CONDRAN, CHRIS, W. Ed.D. An Asynchronous Online LGBT+ Cultural Competency Training for Physical Therapists. (2022) Directed by Dr. Diane L. Gill. 66 pp.

Research suggests that physical therapists lack knowledge, awareness, and clinical preparedness to engage with LGBT+ populations in clinical settings and that LGBT+ patients report difficulty engaging in physical therapy and fear of discrimination. The purpose of this study was to develop, deliver, and evaluate an online LGBT+ culturally competency training (CCT) program for physical therapists.

To address the purpose, physical therapists in current clinical practice completed surveys assessing LGBT+ clinical preparedness, attitudinal awareness, and basic knowledge before and after engaging in an LGBT+ clinical competency training. An initial sample (n=115) completed the pretest, with only 30 completing the course and participating in the study. Participants' scores on all 3 subscales and total of the Lesbian, Gay, Bisexual, Transgender Development of Clinical Skills Scale (LGBT-DOCSS) were significantly higher at post-test, with the greatest increase in clinical preparedness, t(29) =7.15, p<.001, and a large effect size (d=1.30). These findings suggest that participating in this course increase PT's LGBT+ cultural competency.

The majority of participants (96%) agreed that LGBT+ cultural competency is essential to PT curricula, should be CAPTE mandated in PT programs, and clinical practice guidelines should be published. Post-course ratings of course content, delivery, and format were all very positive. The course was successful in raising cultural competency with a large effect for clinical preparedness and was rated positively by participants.

# AN ASYNCHRONOUS ONLINE LGBT+ CULTURAL COMPETENCY TRAINING FOR PHYSICAL THERAPISTS

by

Chris W. Condran

A Dissertation

Submitted to

the Faculty of The Graduate School at

The University of North Carolina at Greensboro

in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Greensboro

2022

Approved by

Dr. Diane L. Gill Committee Chair

© 2022 Chris W. Condran

## **DEDICATION**

This work is dedicated to my wilding, Phoenix. Knowing you are always watching and mimicking me, being your father has made me grow exponentially. Your fierce spirit and unwavering empathy for the experiences of others inspire me beyond measure. I wish for this to serve as a reminder to you that no matter the obstacles, with the right combination of creativity, curiosity, and resilience there is always a way to persevere. I love you "so much" to beyond the stars and back again. May your future hold the greatest joy and fulfillment. ~IL

# APPROVAL PAGE

| This dissertation written by Chris W. Cor | ndran has been approved by the following committee of |
|---|---|
| the Faculty of The Graduate School at Th  | e University of North Carolina at Greensboro.         |
|   |   |
|   |   |
|   |   |
| Committee Chair                           | Dr. Diane L. Gill                                     |
| Committee Members                         | Di. Diane L. Gii                                      |
| Committee Members                         | Dr. Pam K. Brown                                      |
|   |   |
|   | Dr. Jay Poole   |

June 21, 2022 Date of Acceptance by Committee

April 25, 2022 Date of Final Oral Examination

#### **ACKNOWLEDGEMENTS**

To the EdD faculty and staff—My gratitude for all the mentoring, advising, and unwavering support as I navigated the ups and downs of life coupled with the demands of graduate work.

To Kerstin Palombaro—First and foremost, I want to express my deepest appreciation for your friendship. Second, many thanks for all the mentoring, teaching, and support throughout this process. It has been my greatest pleasure collaborating with you over the past 9 years. Your contributions to my personal and professional growth are too numerous to count. I look forward to our continued work together.

To Karla A. Bell—Thank you for the time you have spent providing me with advice and mentorship.

To all the LGBTQ+ young people (student physical therapists, mentees, colleagues) I have had the privilege to collaborate with, mentor, and guide, I appreciate you more than you know. Your resilience, enthusiasm, and curiosity have recharged my soul at the times I needed it most.

Lastly, to all my parents (Mom, Dad, Brian, Maria)—I am beyond grateful for all the guidance, emotional support, endless childcare, and unconditional love you show me daily. Without you four, these last four years would have been a great struggle rather than a passion project. ~ I love you, IL

# TABLE OF CONTENTS

| CHAPTER I: PROJECT OVERVIEW   | 1  |
|---|----|
| Background Literature   | 2  |
| LGBT+ Patient Experiences with PT   | 5  |
| LGBT+ Cultural Competency Training  | 6  |
| Purpose Statement and Specific Aims                                       | 8  |
| Methods   | 8  |
| Participants  | 9  |
| Measures  | 10 |
| LGBT-DOCSS Survey   | 10 |
| LGBT+PT Survey  | 11 |
| Program Evaluation Survey   | 11 |
| Procedures  | 12 |
| Cultural Competency Training Intervention.                                | 12 |
| Researcher Positionality  | 13 |
| Results   | 14 |
| Table 1. Comparison of participants (initial vs. final) LGBT-DOCSS scores | 15 |
| Table 2. Comparison of LGBT DOCSS Scores                                  | 15 |
| Table 3. Attitudes toward LGBT+ cultural competence                       | 16 |
| Table 4. Course Evaluation Scores   | 18 |
| Discussion and Implications   | 19 |
| CHAPTER II: DISSEMINATION PLAN  | 22 |
| Purpose   | 22 |
| Introduction  | 22 |
| Results   | 23 |
| Discussion  | 23 |
| CHAPTER III: ACTION PLAN  | 25 |
| Short Term Plan   | 25 |

| Long Term Plan   | 25 |
|--|----|
| REFERENCES   | 27 |
| APPENDIX A: SUMMARY RECOMMENDATIONS FOR HEALTH PROFESSION EDUCATION CURRICULAR THREADS (EXPANDED UPON FROM AAMC, 201   |    |
| APPENDIX B: BARRIERS, MANIFESTATIONS, RECOMMENDATIONS, AND FACILITATORS IN HEALTH FOR SEXUAL AND GENDER MINORITY POPUL (BELL, CONDRAN, HOFFMAN TO BE PUBLISHED 2022) |    |
| APPENDIX C: SURVEY COMPONENTS  | 42 |
| APPENDIX D: LGBT+ CULTURAL COMPETENCY COURSE SLIDES  | 55 |
| APPENDIX E: PARTICIPANT DEMOGRAPHICS   | 65 |
| APPENDIX F: DISSEMINATION POSTER PRESENTATION  | 67 |

# LIST OF TABLES

| Table 1. Comparison of participants (initial vs. final) LGBT-DOCSS scores | 15 |
|---|----|
| Table 2. Comparison of LGBT DOCSS Scores                                  | 15 |
| Table 3. Attitudes toward LGBT+ cultural competence                       | 16 |
| Table 4. Course Evaluation Scores   | 18 |

#### CHAPTER I: PROJECT OVERVIEW

The field of physical therapy has historically struggled to acknowledge lesbian, gay, bisexual, transgender, plus (LGBT+) peoples in clinical practice as well as academic settings. The lack of inclusion of LGBT+ persons' experiences has led many to feel the effects of minority stress. The overarching issue facing the LGBT+ communities in society is "getting a seat at the table" and for that matter the "right seat." This two-part scenario implies not only being included but equitably included. In the past, LGBT+ communities have experienced disproportionate levels of health disparities when compared to their heterosexual cisgender peers (Copti, 2016).

Romanelli noted that system-level barriers can be attributed to social-structural factors that marginalize LGBT+ people from participating in and accessing the health and wellness services they need (Romanelli, 2017). These social structural factors come to fruition for LGBT+ populations in exclusionary policymaking, a lack of funding for and inclusion in data collection, exclusion from cultural competency initiatives, and scarcity of empirical evidence involving LGBT+ communities (Bell, 2019; Copti, 2016). These factors disproportionately impact the transgender communities when seeking care, resulting in discrimination and rejection from services, poor quality of treatment and provider insensitivity, problems with the physical environment and climate of services, issues with the availability and appropriateness of services, and a lack of competence in transgender care and gender-affirming care (Stolzer, Silvershanz, & Wilson, 2013).

Clinical practice guidelines are statements that provide clear procedures for addressing specific clinical circumstances when providing high-quality care to patients (IOM, 1990). The marginalization of the LGBT+ communities in physical therapy stems from the lack of clear,

evidence-based clinical practice guidelines. Up to this point, the creation of guidelines to meet the unique needs of the LGBT+ communities has been impossible because of sparse evidence and lack of interest from the field. Over the past three years specifically, several studies have been published along with a surge in interest from academics and clinicians to begin this process. The purpose of this study is to develop and evaluate an online LGBT+ cultural competency course on physical therapists.

