, most schools provide an opportunity for all fields associated with gender affirming and trans-inclusive health care (name, affirmed name, sex, sex assigned at birth, and gender identity) to be edited by the patient or the provider. Sex assigned at birth was the least able to be edited (50%) and affirmed name was the most able to be edited (91.3%), and about 70% of

schools have a policy or protocol in place for staff to use that affirmed name when treating the patient. About 80% - 90% of schools offer a way for students to change their sex/gender marker or name with the campus registrar, respectively. Despite a surprisingly robust list of trans-inclusive services and practices demonstrated in this study, only 57.6% of college health centers have a formal policy or procedure for working with trans patients.

These findings are substantially consistent. Anytime that control of institution, religious affiliation, transgender inclusive laws and policies, or size of institution were found to be significant predictors of trans-inclusive care, the relationship was in the same direction. Meaning, that every time control of institution was a significant predictor, it was the public schools that provided more trans-inclusive care on that measure compared to private schools. Every time religious affiliation was a significant predictor, it was the schools without a religious affiliation that provided more trans-inclusive care on that measure compared to schools with a religious affiliation. Every time transgender inclusive laws and policies was a significant predictor, it was the schools in states with more trans-inclusive laws and policies that provided more trans-inclusive care on that measure compared to schools in states with trans-exclusive laws and policies. Lastly, every time that size of institution was a significant predictor, the ordinal trend was that in general, the larger the school, the more trans-inclusive care on that measure compared to smaller schools.

Notable Findings

While the most notable finding is that the overall sample reported a considerable amount of trans-inclusive health care, it is interesting to look at where the six institutional

characteristics were most commonly a predictor of differences in the nine scales and ten individual items. Religious affiliation and institution size were both found to be significant predictors of difference across all nine scales and four of the ten individual items. However, in regard to institution size, there is an interesting trend across some measures (i.e. health insurance, medical staff and services, and campus and community collaboration and referrals,). While the overall trend is that the larger the school, the more trans-inclusive services are provided, the one exception is very small institutions (<1,000), which in some cases are providing a high level service similar to the largest schools. It is not surprising that as schools increase in size they are likely to have greater resources and staff to provide services; it is less clear why this might be the case for very small schools. It is possible that some of the very small schools focus on and promote themselves as providing more personalized and specialized care for their smaller student population. Additionally, there may be a relationship between size of institution and control of institution, in that very large institutions tend to be public versus private schools and public schools were also found to provide more trans-inclusive care. Lastly, while the percentage of schools in the <1,000 category approximates the number of schools in that category for the membership, the group is so small (n=6) that it might be an outlier in the overall ordinal trend for the remaining 266 institutions.

The transgender inclusive laws and policies at the state level were found to be a significant predictor of difference across six of the nine scales and one of the ten individual items. This provides an indication that the laws and policies at a state level do in fact have an influence on the provision of trans-inclusive health care at institutions of higher education and therefore can impact health and wellness outcomes for transgender

college students in those states. Region was found to be a significant predictor for five scales and one of the individual items, with the Northeast and West generally providing more trans-inclusive care compared to the Midwest and South. One reason for this might be that the Northeast and West regions have a higher density of states with more trans-inclusive laws and policies compared to the Midwest and South regions. Control of institution was found to be a significant predictor for four of the scales and one of the individual items, as well as a moderately significant predictor for a fifth scale whereas public schools provided more trans-inclusive care on those measures. While public schools by default tend to adopt the laws and policies that are found at their home state level which may work for or against trans-inclusive health care (depending on the trans-inclusive nature of state laws) in those college health centers, private schools may have more leverage to create their own policies that may differ from those at the state level.

Locale was not determined to be a key predictor, with significant differences only found on two scales one individual item, with a second individual item showing moderately significant difference. This is an interesting finding of non-significance because it seems that transgender inclusive laws and policies by state and region of the country are more significant predictors of the provision of transgender inclusive health care than whether that that campus is in a city, suburb, town, or rural area. In short, it is possible that many of the findings of significant differences based on college characteristics may be tied, in part to the laws of the states and the political climates of the regions in which they are located, as opposed to the locale of the campus.

The noteworthiness of the overall samples' provision of trans-inclusive health care is enhanced when it is contrasted with the lack of transgender health care services

documented in health care facilities on a national level. As discussed in the literature review, the Human Rights Campaign Foundation's Health care Equality Index (HEI) surveys hundreds of large health care facilities nationwide on several measures of LGBT inclusion. Participating facilities voluntarily share their policies and procedures in order to receive feedback regarding facility strengths, challenges, and recommendations for improvement as well as be recognized for their efforts in excellence. Three hundred and ninety of the 590 participants in the 2017 survey were identified as leaders providing exemplary LGBT health care, therefore, one could presume that the general findings of the HEI represent some of the most LGBT-inclusive health care settings in the country (Human Rights Campaign, 2017). That being said, only 39% of the surveyed sites indicated that their facility has a policy specifically outlining procedures aimed at eliminating bias, insensitivity, and ensuring appropriate interactions with transgender patients compared to the almost 58% of college health centers that have a specific policy and procedure for working with trans patients and more than 80% that include some trans-inclusive training for their staff. While about 73% of those surveyed with the HEI reported that they provide some degree of transgender specific services, almost 75% of college health centers reported trans-inclusive medical staff and services, with more than 92% of those same services in their mental health units. Only 29% of sites surveyed with the HEI have an explicit way to capture a patient's current gender identity in a way that differentiates it from sex assigned at birth compared to the almost 91% of college health centers that report trans-inclusive fields in their health records and 71% that specifically provide a way for patients or providers to edit a gender identity field in the medical chart.

These findings position college health centers as true leaders in the field of trans-inclusive health care.

Political Climate as it Relates to the Findings

In the short period of time since launching this dissertation, laws and policies regarding transgender people have been unpredictable. The trans community at large has seen an increase in visibility, societal acceptance, and some legal victories, including the transgender students who cited Title IX to win lawsuits against their schools and states for barring them from using the bathroom that corresponds with their gender identity, and the states attorneys from 20 different states and the 59 major U.S. companies that signed amicus briefs in support of these students (Wheeler, 2019 & Kozuch, 2017). However, the current administration threatens this progress with targeted attacks on transgender people through a ban prohibiting transgender people from serving in the U.S. Military (de Vogue & Cohen, 2019) and proposing a roll back of recognitions and protections of transgender people under federal civil rights law (Green, Benner, & Pear, 2018).

The Department of Health and Human Services is spearheading an effort to narrow the interpretation of sex under Title IX to be determined and fixed at birth. This new definition would essentially eradicate federal recognition of the estimated 1.4 million Americans who identify as a gender other than the one they were assigned at birth (Green, Benner, & Pear, 2018). This proposal is particularly concerning for transgender students and the staff seeking to support them, as many students, including the ones mentioned above who won law suits against their schools and states, have cited Title IX as a basis for their protection. Narrowing the interpretation of sex in this binary and transphobic manner not only erases protections for transgender people and presents an impossible position for the .06% - 1% of the population

that are intersex (Intersex Society of North America, 2019), it invalidates their very existence. Under the Trump administration, several agencies have withdrawn policies that recognized gender identity in schools, prisons, and homeless shelters and the current administration has tried to remove gender identity from a 2020 census survey and a national survey of elderly citizens (Green, Benner, & Pear, 2018). These proposals pose real threats to the most vulnerable and marginalized subsets of the transgender community.

It is important to acknowledge this social context as we discuss these findings. While there has been significant progress and increased opportunity to move the needle towards trans-inclusion and equity in health care, there are also very real threats which compromise progress at the intrapersonal, interpersonal, institutional, community, and public policy levels. The current efforts to erase or further marginalize transgender people and students have serious implications on all levels of the socio-ecological model as well as on all levels of health and wellbeing. Considering that these findings indicate that college health centers are already leaders in this work, it is imperative for college health professionals to advocate for trans-inclusive health care across various care settings and to engage in educating other clinicians who may be less familiar or less versed in this work. By doing so, college health professionals have an opportunity to enhance the health and wellness of not just their own students, but transgender people at large, particularly those who may not have the opportunity or privilege to attend an institution of higher education.

Practical Implications

Now that the current political landscape has been acknowledged and the call for college health professionals to engage in advocating and educating others in this work has been named, there are several practical implications for these findings which serve as the

critical first step in identifying capacities and needs of college health professionals and facilities to reduce health disparities and enhance outcomes among transgender college students. For one, while these findings are aggregated and do not provide individual reports, a college health center could use the various institutional characteristics as a way to benchmark how they are doing compared to institutions like themselves. For example, small private schools with a religious affiliation could use these findings to assess how they stack up to similar schools, instead of comparing themselves to the ACHA membership at large. This can be incredibly helpful, particularly when there is a lot of work to be done, resources may be scarce, or a health center may be unsure where to begin or how far to move the needle to be on par with similar schools.

Additionally, the ACHA membership has regional affiliates who meet annually. The region category provides an opportunity for those in each regional affiliate to look specifically at how institutions in their specific sub-group are doing and have similar benchmarking conversations. Furthermore, there may be states with both transgender inclusive laws and policies and transgender exclusive laws and polices all within the same region. The regional sub-groups could use these findings and the various institutional characteristics as a benchmarking or discussion tool at these regional meetings to discuss, teach, and learn from one another in a more specific and personalized way.

A more broad implication is for these findings to be shared at the ACHA annual meeting as a state of the union regarding trans-inclusion across the membership. These findings highlight the incredible work that the membership is doing as well as highlight areas of opportunity. This national meeting provides space for various specialties and professions to meet. For example, health promotion professionals, mental health professionals, medical

providers, administrators responsible for overseeing health insurance options or maintenance of medical records, all meet in sub-specialty groups at this national conference and engage in topic specific conversation and assessment regarding who is doing what, who is having success, where are the barriers, and what are the strategies to work through them. They could use the findings pertaining to their particular scope of practice and incorporate them into their smaller group meetings at the national conference.

A practical implication and area of opportunity based on these findings, is for schools across all institutional characteristics to formalize a policy or procedure for working with transgender patients. Despite the overall sample reporting a considerable amount of trans-inclusive health care services, only about 58% reported that they had some formal policy. Not only is this a demonstrated need and practical opportunity based on these findings, it is critical to ensure consistent adherence and continuity of this care. Otherwise, the degree of inclusive care is more likely to vary from provider to provider, or worse yet, may be at risk if the select clinicians providing such care leave their position in the health center. College health centers should not only draft and formalize these policies to highlight and showcase their investment in trans-inclusive care, but also to protect the transgender students they service and enhance continuity of care.

Lastly, these findings serve as a foundational benchmark to provide a snapshot of trans-inclusive health care among the membership in 2018 and can be re-implemented every two to three years to assess progress, regression, or stagnation within the membership at large as well as identify various trends among the institutional characteristic categories. The survey and scales developed for this research project serve as lasting tools for ACHA and its membership to implement this kind of benchmarking and to assess meaningful trends moving forward.

Ecological Theoretical Framework and its Connection to the Findings

Ecological theory served as the framework for conceptualizing this study. Therefore, it makes sense to examine the extent to which the findings are consistent with the theory.

First, the nine scales developed for analyses align with the different levels of ecological model. For example, the Soliciting Input and Collaboration with Transgender Students scale best aligns with the *interpersonal* level of the model. The Trans-Inclusive Training for Staff, Trans-Inclusive Mental Health Staff and Services, Trans-Inclusive Medical Staff and Services, Trans-Inclusive Health Promotion/Education and Services, and Trans-Inclusive Health Records scales best align with the *institutional* level of the model, although training for staff has implications at the *interpersonal* level as well. The Campus and Community Collaboration and Referrals scale best aligns with the *community* level of the model and the Trans-Inclusive Campus and Health Center Policies scale aligns with both the *public policy* and *institutional* levels of the model.

Beyond the scales assessed representing multiple levels of the ecology surrounding trans-inclusive health care on college campuses, the ecological theoretical framework is connected to the findings in several ways. Religious affiliation and institution size were both found to be significant predictors of difference across all nine scales and four of the ten individual items. Religious affiliation and institution size both correlate with the *institutional factors* level of the ecological model, which is what drives rules and regulations for operations. According to the findings, it seems that religious affiliation limits an institution's investment in trans-inclusive care and that the size of the institution determines the amount of resources to support trans-inclusive care, with the larger schools generally having more staff and money to support trans-inclusive care.

The trans-inclusive laws and policies at the state level correspond with the *public policy* level of the ecological model. This institutional characteristic was found to be the third most significant predictor of difference across six of the nine scales and one of the ten individual items. According to the findings, schools in states with trans-inclusive laws and policies provided significantly more care than schools in states with trans-exclusive laws and policies. This speaks to the importance and impact that laws and policies have on the numerous institutions in those states. When a state has trans-inclusive laws and policies, not only can it impact the social climate and *interpersonal* factors for transgender people, but they have a trickledown effect which supports trans-inclusion at the *community* level (by funding trans-specific community resources), and the *institutional* level (by allowing institutions to adopt the laws and policies at the state level and follow a more inclusive precedence). All of these impact trans health at the *intrapersonal* level.

These findings suggest that the ecological model has great utility in conceptualizing the integration of trans-inclusive health care services into college health centers. Further, the results of this study, viewed from an ecological perspective suggest that advocacy for trans-inclusive laws and policy at the public and institutional levels will be effective in enhancing trans-inclusive health care services at college health centers and, therefore, enhancing health and wellness outcomes for transgender college students while they are in school and beyond.