## **Background Literature**

Despite the American Physical Therapy Association (APTA) having guidelines for cultural competency, the historical climate surrounding physical therapy (PT) and LGBT+ has been deleterious. The only article to date illuminating physical therapists' (PTs) and physical therapy assistants' (PTAs) attitudes toward LGBT+ patients is one by Burch in 2008. Burch surveyed PTs, PTAs, nurses, occupational therapists, and occupational therapy assistants treating patients with spinal cord injuries prior to and directly following administering an LGBT+ competency training video. The results were alarming. The majority of PTs and PTAs (85%) described tolerance versus respect and just 1% disclosed having "full respect" for LGBT+ patients. Alternatively, 40% of nurses recounted having "some respect" while nearly half (44%) of nurses reported having "full respect" for LGBT+ patients. The most concerning result was that 68% percent of clinicians rated themselves as having "very low to average knowledge" related to providing care to LGBT+ patients (Burch, 2008).

This low knowledge and lack of respect was on full display during a debate that unraveled in APTA's *PTinMotion* monthly magazine. The debate began in the June 2011 "Viewpoints" section of the magazine, which welcomes opinions regarding articles in the magazine or those of general interest. Evans, Karpatkin, and Thomas wrote a piece called

"APTA and the LGBT Community," in which they advocated for the APTA to add gender identity and sexual orientation to minority membership data collection, increase LGBT recruitment to the field, include LGBT content in cultural competence education, and provide LGBT protections. Evans, et al. (2011, p.9) passionately stated "Physical therapy professionals need to have the same level of education on LGBT+ culture and psychology as they do on racial/ethnic culture." Following this call to action from these three APTA members, the debate began.

Other members (licensed professionals) began submitting their follow-up "Viewpoints" for nearly a year with each monthly publication featuring another rebuttal. Some interpreted Evans et al. as condoning a lifestyle. "I question how ethical it would be for our health profession to actively promote a lifestyle that incorporates known high- risk health behaviors." (Logan, 2011,p.8). Other statements such as "LGBT: What's the Relevance?" or "Can we move on already" were tossed about (Wierzbicki, 2012). Some clinicians expressed good intentions, but fell quite short of cultural competence. "Just because I cannot condone the choice, they have used to define themselves does not mean I cannot be *charitable* toward them." (Gleason, 2012). Such views fall into the categories of the cultural competency continuum as cultural destruction or cultural incapacity (Cross et al., 1989). Cross et al., 1989 describe a cultural competence framework characterized by a six stage continuum to achieving cultural competence. These six stages include: 1) cultural destructiveness, 2) cultural incapacity, 3) cultural blindness, 4) cultural pre-competence, 5) cultural competency and 6) cultural proficiency. By definition, cultural destructiveness is having attitudes and/or behaviors that reinforce superiority of one group over another resulting in oppression. Next is cultural incapacity which is defined as the lack of skills and knowledge to be effective interacting with an individual from a diverse background. As one

moves into the middle of the continuum, cultural blindness is the inability to acknowledge differences and claim diversity of culture, race, ethnicity, identity, etc. have no bearing. Cultural pre-competence describes the stage in which individuals accept the necessity of cultural competency but are unable to move beyond contemplation to action. As one nears the final stage, cultural competence refers to individuals who accept and respect diversity exists and take actions to remediate policies to support their commitment to equity and inclusion. The final stage is cultural proficiency. This stage is characterized by those individuals who actively seek to learn and grow into new knowledge and skills for valuing diversity, taking action to create equity and practice inclusion.

The LGBT+ membership stepped in to clarify the first viewpoint, refute the outdated, false evidence from other members, and continue to advocate for themselves and patients in their communities (Matlock, 2011; Pavel, 2012; Kietrys, 2012). This nearly year-long exchange provided a barometer reading of the professions' lack of competence when working with LGBT+ patients. This exchange may reflect the dynamics within the profession and our society. Majority members (heterosexual, cisgender) reacted emotionally and denied their incompetence for caring for the LGBT+ community. Cultural competence requires acknowledgement of incompetence and biases. Evidence to support these findings is coming into the limelight now and this will likely clear the way to move forward.

In addition to Burch and *PTinMotion* debate, two position papers have been published advocating for LGBT+ inclusion and cultural competence in physical therapy education programs. Most recently Bell published a piece expanding on the American Association of Medical College's (AAMC) 2014 work honing on the implementation of curricular and institutional climate changes for equitable inclusion of LGBT+ individuals. Dr. Bell describes

potential "curricular threads" (visible in Appendix A) based on domains of practice regarding these health implications. These domains are patient care, knowledge for practice, practice-based learning and improvement, interpersonal and communication skills, professionalism, systems-based practice, interprofessional collaboration, and personal and professional development (Bell, 2019). Each of these unique practice components is an opportunity to implement LGBT+ inclusive content and most importantly an opportunity to infuse knowledge and skills into each facet of clinical practice to create competent clinicians. It is this author's opinion that this integrated approach will be the most successful means for delivery versus a blocked lecture session of focused education because it will ensure equitable inclusion of LGBT+ representative materials in all curricula. However, the feasibility of this is unlikely at this time.

Prior to Bell's work and shortly following the *PTinMotion* debate, Copti (2016) published a position paper advocating for cultural competency in PT education in the United States. In this work Copti thoroughly described the many health risks, disparities, discrimination, prejudice and lack of access plaguing the LGBT+ communities. The author also draws attention to the lack of knowledge and sensitivity of providers that contributes to the "just like everyone else" philosophy of treating LGBT+ patients (Copti, 2016).

## LGBT+ Patient Experiences with PT

Most recently Ross and Setchell (2019) examined LGBT+ patient attitudes in Australia via surveys of 108 patients who had participated in physical therapy. The researchers identified four themes. First, PTs make assumptions regarding a patients' gender identity and sexual orientation. The nature of PT requiring touching of, proximity to and exposure of bodies resulted in discomfort for patients. Patients experienced fear of discrimination as well as implicit

and overt discrimination by PTs. Lastly, patients reported PTs have a lack of knowledge regarding transgender specific health issues. In addition to these emerging themes, participants also supported potential solutions to remedy the issues. Respondents were in favor of LGBT+ trainings on cultural competency-related topics as well as specific health issues common in these communities. Participants also were supportive of changes to the clinic itself and processes therein such as instituting gender neutral facilities and gender neutral forms. Ross and Setchell are the first to examine the attitudes surrounding the LGBT+ communities' interaction with physical therapy practice. Their findings and suggestions provide solid actionable items for providers and administrators to create change in clinics around the world. These changes as stated previously have significant implications for improving the health and wellbeing of these marginalized communities (Ross & Setchell, 2019).

## LGBT+ Cultural Competency Training

As healthcare providers become more aware of these glaring social justice issues and barriers to health/healthcare (see Appendix B Table 1), providers can be proactive in eliminating these barriers to wellness within their own practice and advocate for change in other facets of society. As providers begin this journey as an ally, it is essential they acquire the necessary knowledge to become LGBT+ culturally competent providers in their specialties. In many fields such as PT, this education is not mandated by an accreditation body. This creates inequities for graduating entry-level clinicians as they begin licensed practice. A standardized curriculum requirement would be a solution to this problem to ensure all entry-level clinicians are LGBT+ culturally competent.

Bell breaks down educational components into areas of domain of practice. These consist of patient care, knowledge for practice, practice-based learning and improvement,

interpersonal and communication skills, professionalism, systems based practice, interprofessional collaboration, and personal and professional development. Bell (2019) further divides these into content recommendations and samples, the detail for which will be included in the curricula of the cultural competency course used for intervention (Bell, 2019).

Additional content from Boroughs et al. (2015) recommends the following actionable behaviors for providers interacting with LGBT+ communities. Clinicians should attain the skills to meet the unique needs associated with LGBT+ identities. Clinicians should pursue knowledge and understanding of LGBT+ individuals as it pertains to therapeutic relationships and the role of the providers' identity in therapeutic interactions. Clinicians should be open-minded in the pursuit of understanding LGBT+ specific issues and its impact on examination, evaluation, diagnosis, prognosis, and the plan of care development. Lastly, clinicians should include an appropriate assessment of gender identity and sexual orientation that may better facilitate positive patient-to-clinician relationships with the potential to positively impact treatment outcomes (Boroughs et al., 2015). The summative benefit of these behaviors is a positive therapeutic relationship between therapist and patient resulting in stronger patient functional outcomes.