Limitations of the Study

The most notable limitation of the study is that this survey tool was based on a set of guidelines that were never intended to be operationalized nor used in a checklist manner, which resulted in overlap between several constructs and guidelines. Additionally, several guidelines included more than one recommendation in a single guideline, which required

several questions to be developed to measure just one guideline. These structural issues required the proposal of new scales and while the new scales provide more practical applications of the findings, they are different than the six constructs initially presented in the ACHA *Trans-Inclusive College Health Programs* guidelines.

Additional limitations result from the fact that only one staff member at each institution received the survey, despite that being the preferred way of capturing unique institution responses and the fact that the responding sub-group was representative to the overall sample. First, there could be a response bias in who was willing and interested in completing a survey regarding transgender health. Some ACHA membership representatives who received the survey may have seen the word 'transgender' in the subject header and deleted the email invitation either because of their own bias or because they were worried about documenting the lack of trans-inclusive care at their facility. Conversely, members who are more invested in transgender health or who feel more confident in their provision of trans-inclusive health care may have been more likely to respond to the survey. This response bias may have affected the results by demonstrating an inflated provision of trans-inclusive care throughout the membership.

Regardless of personal bias or support towards transgender people or the perceived provision of care at one's facility, another limitation that comes from the survey being sent to one individual is that it is unknown to what degree each of these respondents was aware or involved in the trans-inclusive health care services on their campus. While the email invitation encouraged the respondents to consult with other colleagues on campus who may be more familiar with this work, it is unknown if those consultations occurred or if they in

fact provided respondents with the necessary information to answer the survey more accurately.

Furthermore, it is clear from the respondent breakdown in Table 2 that there is much more representation from administrator and medical staff compared to the mental health and health promotion units. This is likely because administrators and medical staff are more likely to be designated as representatives to complete routine ACHA benchmarking surveys. Despite the request for survey respondents to consult with other colleagues to most accurately reflect services that they may not be involved with, it is unknown if this type of consultation happened with the mental health and health promotion questions. Therefore, it is unknown if the mental health and health promotion scale scores would be higher had more mental health and health promotion professionals been identified to receive this survey. Although, they may be more limited in their knowledge of administrative or medical services which would have presented the same limitation on the medical measures. Lastly, although the responding institutions were representative of the institutions to which surveys were sent, ACHA membership only represents about 50% of college health centers in the country and the larger representation of their membership to all of college health is undetermined.

Two of the 32 guidelines were not analyzed as individual items or on the scales. One of those guidelines, Guideline #11 (*Revise standardized language across medical forms so that the language is the most inclusive possible. For example, use "relationship status" instead of "marital status."*), was initially proposed and had sufficient interrater reliability to be on the Trans-Inclusive Health Records scale. However, this item was shown to have weak internal consistency with other items on the scale and was therefore removed. Removing this item from the scale increased the internal consistency Cronbach's alpha of the remaining three

items on the scale. Furthermore, the researchers determined that while having "relationship status" as an option on a health record is certainly more inclusive to the LGBTQ+ community as a whole, it is not specific trans-inclusive care and not necessary to analyze as part of this research project.

The remaining guideline that was not analyzed as part of this project is Guideline #15 ("*Work with the EMR (electronic medical records) provider to find solutions if there are challenges with an EMR system. In the meantime, provide the paper solution outlined above until the problem is resolved. Be aware of how an EMR system interacts with other computer systems on campus (e.g., registrar) which may limit the control of a college health program").* While there were four questions created to measure this guideline (Questions #26 - #29), they provide a more nuanced and qualitative perspective regarding what college health centers are doing to navigate and troubleshoot potential limitations in their software (assuming they are using electronic medical records) rather than measuring a more concrete provision of trans-inclusive services.

Lastly, the language and terminology regarding gender identity is fluid and constantly evolving. Therefore, it can be difficult to capture the recommended practices to best provide trans-inclusive health care because the needs of the population are not singular and there are substantial variations in how individuals may identify themselves and what would affirm them in clinical settings. Fortunately, the ACHA *Trans-Inclusive College Health Programs* guidelines were written by experts in the field who heavily considered the diverse needs of the population and generated comprehensive recommendations to best capture culturally competent care for this population. As is stated in the guidelines: "The following recommendations are designed to create climates and environments in college health that are

inclusive and affirming of transgender, gender nonconforming, genderqueer, and similarly self-identified students. Students' gender expressions span a wide spectrum. The following recommendations can help mitigate barriers that trans students face when accessing mental health, physical health and preventative services on campus." For example, while not all transgender people want, need, or choose gender-affirming hormone therapy for a variety of reasons outside of lack of access, all transgender people can benefit from staff being trained in the importance of pronouns, having gender-inclusive restrooms available in a health care facility, and proving editable fields in a health record where a name, sex assigned at birth, and gender identity can be properly documented so that a patient is accurately gendered when receiving care in that space. Similarly, while not all students may identify as transgender specifically, all transgender, gender nonconforming, genderqueer, or non-binary students can benefit from the less gendered and binary and more trans-inclusive system that these guidelines propose.

That being said, providing trans-inclusive health care is not the same as providing trans-specific health services. While almost 75% of the sample reported some degree of trans-inclusive medical staff and services, only 51% specifically provide hormone readiness or hormone maintenance services. Therefore, while capturing the trans-inclusive nature of provided services in college health is a critical first step and provides a necessary foundation, it should not be conflated with the provision of trans-specific services, as these were only some measures that comprise the analyzed scales.

Recommendations for Future Research, Policy, and Practice

These findings have identified some significant and interesting differences regarding the provision of trans-inclusive health care across various institutional characteristics. A

logical next step would be for future research to look at the cross sections of these institutional characteristics. For example, does the provision of trans-inclusive health care differ at institutions with a religious affiliation by size or region? For example, how does the provision of trans-inclusive care at religious-affiliated schools differ in the Northeast versus the South? How does the provision of trans-inclusive care differ at very small public schools compared to very large public schools? How does the provision of trans-inclusive care differ at public versus private schools in states with transgender inclusive or exclusive laws and policies?

Furthermore on the matter of transgender inclusive or exclusive laws and policies, this measure is derived from dichotomizing the Movement Advancement Project's four categories (negative, low, medium, high) of transgender inclusion at the state level looking at 25 different laws and policies. Future research could keep these four categories instead of dichotomizing them into inclusive (medium and high trans-inclusion at state laws and policies) versus exclusive (low or negative trans-inclusion at state laws and policies). This would allow us to see if there is a threshold of inclusion that predicts more trans-inclusive care for college health centers in those states, and if some inclusive laws and policies (low) are better than no inclusive laws and policies (negative).

Additionally, the Movement Advancement Project's gender identity inclusion tally considers 25 state laws and policies in five key categories: 1) Non-Discrimination; 2) LGBT Youth; 3) Health and Safety; 4) Ability to Correct the Name and Gender Marker on Identity Documents; and 5) Adoption and Parenting. Future research could isolate certain categories to see if inclusion in any one of these five categories serves as a stronger predictor of trans-inclusive health care at college health centers. For example, a state's overall gender identity

tally score may be lowered due to negative or low scores regarding adoption and parenting but they may have a medium or high inclusion score in the health and safety category. By disaggregating the overall gender identity tally score and looking at each of the five categories or specific policies within each of those five categories we could identify which laws and policies are the best predictors for trans-inclusive care at the college health centers. This would have implications for college health professionals to be able to identify and advocate for specific laws and policies that are most likely to impact their provision of trans-inclusive care on their campuses.

This research project focused on how six institutional characteristics (control of institution, religious affiliation, transgender-inclusive laws and policies by state, size of institution, locale, and region) were related to the provision of trans-inclusive care at college health centers. Future research could look at other institutional characteristics, such as the provision of various non-health related LGBT-specific units and groups on campus, to determine relationships to trans-inclusive health care services. This would help to answer if campuses with more institutional commitment to LGB or T students through non-health programs and resources are more likely to have trans-inclusive health care services. These findings could motivate college health professionals to become more involved in advocacy for non-health related LGB and T resources on their campuses.

As stated in the notable findings, college health professionals are positioned to be leaders in this work and could utilize various means to work with and educate their community counterparts. For one, college health centers typically have medical and mental health referrals for off-campus services. It is common practice to routinely update and vet those community referrals to ensure that they are still in practice, accessible to students, and

student-friendly. College health professionals involved in trans-inclusive work could assess how trans-friendly those referrals are and could deepen those relationships by sharing information, resources, or offering continuing education to their staff if sites were interested and if that was feasible.

Additionally, many college health professionals hold various licenses and certifications that require on-going training that is not necessarily specific to college health. For example, a social worker may receive continuing education through the National Association for Social Workers. College health professionals with this credential could ask their local chapters if they could provide some continuing education regarding trans-inclusive care as it relates to their scope of work or make a recommendation for the membership to highlight trans-healthcare in an upcoming webinar or event.

The last recommendation is for college health professionals to lead in the education of community providers is to through workforce training of medical professionals. As noted in the literature review, clinical training in medical and mental health programs is lacking. Some institutions of higher education have an affiliation with medical or clinical training programs or host residency or intern programs. For example, college health professionals at a specific institution could connect with faculty in the medical, nursing, physician's assistant, social work, counseling, or community health programs and ask questions about trans-specific training included in their curriculum and offer support as appropriate. This could educate and inspire a new generation of providers as well as develop unique and meaningful relationships across an institution.

Many questions on this survey were recoded as dichotomous variables to concretize whether or not a school was providing some or none of this care. A meaningful future project

could specifically assess the 'in progress' responses of this or another similar survey. Providing trans-inclusive health care is a process and while many schools may not report full compliance with a guideline, it could provide valuable information and perspective to look at the schools 'in progress' to assess their successes and roadblocks in this journey to provide these new services.

While the individual participants were de-identified in this research project, ACHA does have access to the member information. Therefore, ACHA has the ability to identify and contact their membership leaders who are excelling in this work to serve as potential advisors to other institutions. These leading institutions could gather to present at the annual or regional meetings and to write articles for the membership's newsletter to provide recommendations to move the needle in our various settings. These findings and the newly developed scales along with membership leaders could provide meaningful suggestions to ACHA regarding an updated list of guidelines and a checklist tool for institutions to more informally assess themselves and identify strengths and opportunities to enhance inclusion.

This checklist tool could easily be disseminated to the membership in manner where schools could voluntarily participate and know that the results would be made public, similar to The Human Rights Campaign Foundation's Health care Equality Index (HEI) but specifically focused on college health care. This could provide schools with an incentive to enhance their trans-inclusion, add a level of accountability towards progress, and give them some ranking that they could share on their website or social media as a designation of their commitment to this work.

Another practical implication for these findings is for them to be cross-referenced with National College Health Assessment (NCHA) data in different ways. For one, the ACHA

research unit could cross reference the provision of trans-inclusive health care by specific institutional characteristics with the health and wellness behaviors and outcomes of transgender students. These analyses would start to connect the dots between the provision of trans-inclusive care and its impact of trans-student health and wellness. Additionally, schools that participate in the NCHA could run their own analyses on the outcomes of their transgender student subgroup and cross reference that with their general provision or lack thereof of trans-inclusive health care. If these analyses showed a relationship between enhanced service and enhanced wellbeing among trans-students, they could motivate schools to continue these services. The inverse, lack of services and compromised wellbeing, may motivate a school to start these services. Lastly, ACHA could measure if the health and wellness behaviors and outcomes of trans students differ along any of the institutional characteristics outside of the trans-inclusive care measures. For example, does trans student health fare better at larger or smaller schools, or in schools with or without religious affiliation, or in states with inclusive or exclusive state laws and policies? These findings may be interesting to groups like Campus Pride that help prospective LGBTQ college students identify LGBTQ-friendly campuses (Campus Pride, 2019).

Despite the overall sample overwhelmingly providing some degree of trans-inclusive services, significant health disparities still exist among transgender college students. There are many reasons why this may be the case. For one, the provision of this care could be rather new to various facilities and the impact on wellness outcomes for students is not yet measured. Secondly, transgender students may not even be seeking or receiving health care on their campuses. This leaves the generally less trans-inclusive health care community to be the foundation on which these individuals may be basing their care, which may influence their

trust and treatment in a health care system. Additionally, transgender students exist in many spaces outside of their campuses. While trans-inclusive campuses and college health services can certainly offset the effects of societal and institutional marginalization experienced by this community, they are not able to completely undo the harmful impacts of discrimination and mistreatment that so many have experienced in their lives before coming to campus and in their current lives. Future research could look more closely at transgender students and explore more specific predictors for health and wellbeing so that the information could be used in conjunction with trans-inclusive college health services to optimize outcomes.

Conclusions

This study found that college health centers are overwhelming providing some degree of trans-inclusive health care, services, and programs and that the provision of such care varies greatly based on several institutional characteristics. These findings are notable in that college health centers seem to be positioned as potential leaders in trans-inclusive health care as they provide more trans-inclusive care than most health care facilities. Despite this, transgender college students still face significant health disparities and more research is needed to better understand what colleges and communities can do to improve health outcomes for transgender students. Regardless, these findings provide a critical foundation on which college health professionals can benchmark their own institutions and engage in necessary conversation about the strengths and challenges college health centers face in providing trans-inclusive health care, as well as be able to identify what kinds of institutions may be best positioned to lead this work.