Though somewhat outdated (2002), a validated model for cultural competence (CC) in the delivery of healthcare services is Campinha-Bacote's model of cultural competence in health care delivery. It integrates nursing, anthropology and counseling concepts. It operates on 5 assumptions: CC is an ongoing process rather than a single occurrence; CC consists of 6 constructs cultural awareness, skill, knowledge, encounters, humility, and desires; there is greater intra-ethnic variation than inter-ethnic; there is a direct relationship between competence of providers and their ability to provide culturally responsive care; CC is instrumental in the

effective delivery of CC care to diverse populations. This is a foundational model for educating providers in multiple settings (Bauer & Bai, 2018; Campinha-Bacote, 2002; Hawala-Druy & Hill, 2012).

### Purpose Statement and Specific Aims

The core of the issue is PT's lack the knowledge, attitudes, and clinical preparedness to be competent providers for the LGBT+ communities. PT's lack of cultural competency results in the LGBT+ communities experiencing decreased access to physical therapy (PT), poorer quality of care, prejudice, and discrimination (Copti, 2016; Bell, 2019; Ross & Setchell, 2019). The purpose of this study was to develop, deliver, and evaluate an online LGBT+ culturally competency training (CCT) program for physical therapists. The expected outcome is therapists that engage in the online cultural competency training will improve their cultural competency as reflected by their self-rated LGBT-DOCSS score. The potential impact is for LGBT+ individuals to have greater access to better prepared, culturally competent physical therapy providers to guide their care toward increased health and wellness. The specific aims are:

- 1. Determine the impact of the educational training on PTs knowledge, clinical preparedness, and attitudes towards LGBT+ patients, as assessed with LGBT-DOCSS outcome scores.
- 2. Determine participant attitudes towards the inclusion of LGBT+ cultural competency content in academic and continuing education curricula.
- 3. Evaluate the LGBT+ cultural competency course based on participant feedback.

#### Methods

In order to address the purpose and aims of this study, a one-group pre-post design with LGBT+ clinical preparedness, attitudes, and knowledge being examined before and after engaging in an

LGBT+ clinical competency training was used. In addition to the evaluation of cultural competency markers, a post-test program evaluation survey was included.

## **Participants**

The participants in this study were licensed PTs working in direct patient care settings. Participants were recruited via convenience sampling utilizing social media; however, care was taken to recruit from across the country as well as across clinical settings to ensure representation is appropriate. Participants who were not licensed PTs were excluded such as PT assistants and occupational therapists. Others who were excluded were those living outside the United States. The total number of participants was 115 with 30 completing the 3 steps of the study. The initial sample (n=115) began the study by taking the pre-test. Following the pre-test, participants (n-85) dropped out of the study by not moving on to complete the course. The final sample of participants that completed the study was 30 physical therapists.

The majority of participants were between 26-55 years of age, white, non-Latino, straight and female. Geographic location was mostly evenly distributed however a shortage of those from the South-west region. Most were doctoral-level educated therapists practicing in the outpatient setting with 20+ years of experience. A large portion had a Women's Health Board Certification. The majority were not APTA credentialed clinical instructors. The initial sample was nearly exactly the same as the final participants when considering the demographics of race, ethnicity, sexual orientation, gender identity, and terminal degree status. More of the final participants were between the ages of 46-55 when compared to the whole sample. When compared to the initial group of participants, a greater percentage of the final participants resided in the west while less of the group was made up of individuals from the Southeast region. When compared to the initial group twice the percentage of participants in the final sample practice in

acute care. Interestingly, those who finished the study were more likely to have 20+ years of experience in practice which is counter to intuition that would suggest new clinicians would be pursuing continuing education topics such as this one. Participants who had board certification in the area of Women's Health were also more likely to complete the study.

#### Measures

Participants completed a demographics survey, LGBT-DOCSS and the LGBT+ & PT survey prior to engaging in the 2-hour educational course. The LGBT-DOCSS, LGBT+ & PT survey, and course evaluation were performed following course completion. Full pre and post-test surveys are located in Appendix C. Participants were permitted a 4 week period to complete the course and all related surveys. A reminder to complete was sent at 2 weeks and 1 week prior to close of course. Demographics included age, ethnicity, gender identity, sexual orientation, geographic location, degree, practice setting, and years in practice.

## LGBT-DOCSS Survey

The LGBT-DOCSS is a survey outcome measure for providers that examines specifically the self-reported cultural competence when engaging the LGBT+ population as it relates to care delivery (Bidell, 2017). This survey is an 18-item scale and examines three distinct areas of competence: clinical preparedness, attitudinal awareness, and basic knowledge. Clinical preparedness examines LGBT+ training and clinical experiences. Attitudinal awareness assesses LGBT+ explicit bias and prejudice. Basic knowledge explores LGBT+ health disparities. The instrument has participants rate their agreement based on a 7-point Likert scale from 1- strongly disagree to 7- strongly agree. Each subscale and a total score are tallied and then divided by the number of items in that assessment total or subscale to obtain a mean score between 1-7. Calculation instructions can be found in greater detail in (Appendix C). A higher score is

indicative of higher self-reported cultural competency in that subscale category or overall total score, in other words, greater knowledge, affirming attitudes, and clinical preparedness (Bidell, 2017). The validity and reliability of LGBT DOCSS in healthcare providers including PTs has been established in a previous multiple-step validation study examining exploratory and factor analysis, test-retest reliability, construct validity, and convergent and discriminant validity (Bidell, 2017). The overall LGBT-DOCSS internal consistency is  $\alpha = .86$ . The Clinical Preparedness Subscale internal consistency is  $\alpha = .88$ . The Attitudinal Awareness Subscale internal consistency is  $\alpha = .80$ . The Basic Knowledge Subscale internal consistency is  $\alpha = .83$ . In addition to internal consistency, the test-retest reliability is strong for the overall LGBT-DOCSS (r = 0.87), the clinical preparedness subscale (r = 0.88), the attitudinal awareness subscale, (r = 0.85) and basic knowledge subscale (r = 0.86) (Bidell, 2017).

## LGBT+PT Survey

The LGBT+ & PT Survey (See Appendix C ) examined attitudes toward the inclusion of LGBT+ cultural competency training in academic programs as well as in clinical practice. It was delivered pre-test and post-test. This was a three-item survey that was developed specifically for this study. The questions were as follows: LGBT+ cultural competency knowledge is essential to physical therapy curricula; LGBT+ cultural competency knowledge should be CAPTE mandated in academic DPT programs; LGBT+ clinical practice guidelines for PT's should be published. These questions were rated on a 5 point Likert scale from strongly agree to strongly disagree.

## **Program Evaluation Survey**

The post-test course evaluation was designed to explore participants' attitudes toward the content, duration, and delivery methods, and sought feedback for improving the course.

Participants rated items on the following scale as excellent, good, fair, or poor. Items included:

The course as a whole was; The course content was; The 2-hour course duration was; The course organization was; The usefulness of the content was; The full measure is in Appendix C.

Procedures

Following IRB approval, participants were recruited via social media platforms (Facebook, Instagram, and LinkedIn). A recruitment link was posted to these platforms with a link to the Qualtrics pretest survey. Following completion of the pretest, emails were sent by the primary investigator to all participants with instructions on accessing the Teachable.com platform to enroll in the LGBT+ CC course. Due to the asynchronous nature of the course, participants had four weeks to enroll, complete the course, and post-test. Upon completing the course, the participant received a link to complete the post-test in Qualtrics.

Cultural Competency Training Intervention.

The intervention in this study was a two-hour, asynchronous online LGBT+ cultural competency course derived from Bell's (2019) curriculum recommendations and created by the researcher. The educational components Bell recommends are called threads which are broken down into areas of the domain of practice. These consist of patient care, knowledge for practice, practice-based learning and improvement, interpersonal and communication skills, professionalism, systems-based practice, interprofessional collaboration, and personal and professional development. Bell (2019) breaks these further into content recommendations and samples, which were included in the curricula of the cultural competency course used for intervention. Participants had a 4-week window to enroll, complete the pre-test, course, and post-test components. Each of the areas of domains of practice is noted on the slide handouts. (Course Powerpoint slides can be viewed in Appendix D).

The course was delivered in a short mini-lecture format in self-recorded modules created by the primary investigator. The Course introduction consisted of a brief overview of the course. Basic terminology covered definitions of the most common language used to describe concepts such as LGBTQ+, gender expression, gender affirmation, and gender identity. The current legal climate facing LGBT+ patients summarized the current policies in place as well as those being proposed in the U.S. government across the country and the impact on the LGBT+ communities. Understanding health and healthcare disparities discussed the healthcare-related barriers and their impact on health and wellness in LGBT+ populations. Understanding and supporting gender-expansive patients discussed the experiences of transition and gender-affirming behaviors. Patient affirming PT behaviors described ways to support gender-expansive patients and their families through affirming behaviors. Modifying the clinical environment to support all identities discusses the ways clinic settings can be changed to support LGBT+ individuals and make them feel safe, welcomed, and visible. The Course summary brings it all together and closes the course.

#### Researcher Positionality

This researcher is a transgender male physical therapist and professor. This researcher has advanced degrees in business administration, exercise physiology, and physical therapy. This researcher's views have been shaped by experiences of being able-bodied, of being perceived as male-bodied, of having lived in both binary identities of male and female, of liberal political ideation, of LGBTQ+ identities, of white privilege, of middle-class status, and of social, medical, and legal transition. This unique identity coupled with eight years of experience in delivering this content in live educational academic settings contributes to the researcher possessing educational, experiential, and professional knowledge, skills, as well as lived experiences

positioning the researcher as a novice expert qualified to execute this research study. The cultural competency training was created by the researcher and has been delivered in various versions previously. There is a potential for bias that must be accounted for when conducting, analyzing, and presenting the findings of this study. To counter potential bias, course content was reviewed by a consultant, a licensed physical therapist and content expert in LGBT+ cultural competency training, provided a review of the content prior to the study.

#### Results

First, the demographics and pre-test measures of the final sample that completed the study are compared with the sample that dropped out. Then, the main results of the LGBT-DOCSS pre-post comparisons are presented. Finally, the results of the post-test program evaluation survey are presented.

Interestingly, the 30 participants' demographics were very similar to those of the total sample a table with full participant demographics on both the initial and final sample can be found in Appendix E. The initial sample and the final were similar in nearly all demographics however the final group was slightly older and had more experience. The term "initial" will be used to refer to the full sample who initially enrolled in the study while the term "final" will be used to refer to the sample that finished the entire study.

A t-test was used to compare the two participant groups on the main outcome measure the LGBT-DOCSS. As Table 1 shows, groups did not differ on clinical preparedness subscale or total scale scores but the final sample had higher scores on the attitudes subscale (medium effect size) and knowledge subscale (small effect size).

Table 1. Comparison of participants (initial vs. final) LGBT-DOCSS scores

| Assessment       | Participant Group | M + SD    | t    | p     | d     |
|------------------|-------------------|-----------|------|-------|-------|
|                  | Initial           | 4.53±.93  | 21   | .84   | 04    |
| Clinical Prepare | edness            |           |      |       |       |
|                  | Final             | 4.58±1.14 |      |       |       |
|                  | Initial           | 6.91±.24  | 3.13 | .002* | .51†† |
| Attitudes        |                   |           |      |       |       |
|                  | Final             | 6.71±.44  |      |       |       |
|                  | Initial           | 6.22±.84  | 2.51 | .014* | .46†  |
| Knowledge        |                   |           |      |       |       |
|                  | Final             | 5.73±1.13 |      |       |       |
|                  | Initial           | 5.84±.54  | 1.36 | .18   | .29†  |
| Total Score      |                   |           |      |       |       |
|                  | Final             | 5.66±.63  |      |       |       |

*Note:* \*p<.05, †d>0.2, small effect, ††d>0.5, medium effect, †††d>0.8 large effect

Comparison of Pre and Post-Test Scores

A paired t-test was used to compare pre and post-scores on the LGBT-DOCSS outcomes. As Table 2 shows, all subscales and total scores were significantly higher in the post-test group following completion of the LGBT+ cultural competency course. The largest improvement was in the clinical preparedness subscale. Also notably large effect sizes within the clinical preparedness subscale and total scale.

Table 2. Comparison of LGBT DOCSS Scores

| Assessment            | Pre-test M±SD | Post-test M±SD | t     | p      | d       |
|-----------------------|---------------|----------------|-------|--------|---------|
| Clinical preparedness | 4.53±.93      | 5.22±.87       | -7.15 | <.001* | -       |
|                       |               |                |       |        | 1.30††† |
| Attitudes             | 6.91±.24      | 6.95±.21       | -2.04 | .050*  | 37†     |
| Knowledge             | 6.22±.84      | 6.59±.74       | -2.63 | .014*  | 48†     |
| Total score           | 5.84±.54      | 6.20±.46       | -6.20 | <.001* | -       |
|                       |               |                |       |        | 1.31††† |

*Note:* t compared pre and post, N=30, \*p<.05†d>0.2, small effect, ††d>0.5, medium effect, †††d>0.8 large effect

A summary of the final participants' content-related attitudes is in Table 3, the majority of participants (96%) agreed that LGBT+ cultural competency is essential to PT curricula, should be CAPTE mandated in PT programs, and clinical practice guidelines should be published. When comparing initial scores to those final scores, the greatest increase was in the agreement that clinical practice guidelines should be established in PT. LGBT+ cultural competency is essential to PT curricula and had the greatest support both pre and post-test. This is interesting since current evidence found most academic PT programs have less than one hour of curricular content devoted to this content (Nowaskie et al., 2020). With regard to the LGBT+PT survey, the final group's attitudes toward inclusion of LGBT+ cultural competency were favorable pre-test and became more favorable in the post-test. Particularly noteworthy was the shift from agreeing to all strongly agreeing for the support of creating clinical practice guidelines as well as CAPTE accreditation standards including this content.

Table 3. Attitudes toward LGBT+ cultural competence

|                                      | Neither |              |       |          |          |          |
|--------------------------------------|---------|--------------|-------|----------|----------|----------|
|                                      | agree   |              |       |          |          |          |
|                                      |         | Strongly nor |       |          |          | Strong   |
| Question                             | Test    | Agree        | Agree | disagree | Disagree | Disagree |
| LGBT+ cultural competency is         | Pre     | 28           | 2     | 0        | 0        | 0        |
| essential to PT curricula            | Post    | 27           | 2     | 0        | 0        | 1        |
| LGBT+ cultural competency            | Pre     | 21           | 9     | 0        | 0        | 0        |
| knowledge should be CAPTE            | Post    | 26           | 3     | 1        | 0        | 0        |
| mandated in academic PT programs     |         |              |       |          |          |          |
| LGBT+ clinical practice guidelines   | Pre     | 20           | 10    | 0        | 0        | 0        |
| for PT's should be published         | Post    | 28           | 2     | 0        | 0        | 0        |
| I am confident that I can apply this | Post    | 24           | 6     | 0        | 0        | 0        |
| training to clinical practice**      |         |              |       |          |          |          |
|                                      |         |              |       |          |          |          |
|                                      |         |              |       |          |          |          |

Note: \*\*Only asked in post-test survey

Course Evaluation Survey

Overall, the course ratings were very positive across categories as shown in Table 4.

Areas that received the highest reviews were the course as a whole, the content, the organization, the usefulness, and the quantity covered. The greatest need for improvement was in the instructor's voice clarity and intellectual challenge. The most favorable ratings were in the course organization and usefulness of the content. These ratings inform areas to improve; the creation of reinforcement activities after each module such as quizzes or case review activities could engage the learner and increase the intellectual challenge. Also re-recording the modules using a script and making edits to improve voice clarity would improve the delivery.

To summarize the open-ended feedback, the most common content participants would like more of was allyship, details on the physiological impact of hormone therapy, trauma-informed care, and resources such as handouts, especially on inclusion for managers and clinic directors. Recommendations for increasing the depth of content and quality of the course were to add videos of patient intakes, evaluations, and case studies. This feedback primarily centered around the nuances of providing care to transgender patients as it relates to surgeries, behaviors such as tucking and binding, appropriate use of language and formality, and avoiding unconscious bias.