The potential and capacity for college health professionals to advocate for and engage in conversation with other health care providers about the importance of trans-inclusive health

care is paramount, as the transgender community and their rights are under attack in our current administration. College health professionals have a responsibility to advocate for the wellbeing of their students, but by engaging in this work with others within and outside of college health, they have an opportunity to have a much broader influence on the health and wellbeing of transgender people at large.

Appendix A

ACHA *Trans-Inclusive College Health Programs* Guidelines

(These have been numbered to assist in following the guideline numbers in the methodology and results chapters)

OCTOBER 2015

ACHA Guidelines

Trans-Inclusive College Health Programs

An increasing number of college students are identifying as transgender or gender nonconforming. As college health programs work to support the overall goals of their institutions, providing trans-inclusive healthcare will enhance academic success for transgender students and comply with Title IX guidelines requiring educational institutions to not discriminate on the basis of gender identity in the provision of services. Likewise, under the Affordable Care Act, non-discrimination in healthcare on the basis of gender identity is increasingly emphasized.

The following recommendations are designed to create climates and environments in college health that are inclusive and affirming of transgender,[1,2] gender nonconforming,[3] genderqueer,[4] and similarly self-identified students. Students' gender expressions span a wide spectrum. The following recommendations can help mitigate barriers that trans students face when accessing mental health, physical health and preventative services on campus.

Recognizing differences in campus size, funding, or other resource challenges, ACHA identifies these practices as best strategies to meet the needs of transgender students. Not all college health programs provide the same services and in circumstances with limited services, college health professionals should partner with other campus and community organizations to best meet the needs of transgender students. In this document, unless otherwise specified, college health staff includes health care providers, prevention educators, clerical staff, lab staff, and other support staff.

Access

1 Include the perspectives of trans students in all college health trainings and use universal language that is inclusive of individuals outside the gender binary.

2 Identify clinicians knowledgeable and supportive of the medical aspects of trans health to provide trans-specific health care services. Communicate availability of these providers through college health program's website and with relevant campus departments (e.g. counseling center, LGBT office).

3 Identify mental health providers knowledgeable and supportive of trans mental health issues. Communicate availability of these providers to medical staff and other departments on campus to allow for appropriate referrals.

4 Have all gender (sometimes referred to as gender neutral) bathrooms available throughout the building.

5 Appoint one or more patient advocates and/or have a visible procedure for trans students (as well as other students) to report concerns and instances of suboptimal care and treatment. At least one patient advocate should be trained on the complexities of insurance coverage and medical care that trans-identified people often face. Having another patient advocate outside of the health center allows for individuals to

[1] For the purpose and context of this document, the terms trans, trans*, transgender, gender nonconforming and genderqueer are meant to describe a diverse and complex set of experiences and identities across the spectrum of gender identity and gender expression. Whenever possible, apply these best practices in a way that reflects the term(s) that your campus community employs.

[2] Transgender is an inclusive term that refers to bending, breaking, moving across, between, or outside gender norms. Individuals who self-identify as trans may identify as transsexual (pre/non or post-op), non-gender, multi- or bi-gender, other gender, or use other terms.

[3] Gender nonconforming individuals do not adhere to society's rules about dress and activities based on an individual's sex.

[4] Genderqueer individuals do not adhere to strictly male or female identities and roles.

perceive the availability of a neutral, unbiased resource that can also address concerns.

6 Include clear, complete information about accessing trans-related health care services on websites and in health center literature, including appropriate representations of gender expressions across the spectrum of experience. Representations may include website content, trans-specific brochures, and pictures or posters.

7 Research and determine relevant campus and community agencies that complement and/or provide trans-affirming medical, mental health, and social support services. Develop plans to partner and/or refer as needed to these organizations.

Health Insurance

8 Strive to offer insurance coverage for gender-affirming hormones and gender-affirming surgical procedures under university/college provided student health insurance plans.

Names, Identity, Medical Records, and Health Informatics

9 Ensure that only medically-necessary information is collected; this includes avoiding questions that are not relevant to the specific patient interaction needed at that visit.

10 Allow for a patient/client to indicate their "sex assigned at birth" alongside their current gender.

11 Revise standardized language across medical forms so that the language is the most inclusive possible. For example, use "relationship status" instead of "marital status."

12 Enable students to indicate the name they use (sometimes referred to as "preferred name"), and not just their legal name, on intake forms. Use this chosen name when calling students in for appointments.

13 Train staff to recognize that students may prefer to use a pronoun that may not be obvious from their physical presentation. Clinicians may want to refrain from using a pronoun (and can use the individual's name instead) or as the relationship develops, can ask the student about their preferred pronoun.

14 Enable students to self-identify gender on the intake forms and, where there are limitations posed by electronic medical record (EMR) software, provide paper-based solutions to ensure a student is represented in ways that are appropriate to them. Suggested wording:

Gender Identity (choose all that apply)
__ woman
__ man
__ trans or transgender (please specify):
_____
__ another identity (please specify):
_____

15 Work with the EMR provider to find solutions if there are challenges with an EMR system. In the meantime, provide the paper solution outlined above until the problem is resolved. Be aware of how an EMR system interacts with other computer systems on campus (e.g., registrar) which may limit the control of a college health program.

16 Write prescriptions and lab orders so that the name a student uses is called out at the pharmacy and lab.

17 Provide written information about how a student can legally change their name, if they desire to do so. Some campuses allow a student's name to be changed at the registrar, even if the student has not changed it legally. Staff members need to be aware of applicable university policies.

Personnel, Continuing Education, and Training

18 Develop a policy that outlines procedures and practices for working with trans students to ensure quality care in all areas.

19 Work in concert with staff across the institution to care for a trans person's whole self and holistic

wellness. Such cross-campus partnerships might include student services, counseling center, registrar, public safety, and university facilities.

20 Hire trans-knowledgeable and trans-supportive college health professionals. Allow staff with subspecialties in trans health care to be identified so that a student may request that provider.

21 Train college health staff at all levels to be aware of trans identities and needs. Train specific staff based on their role, e.g. train mental health professionals to author letters of referral for gender-affirming hormones and/or gender-affirming surgical procedures, and train clinical health care providers on the initiation and continuation of gender-affirming hormones.

22 Incorporate training and education about trans individuals, their experiences and their health care needs into regular meetings throughout the year. Training opportunities should be designed to be accessible for health care providers and staff at all levels.

Mental Health Services

23 Identify providers who are knowledgeable about trans mental health, including, but not limited to, those who have training and experience to write letters for transitioning students to access hormones or undergo surgery.

24 Understand and be able to explain the required mental health services for students who are transitioning under the student health insurance plan.

25 Provide access to mental health providers knowledgeable about gender transition medical procedures and their impact on mental health overall and the possible interactions with current medications.

26 Offer a support group for trans and gender-nonconforming students.

27 Develop marketing strategy for mental health services to highlight specialized care for trans students.

Health Promotion/ Prevention

28 Develop prevention strategies to address issues that disproportionately affect transgender individuals. These strategies can include, but should not be limited to, violence prevention (including harassment/ bullying, relationship and sexual violence); HIV/AIDS and other STI prevention and treatment; substance abuse prevention and treatment; and mental health issues such as depression, suicidal ideation, and suicide prevention.

29 Acknowledge and address the intersection of race and ethnicity for trans people (i.e., ethnic and racial minorities may experience more discrimination and challenges as stigma and access to physical and mental health care can be compounded for some individuals).

30 Adapt appropriate education and prevention services to the trans population.

31 Develop education and prevention efforts in concert with the trans community as stakeholders. Provide these services in both trans-specific venues in addition to general education sessions.

32 Ensure that language and examples allow for inclusion of trans people in both written and verbal education efforts.

This document was developed collaboratively between the American College Health Association Coalition of Allies for LGBT Health and the Consortium of Higher Education LGBT Resource Professionals.

ACHA American College Health Association
advocacy•education•research

1362 Mellon Road, Suite 180 | Hanover, MD 21076
(410) 859-1500 | www.acha.org

Appendix B

ACHA Survey

Start of Block: Consent

*

Q1 This assessment serves as a dissertation project for an ACHA member at the University of Maryland and will result in final report made available to the membership. Your responses will be de-identified by ACHA before the data are shared with the researcher for analysis. The researcher will not be able to connect your responses to you as an individual nor to your institution. The final report will aggregate all responses and will not specifically share the responses from any individual institution or member. ACHA will not in any way reward or punish members and institutions based on their responses to this survey. Completion of this survey may take collaboration of health center, mental health, health promotion professionals, and/or your campus LGBTQ+ resources. Please coordinate the appropriate information from the various professionals to complete this survey to the best of your ability and submit ONE survey response for your institution. Members who complete the survey will be entered into a raffle for one of four $100 VISA gift cards. ACHA will select four random winners from the total sample of participants and send the email addresses only, separate from any survey responses, to the researcher so that they can send out the gift cards accordingly. This will keep the participants' responses confidential while allowing for the researcher to contact the participants with their gift cards. Please contact Jenna Messman (jbeckwit@umd.edu) if you would like a copy of this consent for your records or if you have questions about this project. This research has been reviewed according to the University of Maryland, College Park Institutional Review Board (IRB) procedures for research involving human subjects. If you have questions about your rights as a research participant, please contact the UMD IRB: E-mail: irb@umd.edu Telephone: 301-405-0678. By agreeing to participate, you are indicating that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study.

- ○ Yes (1)
- ○ No (2)

Q2 **Please note: Transgender is an umbrella term for people whose gender identity and/or gender expression differs from what is typically associated with the sex they were assigned at birth. Not everyone under this umbrella may use the term transgender to describe their gender identity, in fact, there is an expansive list of other gender identities that may be more salient to an individual. This survey will use the term transgender or trans, as it is the more encompassing term and is most commonly used in research.**

End of Block: Consent

Start of Block: Primary Practice and Insurance

Q3 What is your primary area of practice?

- ○ Administrator (1)
- ○ Dietician/Nutritionist (2)
- ○ Faculty (3)
- ○ Health Educator (4)
- ○ Medical Records Specialist (5)
- ○ Nurse (6)
- ○ Nurse Director (7)
- ○ Nurse Practitioner (8)
- ○ Pharmacist (9)
- ○ Physician (10)
- ○ Physician Assistant (11)
- ○ Psychiatrist (12)
- ○ Psychologist or Counselor (13)
- ○ Social Worker (14)
- ○ Other (15) _____

Q4 Does your campus provide a student health insurance plan?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Does your campus provide a student health insurance plan? = Yes

Q5 Does your student health insurance plan offer coverage for:

	Yes (1)	No (2)
Gender affirming hormone therapy (also known as cross-sex hormone treatment) (1)	○	○
Gender affirming surgical procedures (2)	○	○

End of Block: Primary Practice and Insurance

Start of Block: Restrooms

Q6 Does your student health center have single-user restrooms?

○ Yes (1)

○ No (2)

Display This Question:

If Does your student health center have single-user restrooms? = Yes

Q7 Are any of these single-user restrooms specifically identified as all-gender/gender-neutral?

○ Yes (1)

○ No (2)

Q8 Does your student health center have multi-user restrooms?

- Yes (1)
- No (2)

Display This Question:

If Does your student health center have multi-user restrooms? = Yes

Q9 Are any of these multi-user restrooms specifically identified as all-gender/gender-neutral?

- Yes (1)
- No (2)

End of Block: Restrooms

Start of Block: Patient Advocates

Q10 Does your student health center promote instructions for patients who wish to report complaints about care or treatment?

- Yes (1)
- No (2)

Q11 Does your center provide patient advocates?

- Yes (1)
- No (2)

Display This Question:

If Does your center provide patient advocates? = Yes

Q12 Do those patient advocates specifically receive training in marginalized populations in health care?

- ○ Yes (1)
- ○ In progress (2)
- ○ No (4)

Display This Question:

If Do those patient advocates specifically receive training in marginalized populations in health care? = Yes

Q13 What marginalized populations are included in your training?

_____

_____

_____

_____

_____

Display This Question:

If Do those patient advocates specifically receive training in marginalized populations in health care? = Yes

Q14 Does the training specifically address transgender issues?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Does the training specifically address transgender issues? = Yes

Q15 Do those patient advocates receive training in the complexities of insurance coverage and medical care that trans-identified people often face?

- ○ Yes (1)
- ○ No (2)

End of Block: Patient Advocates

Start of Block: Health Records

Q16 Are the following demographic markers included in your health forms/medical records:

	Yes (1)	No (2)
Preferred name or name DIFFERENT than legal name (1)	○	○
Sex assigned at birth (DIFFERENT field than sex) (2)	○	○
Gender identity (3)	○	○
Relationship status (as opposed to marital status) (4)	○	○

Display This Question:

If Are the following demographic markers included in your health forms/medical records: = Preferred name or name DIFFERENT than legal name [Yes]

Q17 You answered yes to “preferred name or name different than legal name." Is there a policy or protocol to use this name when addressing students for appointments and at various points of contact when receiving health care (i.e. front desk, lab, pharmacy)

- ○ Yes (1)
- ○ In progress (2)
- ○ No (3)

Display This Question:

If Are the following demographic markers included in your health forms/medical records: = Preferred name or name DIFFERENT than legal name [Yes]

Or Are the following demographic markers included in your health forms/medical records: = Sex assigned at birth (DIFFERENT field than sex) [Yes]

Or Are the following demographic markers included in your health forms/medical records: = Gender identity [Yes]

Or Are the following demographic markers included in your health forms/medical records: = Relationship status (as opposed to marital status) [Yes]

Q18 Does your student health care facility use electronic medical records (EMR) or electronic health records (EHR)?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Does your student health care facility use electronic medical records (EMR) or electronic health... = Yes

Q19 Has your student health care facility encountered limitations with utilizing these EMR/EHR fields to affirm a patient’s identity while they navigate care in your space (i.e. using preferred/affirmed name when greeting patients, billing legal name or sex while affirming a different name or gender when providing care, at the pharmacy or lab, etc.)?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Has your student health care facility encountered limitations with utilizing these EMR/EHR fields... = Yes

Q20 Has your student health care facility worked with your EMR/EHR provider or other units to find solutions to affirm patient's identity while they navigate care in your space (i.e. using preferred/affirmed name when greeting patients, billing legal name or sex while affirming a different name or gender when providing care, at the pharmacy or lab, etc.)?