Table 4. Course Evaluation Scores

| Question                               | Excellent | Good | Fair | Poor |
|--|-----------|------|------|------|
| The course as a whole was:             | 19        | 10   | 1    | 0    |
| The course content was:                | 23        | 6    | 1    | 0    |
| The course organization was:           | 26        | 4    | 0    | 0    |
| The clarity of instructor's voice was: | 23        | 0    | 0    | 7    |
| The 2-hour duration was:               | 16        | 14   | 0    | 0    |
| The usefulness of content was:         | 25        | 5    | 0    | 0    |
| The amount you learned was:            | 18        | 10   | 2    | 0    |
| The quantity of content covered was:   | 22        | 7    | 1    | 0    |
| The intellectual challenge was:        | 11        | 15   | 4    | 0    |

#### Discussion and Implications

The results suggest that incorporating LGBT+ cultural competency training in an online asynchronous format did increase competency scores according to the LGBT-DOCSS. Of particular significance was clinical preparedness, which is the key to effective and equitable treatment of LGBT+ patients (Bidell, 2017). Also, favorable attitudes and knowledge both improved following the intervention which would have added impact on patient interactions, outcomes, and quality of care delivery (Bidell, 2017; Copti, 2016; Ross & Setchell, 2019). Additional findings suggest that physical therapists believe LGBT+ cultural competency training is essential in PT curricula, should be CAPTE-mandated, and the clinical guidelines should be published to drive best practices. Additionally, this study found that the course was evaluated very positively suggesting it can be utilized to continue to drive increased LGBT+ cultural competency.

Increased efforts to increase and maintain participants via incentives such as monetary reimbursements for time spent participating, and offering continuing education credits, would likely combat the challenge of participant attrition. Other methods of delivery utilizing education best practice principles to support experiential learning through synchronous or hybrid formats with short 10 to 15-minute modules with reinforcement activities would likely increase the interest and engagement from participants and keep them enrolled to completion. .

Expansion of this course from cultural competency to include cultural humility and responsiveness as well. Yeager and Bauer-Wu (2013) define cultural humility as a process of self-reflection and discovery that promotes self-awareness of biases and an understanding of the individual's positions of privilege. Cultural humility must also be achieved by active listening and curiosity in a situation driven by a desire to learn from the interactions with our patients

(Yeager & Bauer-Wu, 2013). Another space to grow as a care provider that essentially incorporates both cultural humility and cultural competency is cultural responsiveness. This is the ability to acknowledge and understand the impact culture has on the patient-provider dynamic and evolve treatment delivery to specialize care to the unique needs of each individual. Adapting the organization of the course to address each of the frameworks of cultural humility, competency and responsiveness would provide a structure for delivering content that doesn't end at competence but continues the career-long learning and practice of cultural proficiency which is lifelong growth focused on exploring and understanding the unique experiences of others to become a better person.

There is a new concept being discussed in the nursing literature that integrates these concepts and it is referred to as "cultural competemility" (Campinha-Bacote, J. 2018). Cultural competemility is defined as the process by which cultural humility intermingles with each of the five components of cultural competence: cultural awareness, cultural knowledge, cultural skill, cultural desire, and cultural encounters. During this process individuals must engage in becoming culturally competent while simultaneously demonstrating cultural humility as they participate in cultural encounters, acquire cultural knowledge, conduct culturally sensitive cultural assessments, and awaken to their own biases. The process of cultural competemility is not a destination with a finish line but a lifelong pursuit of processing and expertise (Campinha-Bacote, J. 2018). Cultural competemility would likely have a much greater impact on practice and the profession than cultural competence alone due to these characteristics.

With regard to further research on this front of LGBT+ cultural competency, further study of this content in clinical, academic, and patient populations is essential to develop LGBT+ clinical practice guidelines in physical therapy. These guidelines would provide a standard of

practice when engaging LGBT+ populations and enable a higher quality of care and outcomes for our patients.

In conclusion, the greatest impact on participant outcomes was in the clinical preparedness subscale as well as the total scale. This finding suggests this course is an effective tool to utilize when addressing PT clinician deficits in LGBT+ cultural competency. There was also significant support for this content to make its way into physical therapy curricula. Moving forward, the foundational nature of this course lends nicely to even the novice clinician the student physical therapist. Integrating the course into the doctor of physical therapy programs as well as physical therapy assistant programs is essential to continuing the growth and competence of our profession. Additionally, offering this course as a continuing education course for credits toward license renewal would be an effective way to engage already licensed clinicians in obtaining LGBT+ cultural competency. This two-pronged approach would enable access on both sides of the profession.

#### CHAPTER II: DISSEMINATION PLAN

This dissertation will be used to provide a foundational course for PT clinicians to pursue cultural competency, set baseline parameters of an LGBT+ cultural competency training, act as a starting point for effective training components, and start a conversation that may prompt the creation of CPGs for providing care to the LGBT+ communities. My immediate plan is to present a poster at ACAPT Educational Leadership Conference. The poster can be viewed in Appendix F.

### Purpose

To review the key points of the poster in detail, let's begin with the purpose of the study. The purpose of the study was to develop, deliver and evaluate an online asynchronous LGBT+ CC course for physical therapists. The importance of running this study was to develop a course that was evidence-based from the latest empirical data and its implications. A course like this in the physical therapy field has not been examined in the literature. The unique delivery of it being online and asynchronous makes this course different from those being held in person such as "Brave Space Trainings". This format allowed for access without barriers other than gaining use of a computer and internet connection.

#### Introduction

Courses to address physical therapists' deficits in this area are of significance because of the marginalization the LGBT+ people experience daily in this country and across the globe.

LGBT+ individuals are at higher risk for health care disparity and a major contributor to these issues is the lack of high quality culturally sensitive care from providers. There is no precedent in PT education to address LGBT+ cultural competency. Physical therapists have been shown to lack knowledge, awareness, and clinical preparedness with regard to engaging LGBT+

populations in clinical settings (Ross & Setchell, 2019). The majority of PTs and PTAs describe tolerance versus full respect for LGBT+ individuals (Ross & Setchell, 2019). LGBT+ patients report difficulty engaging in physical therapy and fear discrimination related to assumptions PTs make regarding sexual orientation and gender identity (Ross & Setchell, 2019).

#### Results

This study and course set out to address these very issues by recruiting a sample of licensed PTs to engage in the training and assess its effects as well as engage participants' attitudes regarding if this content should be included in academic and clinical settings in a more regulated and extensive manner. This study's results were significant in several ways. First, the course increased cultural competency across all three domains, demonstrated by the three subscale scores knowledge, attitudes, and clinical preparedness. The greatest effect was demonstrated in the clinical preparedness subscale. These findings suggest the online asynchronous method is a successful manner in which to deliver this content. This content accomplished its objectives of positively impacting the physical therapists' LGBT+ cultural competence. Additionally, the course received very favorable reviews across categories in the evaluation with particularly high scores in content and organization. Lastly, the PT's attitudes towards the inclusion and regulation of this content in academic and clinical settings were very positive. All of these components are essential for moving physical therapy practice forward.

## Discussion

Inclusion of LGBT+ cultural competency training in the academic setting through CAPTE mandate would serve to establish competent providers prior to licensure. Continued training such as this in clinical spaces for onboarding and annual training would address current deficits in licensed clinicians. Finally, the development of clinical practice guidelines would

mainstream this content for all providers in the profession. These guidelines would set a standard of care for our clinicians to provide high-quality, culturally sensitive, and competent care for those in the LGBT+ communities. In the long term, this could serve to increase access to healthcare for many in these marginalized communities, particularly in states with direct access licensures such as Pennsylvania. This would greatly improve the health of many in the community due to the unique care model in physical therapy practice where clinicians spend nearly an hour and often more in a one-on-one evaluation and follow-up visits over weeks and sometimes months with the patient examining and treating their health, wellness, and function.

#### **CHAPTER III: ACTION PLAN**

My objectives for dissemination of this content are to raise awareness and understanding for LGBT+ inclusion and CC in PT, create change in clinical settings and physical therapist practice, and continue further research to drive the creation of CPGs all with the ultimate goal of impacting LGBT+ patient experiences in the PT setting. The formats I intend to use to disseminate my findings are through poster presentations, journal articles, webinars, conference sessions, podcasts, and continuing education courses.