- ○ Yes (1)
- ○ In progress (2)
- ○ No (3)

Display This Question:

If Does your student health care facility use electronic medical records (EMR) or electronic health... = Yes

Q21 Please provide any comments or insight about your student health care facility's experience working with EMR/EHR and affirming patients' identities and names.

_____

_____

_____

_____

_____

Page Break

Q22 We asked you about what demographic options are available on your medical charts. Now we are asking WHO IS ABLE TO EDIT the patient's chart/record (check all that apply):

	Patient (1)	Staff Member (2)	N/A (this field cannot be edited) (3)	N/A (this field is not on our charts/records) (4)
Name (1)	☐	☐	☐	☐
Preferred/affirmed name (2)	☐	☐	☐	☐
Sex (3)	☐	☐	☐	☐
Sex assigned at birth (4)	☐	☐	☐	☐
Gender identity (5)	☐	☐	☐	☐

Q23 Does your campus allow students to change the following with the registrar (or other official campus entity)?

	Yes (1)	No (2)	Don't know (3)
Name (1)	○	○	○
Sex or gender marker (2)	○	○	○

End of Block: Health Records

Start of Block: Services and Specialization

Q24 Please answer the following regarding your MEDICAL and MENTAL HEALTH staff and/or services

	MEDICAL			MENTAL HEALTH		
	Yes (1)	No (2)	Don't Know (3)	Yes (1)	No (2)	Don't Know (3)

Are any of these staff providing care specific to the needs of transgender students (i.e. hormone readiness assessments, hormone maintenance) (1)	○	○	○	○	○	○
Has your campus internally identified any specific providers as knowledgeable or supportive of transgender health care services? (2)	○	○	○	○	○	○
Are any of these providers externally identified as transgender health care resources on your website, to relevant campus departments, or other public-facing promotional materials? (3)	○	○	○	○	○	○
Do any of these providers have experience writing letters for transitioning	○	○	○	○	○	○

students to access hormones, undergo surgery, or affirm names/gender markers on legal documents (i.e. license, health insurance)? (4)						
Do any of these providers have experience navigating health insurance questions and needs for students in transition? (5)	○	○	○	○	○	○
Have any of these providers worked with other campus departments to inform, consult, or advance transgender-related initiatives in the last 24 months? (6)	○	○	○	○	○	○

Q25 Does your campus offer a support group for transgender students?

- ○ Yes (1)
- ○ In progress (2)
- ○ No (3)

Display This Question:

If Please answer the following regarding your MEDICAL and MENTAL HEALTH staff and/or services : MEDICAL [Yes] (Count) >= 1

Or Does your campus offer a support group for transgender students? = Yes

Q26 Does your campus specifically market or highlight these services to students?

- ○ Yes (1)
- ○ No (2)

End of Block: Services and Specialization

Start of Block: Policies and Training

Q27 Does your student health center have a policy that outlines procedures and practices for working with transgender students (i.e. policies that address pronouns, hormones, referrals, or any other procedures that may be relevant to your practice and this population)?

- ○ Yes (1)
- ○ In progress (2)
- ○ No (3)

Q28 In the past 24 months, has your student health center provided training to staff on the following (check all that apply):

	Yes (1)	No (2)
Pronouns (1)	○	○
Transgender people's experiences in health care (2)	○	○
Health disparities faced by transgender people (3)	○	○
Gender-affirming hormone therapy (also known as cross-sex hormone treatment) (4)	○	○
Preventative health care for transgender people (5)	○	○
Referrals for those seeking transition support/services/procedures/surgeries (6)	○	○
Ensuring that only medically-necessary information is collected during appointments (7)	○	○

Q29 In the last 24 months, has your student health center solicited student perspectives to inform training or processes in the health center that affect patients (generally, not specifically for transgender patients)?

- ○ Yes (1)
- ○ In progress (2)
- ○ No (4)

Display This Question:

If In the last 24 months, has your student health center solicited student perspectives to inform tr... = Yes

Or In the last 24 months, has your student health center solicited student perspectives to inform tr... = In progress

Q30 Select all of the ways that your student health center solicits student perspectives to inform your general practice:

- ☐ SHAC (Student Health Advisory Committee) (1)
- ☐ Patient satisfaction surveys (2)
- ☐ Comment or suggestion box (3)
- ☐ Town hall (4)
- ☐ Partnering with LGBTQ+ groups (5)
- ☐ Other (6)

Display This Question:

If In the last 24 months, has your student health center solicited student perspectives to inform tr... = Yes

Q31 Has your center SPECIFICALLY solicited transgender student perspectives to inform training or processes in the health center that affect transgender patients?

- ○ Yes (1)
- ○ In progress (2)
- ○ No (4)

Display This Question:

If Has your center SPECIFICALLY solicited transgender student perspectives to inform training or pro... = Yes

Or Has your center SPECIFICALLY solicited transgender student perspectives to inform training or pro... = In progress

Q32 Select all of the ways that your student health center has specifically solicited transgender student perspectives:

- ☐ SHAC (Student Health Advisory Committee) (1)
- ☐ Patient satisfaction surveys (2)
- ☐ Comment or suggestion box (3)
- ☐ Town hall (4)
- ☐ Partnering with LGBTQ+ groups (5)
- ☐ Other (6)

Display This Question:

If Has your center SPECIFICALLY solicited transgender student perspectives to inform training or pro... = Yes

*

Q33 How was that information used to inform training or processes?

_____

_____

_____

_____

_____

End of Block: Policies and Training

Start of Block: Health promotion/prevention/education

Q34 Does your campus have staff dedicated to health promotion/prevention/education?

- Yes (1)
- No (2)

Display This Question:

If Does your campus have staff dedicated to health promotion/prevention/education? = Yes

Q35 Do your health promotion/prevention/educational materials and programs include transgender students (i.e. through language, examples, etc.)?

- Yes (1)
- No (2)

Display This Question:

If Does your campus have staff dedicated to health promotion/prevention/education? = Yes

Q36 Do your health promotion/prevention/education efforts specifically outreach to transgender students regarding health issues that disproportionately affect transgender individuals (i.e. substance use, STIs, relationship violence, mental health issues)?