#### Short Term Plan

My intended short-term action plan is to present a poster at the American Counsel of Academic Physical Therapy Educational Leadership Conference (ELC) which can be viewed in Appendix F. ELC is designed to educate and engage academic administrators, faculty and clinicians via meetings, educational sessions, poster sessions, and exhibitors. I also intend to adapt the course into continuing education for online consumption. This course will provide continuing education credits for license renewal. Then at American Physical Therapy Association's Combined Sections Meeting in early 2023, I plan to deliver a poster presentation, an educational session, and perform CPG taskforce recruitment. From there I will look to interview on podcasts and disseminate via webinars with the APTA sections and state physical therapy associations. I will adapt content to match the needs of the varying sections in 2023.

## Long Term Plan

Five-year plan: Within the five-year period after the defense, I plan to be involved in two other studies which I will be able to utilize this training as a starting point and make changes to improve it for use in those two studies. One study is regarding belongingness in physical therapy clinical education. The first step was to adapt and validate a version of the Belongingness Scale -

Clinical Placement Experience (BES-CPE) for Doctor of Physical Therapy students. We are writing a manuscript to publish our validation study. The next steps of this study may lead to utilizing an adapted version of this training to train clinical instructors to support LGBT+ students in clinical experiences to increase belongingness. Many of the foundational concepts piloted in this course will be adapted to provide this training.

The second study is geared around doing the same for academics and clinicians already in the field and increasing cultural competency in clinical settings via training modules. This research group has completed stages 1 (focus groups of licensed PT's) and 2 (focus groups of PT academics) and have just begun stage 3 (focus groups of LGBT+ patients) now with over 100 focus groups. Many of the foundational concepts piloted in this course will be adapted based on the study's findings to provide this training.

These two studies along with several others will then contribute to informing the creation of CPGs. At this time there is not enough evidence to establish CPGs, however, with the new research being published in the next five years, it will be a possibility. I was nominated to attend the American Physical Therapy Associations CPGs workshop to start the process and potentially gather a team of "experts" to create LGBT+ specific CPGs. This is the final goal for all this work. This study and the course content will be the springboard for adapting and growing the content that I need to obtain buy-in from other clinicians. The clinical practice guidelines are the driving force of PT practice and with LGBT+ specific guidelines, a culture of competency within the physical therapy field will be one step closer. This may have positive influences on LGBT+ health and wellness long term.

#### REFERENCES

- Bauer, K., & Bai, Y. (2018). Using a Model to Design Activity-Based Educational Experiences to Improve Cultural Competency among Graduate Students. *Pharmacy*, *6*(2), 48. https://doi.org/10.3390/pharmacy6020048
- Bell, K.A. (2019) Part of the Solution to Address Sexual and Gender Minority Health and Health
  Care Disparities: Inclusive Professional Education. *Delaware Journal of Public Health*,
  5(3); 56-6
- Bidell, M. (2017). The lesbian, gay, bisexual, and transgender development of clinical skills scale (LGBT+-DOCSS): establishing a new interdisciplinary self-assessment for health providers. *Journal of Homosexuality*. *64* (10), 1432 1460. Retrieved from http://dx.doi.org/10.1080/00918369. 2017.1321389.
- Boroughs, M.S., Bedoya, A., O'Cleirigh, C., Safren, S. (2015). Toward Defining, Measuring, and Evaluating LGBT+ Cultural Competence for Psychologists. *Clin Psychol.* 22(2): 151-171. Doi:10.1111/cpsp.12098.
- Brottman, M. R., Char, D. M., Hattori, R. A., Heeb, R., & Taff, S. D. (2020). Toward Cultural Competency in Health Care: A Scoping Review of the Diversity and Inclusion Education Literature. *Academic Medicine*, *95*(5), 803–813.

  <a href="https://doi.org/10.1097/ACM.0000000000002995">https://doi.org/10.1097/ACM.0000000000000000995</a>
- Burch, A. (2008). Health care providers' knowledge, attitudes, and self-efficacy for working with patients with spinal cord injury who have diverse sexual orientations. *Physical Therapy*, 88(2), 191-198.

- Campinha-Bacote, J. (2002). The Process of Cultural Competence in the Delivery of Healthcare Services: A Model of Care. *Journal of Transcultural Nursing*, *13*(3), 181–184. https://doi.org/10.1177/10459602013003003
- Campinha-Bacote, J. (2018) Cultural Competernility: A Paradigm Shift in the Cultural

  Competence versus Cultural Humility Debate Part I. *OJIN: The Online Journal of Issues*in Nursing, 24 (1).
- Conron, K. J., Mimiaga, M. J., & Landers, S. J. (2010). A population-based study of sexual orientation identity and gender differences in adult health. *American Journal of Public Health*, *100*(10), 1953–1960. PubMedhttps://doi.org/10.2105/AJPH.2009.174169
- Copti, N., Shariari, R., Wanek, L., Fitzsimmons, A. (2016). Lesbian, gay, bisexual, and transgender inclusion in physical therapy: advocating for cultural competency in physical therapist education across the United States. *J Phys Ther Educ.* 30(4): 11-16.
- Cross, T., Bazron, B., Dennis, K., & Isaacs, M. (1989). *Towards a Culturally Competent System of Care, Volume 1*. Washington, DC: CASSP Technical Assistance Center, Center for Child Health and Mental Health Policy, Georgetown University Child Development Center
- Daley, A., & MacDonnell, J. A. (2015). 'That would have been beneficial': LGBT+ education for home-care service providers. *Health & Social Care in the Community*, 23(3), 282–291. PubMed https://doi.org/10.1111/hsc.12141
- Evans, D., Karpatkin, H., Thomas (2011). APTA and the LGBT community. Viewpoints. *PT in Motion*, *5*(3):7, 9-10.

- Gates, G. J. (2017). LGBT Data Collection Amid Social and Demographic Shifts of the US LGBT Community. *American journal of public health*, 107(8), 1220–1222. https://doi.org/10.2105/AJPH.2017.303927
- Gleason, A. (2012). LGBT: What's the relevance? Viewpoints. PT in Motion, 9-10.
- Grosz, A. M., Gutierrez, D., Lui, A. A., Chang, J. J., Cole-Kelly, K., & Ng, H. (2017). A student-led introduction to lesbian, gay, bisexual, and transgender health for first-year medical students. *Family Medicine*, 49(1), 52–56.
- Gwyer, J., & Hack, L. (2014). In search of cultural competence. J Phys Ther Educ, 28(1):3.
- Hafeez, H., Zeshan, M., Tahir, M.A., Jahan, N., Naveed, S. (2017). Health care disparities among lesbian, gay, bisexual, and transgender youth: a literature review. *Cureus*, 9, (4) e1184.
- Hawala-Druy, S., & Hill, M. H. (2012). Interdisciplinary: Cultural competency and culturally congruent education for millennials in health professions. *Nurse Education Today*, *32*(7), 772–778. <a href="https://doi.org/10.1016/j.nedt.2012.05.002">https://doi.org/10.1016/j.nedt.2012.05.002</a>
- Hayward, L., & Li, L. (2014). Promoting and assessing cultural competence, professional identity, and advocacy in Doctor of Physical Therapy (DPT) degree students within a community of practice. *J Phys Ther Educ*, 28(1):23–36.
- Hill, F., Condran, C., Pluss, A.J., Fons, L., Bell, K. (2018). Introduction to LGBT+ Competency Handbook for Physical Therapy. Accessed July 10, 2020. <a href="https://www.ptproud.org/for-clinicians-students">https://www.ptproud.org/for-clinicians-students</a>

- Human Rights Campaign. (2020). 2018 Gender-Expansive Youth Report.

  <a href="https://assets2.hrc.org/files/assets/resources/GEreport1.pdf?\_ga=2.18042928.843571573.158">https://assets2.hrc.org/files/assets/resources/GEreport1.pdf?\_ga=2.18042928.843571573.158</a>

  2349096-632567258.1580530664 Accessed February 21, 2020.
- Johnson BR, Onwuegbuzie AJ, Turner LA. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1, 112–133. https://doi:10.1177/1558689806298224.
- Jones, B. et al. (2016). Being transgender and levels of physical activity: An explorative qualitative study. Poster. DOI:10.13140/RG.2.1.1591.7680.
- Kietrys, D. (2012). The relevance of the LGBT Debate. Viewpoints. PT in Motion, 6-7.
- King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008).

  A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*, 8, 70. PubMedhttps://doi.org/10.1186/1471-244X-8-70
- Lambda Legal. (2010). When Health Care Isn't Caring: Lambda Legal's Survey of

  Discrimination Against LGBT People and People with HIV (New York)

  http://www.lambdalegal.org/publications/when-health-care-isnt-caring. Accessed April 29, 2016.
- Lee, J. G., Blosnich, J. R., & Melvin, C. L. (2012). Up in smoke: Vanishing evidence of tobacco disparities in the Institute of Medicine's report on sexual and gender minority health.

  \*American Journal of Public Health, 102(11), 2041–2043.

- Lewis, N. M. (2009). Mental health in sexual minorities: Recent indicators, trends, and their relationships to place in North America and Europe. *Health & Place*, *15*(4), 1029–1045. PubMedhttps://doi.org/10.1016/j.healthplace.2009.05.003
- Liberti, R. (2017). "Gendering the Gym": A History of Women in Physical Education.

  Kinesiology Review, 6, 153-166.
- Logan, J. (2011). LGBT: Another View. Viewpoints. PT in Motion, 3(8):8.
- Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H. A., McGinley, J., Brent, D. A. (2011). Suicidality and depression disparities between sexual minority and heterosexual youth: A meta-analytic review. *The Journal of Adolescent Health*, 49(2), 115–123. PubMedhttps://doi.org/10.1016/j.jadohealth.2011.02.005
- Matlock, M. (2011). PT's: Health promoters not judges. Viewpoints. PT in Motion, 8-9.
- McCann, E., & Brown, M. (2018). The inclusion of LGBT+ health issues within undergraduate healthcare education and professional training programmes: A systematic review. *Nurse Education Today*, *64*, 204–214. https://doi.org/10.1016/j.nedt.2018.02.028
- Maclain Z, Thomas R, Yehia BR. (2018). Sociocultural and Systemic Barriers to Health for Gender and Sexual Minority Populations. In: Smalley B, K. Warren JC, Nikki Barefoot K, eds. *LGBT Health: Meeting the Needs of Gender and Sexual Minorities*. Springer Publishing:15-25.
- Mertens, D. M. (2007). Transformative paradigm: Mixed methods and social justice. Journal of Mixed Methods Research, 1, 212-225.

- Mollon, L. (2012). The forgotten minorities: health disparities of the lesbian, gay, bisexual, and transgendered communities. J. *Health Care Poor Underserved*, 23(1) 1–6. doi:10.1353/hpu.2012.0009
- National Center for Transgender Equality. (2016) 2015 U.S. Transgender Survey Executive

  Summary. Accessed March 15, 2019

  <a href="https://transequality.org/sites/default/files/docs/usts/USTS-Executive-Summary-Dec17.pdf">https://transequality.org/sites/default/files/docs/usts/USTS-Executive-Summary-Dec17.pdf</a>
- Nowaskie DZ, Patel AU, Fang RC. (2020). A multicenter, multidisciplinary evaluation of 1701 healthcare professional students' LGBT cultural competency: Comparisons between dental, medical, occupational therapy, pharmacy, physical therapy, physician assistant, and social work students. *PLoS One*, 15(8). doi:http://dx.doi.org/10.1371/journal.pone.0237670.
- Obedin-Maliver, J., Goldsmith, E. S., Stewart, L., White, W., Tran, E., Brenman, S., Lunn, M. R. (2011). Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. *Journal of the American Medical Association*, 306(9), 971–977. https://doi.org/10.1001/jama.2011.1255
- Parameshwaran, V., Cockbain, B. C., Hillyard, M., & Price, J. R. (2017). Is the lack of specific lesbian, gay, bisexual, transgender and queer/questioning (LGBT+Q) health care education in medical school a cause for concern? Evidence from a survey of knowledge and practice among UK medical students. *Journal of Homosexuality*, 64(3), 367–381. https://doi.org/10.1080/00918369.2016.1190218

- Park, R.J. (1981). The Emergence of the Academic Discipline of Physical Education in the United States. G.A. Brooks (Eds.) *Perspectives in the Academic Disciplines of Physical Education*, (pp.20-45). Human Kinetics.
- Pavel, I. (2012). A return to the 1950's? Viewpoints. PT in Motion, 8-9.
- Romanelli, M., & Hudson, K. D. (2017). Individual and systemic barriers to health care:

  Perspectives of lesbian, gay, bisexual, and transgender adults. *The American Journal of Orthopsychiatry*, 87(6), 714–728. https://doi.org/10.1037/ort0000306 PubMed
- Ross, M. H., & Setchell, J. (2019). People Who Identify as LGBT+IQ+ Can Experience

  Assumptions, Discomfort, Some Discrimination, and a Lack of Knowledge While Attending

  Physiotherapy: A Survey. *Journal of Physiotherapy 65*(2), 99–105.

  <a href="https://doi.org/10.1016/j.jphys.2019.02.002">https://doi.org/10.1016/j.jphys.2019.02.002</a>.
- Singh, G. K., Daus, G. P., Allender, M., Ramey, C. T., Martin, E. K., Perry, C., Reyes, A., & Vedamuthu, I. P. (2017). Social Determinants of Health in the United States: Addressing Major Health Inequality Trends for the Nation, 1935-2016. *International journal of MCH and AIDS*, 6(2), 139–164. https://doi.org/10.21106/ijma.236
- Smith, M.M. & Jamieson, K.M. (2017). The Way We Never Were: Post racial Kinesiology and America. *Kinesiology Review, 6*, 167-177.
- Stotzer, R. L., Silverschanz, P., & Wilson, A. (2013). Gender identity and social services:

  Barriers to care. Journal of Social Service Research, 39, 63–77.

  http://dx.doi.org/10.1080/01488376.2011.637858.

- Toomey, R. B., Syvertsen, A. K., & Shramko, M. (2018). Transgender adolescent suicide behavior. *Pediatrics*, *142*(4), e20174218. https://doi.org/10.1542/peds.2017-4218 PubMed
- Vertinsky, P. (2017). A Question of the Head and the Heart: From Physical Education to Kinesiology in the Gymnasium and the Laboratory. *Kinesiology Review*, 6, 140-152.
- Wehbe-Alamah, H., Fry, D. (2014). Creating a culturally sensitive and welcoming academic environment for diverse health care students: a model exemplified with Muslim physical therapy students. *J Phys Ther Educ*, 28(1):5–15.
- Wierzbicki, N. (2012). Views on delivery of care and LGBT issues. Viewpoints. *PT in Motion*, 6.
- Witcomb, G. L., Bouman, W. P., Claes, L., Brewin, N., Crawford, J. R., & Arcelus, J. (2018). Levels of depression in transgender people and its predictors: Results of a large matched control study with transgender people accessing clinical services. *Journal of Affective Disorders*, 235, 308–315. https://doi.org/10.1016/j.jad.2018.02.051 PubMed.
- Yeager, K. A., & Bauer-Wu, S. (2013). Cultural humility: essential foundation for clinical researchers. *Applied nursing research : ANR*, 26(4), 251–256. https://doi.org/10.1016/j.apnr.2013.06.008

# APPENDIX A: SUMMARY RECOMMENDATIONS FOR HEALTH PROFESSIONAL EDUCATION CURRICULAR THREADS (EXPANDED UPON FROM AAMC, 2014)