- Yes (1)
- In progress (2)
- No (4)

Display This Question:

If Do your health promotion/prevention/education efforts specifically outreach to transgender studen... = Yes

Q37 Does your health promotion/prevention/education outreach acknowledge the intersection of race and ethnicity for trans people (i.e. trans people who are also ethnic and racial minorities may experience compounded marginalization and discrimination)

- ○ Yes (1)
- ○ In progress (2)
- ○ No (4)

Display This Question:

If Does your campus have staff dedicated to health promotion/prevention/education? = Yes

Q38 Do your health promotion/prevention/education efforts specifically engage the trans community as stakeholders in the development of educational programs and services?

- ○ Yes (1)
- ○ In progress (2)
- ○ No (3)

Display This Question:

If Does your health promotion/prevention/education outreach acknowledge the intersection of race and... = Yes

Q39 Please provide any examples of this health promotion/prevention/education outreach.

_____

_____

_____

_____

_____

End of Block: Health promotion/prevention/education

Start of Block: Resources and Referrals

Q40 These questions are about ON and OFF campus resources:

	On-campus			Accessible off-campus or in the community		
	Yes (1)	No (2)	Don't Know (3)	Yes (1)	No (2)	Don't Know (3)
Are there other departments or agencies that are involved in support services for transgender people? (1)	○	○	○	○	○	○

Display This Question:

If These questions are about ON and OFF campus resources: : On-campus [Yes] (Count) >= 1

Q41 These questions are about collaborative work with ON and OFF campus resources:

	On-campus			Accessible off-campus or in the community		
	Yes (1)	No (2)	Don't Know (3)	Yes (1)	No (2)	Don't Know (3)
Has your department worked with any of these other campus units or community organizations in the past 24 months regarding transgender health conversations/trainings? (1)	○	○	○	○	○	○

Display This Question:

If These questions are about ON and OFF campus resources: : On-campus [Yes] (Count) >= 1

Q42 These questions are about ON and OFF campus referrals

	On-campus referrals			Accessible off-campus or community referrals		
	Yes (1)	No (2)	Don't Know (3)	Yes (1)	No (2)	Don't Know (3)
Does your department have a referral process for students seeking on or off-campus resources regarding transgender identity, community, services, etc. (1)	○	○	○	○	○	○

End of Block: Resources and Referrals

Start of Block: Conclusion

Q43 We understand that in order for you to answer all of these questions, you may have had to consult with other service providers, departments, or units. For example, some campuses may have one department that provides all of these services and another campus may have several different units each responsible for specific services (i.e. group counseling, education, clinical services). Please check all whose services are included in your responses:

- ☐ Student Health Services (1)
- ☐ Mental Health or Counseling Services (2)
- ☐ Health Promotion (3)
- ☐ LGBT Services or Centers (4)
- ☐ Other units or departments , please list (5) _____

Q44 Please provide any comments about your campus' successes, challenges, or strategies in providing quality health care to transgender patients or provide more insight into responses where you noted *in progress.*

_____

_____

_____

_____

_____

End of Block: Conclusion

Appendix C

Email Invitation to Members

An increasing number of college students are identifying as transgender, non-binary, and genderqueer. Health disparities are widely documented among this population and include significantly higher rates of suicide, substance use, sexually transmitted infections, and experiences of sexual assault - even among college students. While it is critical that college health professionals understand the health care needs of this population to support the wellbeing and enhance academic success for this population, we recognize that institutions are at varying levels of conversation and competency around this emerging field.

We are still hoping to get a submission from your school. Please take a few moments to fill out this survey. It is critical that we hear from as many institutions as possible, those providing no specific services as well as those well versed in transgender health care, to get an accurate representation of our membership.

- Every item is optional.
- There are questions on the survey that *everyone* can answer, regardless of their level of trans-specific knowledge or services provided at their institution.
- The survey focuses primarily on services provided in **student health centers,** but may require gathering information from other units on campus depending on the structure of health and wellness services at your institution.

In order for ACHA to best support its membership in providing trans-inclusive care, we must first identify our memberships' successes and challenges in this work. This will allow us to tailor professional development opportunities and recommendations to the specific needs of our membership. An aggregate report of these findings will be made available to the membership by the end of 2018 and can be emailed directly to you by request.

Members who complete the survey will be entered into a raffle for one of four $100 VISA gift cards. It is estimated that the survey will take between 15 to 30 minutes to complete with the time commitment largely determined by the scope of services provided at your institution, the detail of your responses, and who you may need to connect with to get the appropriate information. You are welcome to fill out as much or as little as you like; however, the more information you are willing to share, the more robust the results of this assessment will be.

Follow this link to the Survey: Take the Survey

Or copy and paste the URL below into your internet browser:
https://achasurveying.co1.qualtrics.com/jfe/form/SV_8tVNyFVRLlwalW5?Q_DL=d4DjMv660yCxcCV_8tVNyFVRLlwalW5_MLRP_e2w8tdIQPxVEyC9&Q_CHL=email

Thank you in advance for your time,

Mary Hoban, PhD, MCHES (mhoban@acha.org)
ACHA, Chief Research Officer

and

Jenna B. Messman, MEd, NCC (jbeckwit@umd.edu)

University of Maryland, Sexual Health Program Coordinator and doctoral candidate

Appendix D

Transgender Inclusive Laws and Policies Rankings

Transgender Inclusion by State Rankings	
State	Ranking (0 - low/negative inclusion) (1 - medium/high inclusion)
ALABAMA	0
ALASKA	0
ARIZONA	0
ARKANSAS	0
CALIFORNIA	1
COLORADO	1
CONNECTICUT	1
DELAWARE	1
DISTRICT OF COLUMBIA	1
FLORIDA	0
GEORGIA	0
HAWAII	1
IDAHO	0
ILLINOIS	1
INDIANA	0
IOWA	1
KANSAS	0
KENTUCKY	0
LOUISIANA	0
MAINE	1
MARYLAND	1
MASSACHUSETTS	1
MICHIGAN	0
MINNESOTA	1
MISSISSIPPI	0
MISSOURI	0
MONTANA	0
NEBRASKA	0
NEVADA	1
NEW HAMPSHIRE	1
NEW JERSEY	1
NEW MEXICO	1
NEW YORK	1
NORTH CAROLINA	0
NORTH DAKOTA	0
OHIO	0
OKLAHOMA	0
OREGON	1
PENNSYLVANIA	1
RHODE ISLAND	1
SOUTH CAROLINA	0
SOUTH DAKOTA	0
TENNESSEE	0
TEXAS	0
UTAH	1
VERMONT	1
VIRGINIA	0
WASHINGTON	1
WEST VIRGINIA	0
WISCONSIN	0
WYOMING	0

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