Table 2. Summary of Recommendations for Health Professional Education Curricular Threads (Expanded Upon from AAMC, 2014)

|  | 1   |   |
|--|---|---|
| Area of Domain of Practice                 | Recommendations for Content   | Sample Objectives for Outcomes of Education   |
| Patient Care                               | Include terminology and practices specific<br>to SGM populations  | Develop effective rapport with all patients utilizing inclusive language and practices that avoid assumption-based terminology.   |
|  | Teach health disparities and health equity specific to SGM populations  |   |
| Knowledge for Practice                     | Apply biophysical scientific principles<br>fundamental to health  | "Define and describe the differences among: sex and gender; gender expression and gender identity; gender nonconformity, and gender dysphoria; and sexual orientation, sexual identity, and sexual behavior." 14  |
|  | Apply principles of social-behavioral sciences to principles of patient care  | "Understand and describe historical, political, institutional,<br>and sociocultural factors that may underlie health care<br>disparities experienced by SGM populations." 14  |
|  | Teach investigatory and analytic approach<br>to clinical situations inclusive of sexual<br>and gender minorities  | "Recognize the gaps in scientific knowledge and identify<br>various harmful practices that perpetuate the health<br>disparities for patients in the SGM populations." <sup>14</sup>   |
| Practice-Based Learning and<br>Improvement | Teach self-awareness and reflection to identify strengths, deficiencies and limits in one's knowledge and expertise   | "Demonstrate the ability to elicit feedback from individuals who identify within SGM populations about their health experiences and identify opportunities for change to improve care (e.g. inclusive language on intake forms)." <sup>14</sup>   |
|  | Teach critical appraisal and application of evidence related to patient health  | Include important clinical questions pertinent to SGM populations as they emerge when seeking the literature to inform clinical decisions.  |
| Interpersonal and<br>Communication Skills  | Cultural humility and competency content inclusive of these populations   | Demonstrate knowledge of current terminology respectful of SGM populations when describing patient care or establishing rapport with patients.  |
|  | Teach trauma-informed care and practices  |   |
|  | Skill based content on demonstrating insight and understanding about emotions and human responses to emotions that allow self-development in interpersonal interactions | "Understand that implicit bias and assumptions about sexuality, gender, and sex anatomy may adversely affect verbal, nonverbal, and/or written communication strategies involved in patient care, and engage in effective corrective self-reflection processes to mitigate those effects." 14 |
| Professionalism                            | Cultural humility and competency content and behaviors inclusive of these populations.  | Recognize and sensitively address all patients' and families'<br>health traditions and beliefs, and understand the possible<br>effect on diverse forms of sexuality and gender/gender<br>identity.  |
|  | Confidentiality and patient privacy with circumstances unique to these populations  | Recognize and follow the unique aspects of confidentiality with SGM populations and utilize appropriate consent practices.  |
|  | Ethics and accountability to patients, society, and the profession  | "Accept shared responsibility for eliminating disparities, overt<br>bias, and develop policies and procedures that respect all<br>patients' rights to self-determination." 14   |
| Systems-Based Practice                     | Teach advocacy for quality patient care and patient care systems  | Demonstrate knowledge about legal and systemic barriers<br>to health and resultant discriminatory practices that inhibit<br>optimal health outcomes for SGM populations.  |
|  | Teach the coordination of patient care to specifically target disparity impact  | "Identify and partner with community resources that provide<br>support to SGM populations to help eliminate bias from<br>health care and address community needs." 14   |
|  | Teach practices to effect change on behalf of SGM populations on a systems level  | "Explain how homophobia, transphobia, heterosexism, and sexism affect health care inequalities, costs, and outcomes." 14  |
| Interprofessional<br>Collaboration         | IPE cultural competency practices relative<br>to establishing and maintaining respectful<br>climates/cultures, dignity, diversity, and<br>ethical integrity             | Utilize interprofessional communication and collaboration in providing culturally competent, patient-centered care to the SGM populations and participate effectively as a member of an interdisciplinary health care team.   |
| Personal and Professional<br>Development   | Self-reflection content thread regarding<br>personal and professional development<br>goals  | "Critically recognize, assess, and develop strategies to mitigate<br>one's own implicit biases in providing care to SGM individuals<br>and recognize the contribution of bias to increased iatrogenic<br>risk and health disparities."  |

Bell, K.A. (2019) Part of the Solution to Address Sexual and Gender Minority Health and Health Care Disparities: Inclusive Professional Education. *Delaware Journal of Public Health*, *5*(3); 56-6

# APPENDIX B: BARRIERS, MANIFESTATIONS, RECOMMENDATIONS, AND FACILITATORS IN HEALTH FOR SEXUAL AND GENDER MINORITY POPULATIONS (BELL, CONDRAN, HOFFMAN TO BE PUBLISHED 2022)

| Barriers to<br>Health | Manifestation in SGM<br>Populations | Recommendations to<br>Address | Facilitators of Healthy Lifestyles in SGM Populations |
|-----------------------|-------------------------------------|-------------------------------|---|
| Individual Healthcare | Healthcare disparities              | Comprehensive                 | SGM Individual  |
| discrimination        | Heatineare dispartites              | • Comprehensive               | • SGW Individual                                      |
|                       | -> health                           | educational and               | Protective Factors                                    |
|                       | disparities                         | training requirements         | o Resilience  |
|                       | Distrust of medical                 | for SGM health and            | o Rejection of  |
|                       | professionals                       | cultural                      | stereotypes   |
|                       | Lack of medically                   | humility/competency           | o Proactive coping                                    |
|                       | necessary care provided in          | Multi-layered                 | o Shamelessness                                       |
|                       | a timely manner                     | inclusive approach to         | o Self-acceptance                                     |
|                       | Lawful refusal of necessary         | anti-discrimination           | o Self-esteem   |
|                       | care                                | policies and                  | o Self-efficacy                                       |
|                       |                                     | procedures on                 | o Self-care   |
|                       |                                     | national, state,              | o Spirituality  |
|                       |                                     | regional levels               | o Social Intelligence                                 |
|                       |                                     | Health system                 | o Courage   |
|                       |                                     | inclusion and                 | o Empathy   |
|                       |                                     | accountability metrics        | o Authenticity  |
|                       |                                     | for provider behavior         | o Creativity  |
|                       |                                     |                               | Interpersonal Protective                              |
|                       |                                     |                               | Factors   |
|                       |                                     |                               | o Connectedness                                       |

| Barriers to<br>Health        | Manifestation in SGM<br>Populations | Recommendations to<br>Address | Facilitators of Healthy Lifestyles in SGM Populations |
|------------------------------|-------------------------------------|-------------------------------|---|
|                              |                                     |                               | o Positive LGBTQ+                                     |
|                              |                                     |                               | role  |
|                              |                                     |                               | models/representation                                 |
|                              |                                     |                               | o Social Activism                                     |
|                              |                                     |                               | o Access to Safe                                      |
|                              |                                     |                               | Spaces/Positive                                       |
|                              |                                     |                               | Environments  |
|                              |                                     |                               | o Family Acceptance &                                 |
|                              |                                     |                               | Support   |
|                              |                                     |                               | Inclusive Practices in                                |
|                              |                                     |                               | Health Care   |
| Lack of access               | Increased use of illegal            | Advocacy/Activism             | Inclusive Practices                                   |
| to affirming care / coverage | e access to care and                | for continued                 | Affordable care and                                   |
| of care                      | therapeutics                        | equitable coverage of         | therapeutics  |
|                              | High risk health behaviors          | all affirming care            |   |
|                              | Increased suicidality,              | coverage by all health        |   |
|                              | suicidal ideation, mental           | insurance payers and          |   |
|                              | health disparities                  | employer-based plans          |   |
|                              |                                     |                               |   |
| System                       | TT 14 12 12 1                       | 37.7 11 13                    | E 4 11' 1   |
| Lack of training and         | Healthcare disparities ->           | National health               | Establishment of                                      |
| education available for      | health disparities                  | profession accreditors        | national association                                  |
| health<br>professionals /    | Reinforcement of                    | should enhance                | committees, task forces,                              |
| Lack of national             | misinformation that sexual          | requirements for SGM          | etc. with focus on SGM                                |
| standards                    | orientation/gender identity         | health and cultural           | health (example: PT                                   |
|                              | are not important to health         | humility practices in         | Proud – American                                      |
|                              |                                     |                               |   |

| Barriers to<br>Health |   | anifestation in SGM<br>pulations |   | commendations to<br>dress          | Lif | cilitators of Healthy<br>Testyles in SGM<br>pulations |
|-----------------------|---|----------------------------------|---|------------------------------------|-----|---|
|                       |   |                                  |   | accreditation                      |     | Physical Therapy                                      |
|                       |   |                                  |   | standards                          |     | Association Committee)                                |
|                       |   |                                  | • | Comprehensive                      | •   | Organizations promoting                               |
|                       |   |                                  |   | curricular threads for             |     | and providing inclusive                               |
|                       |   |                                  |   | SGM health in health               |     | professional education                                |
|                       |   |                                  |   | professional education             |     | around SGM health                                     |
|                       |   |                                  |   | - both entry-level and             |     | (example: The National                                |
|                       |   |                                  |   | continuing education <sup>17</sup> |     | LGBT Health Education                                 |
|                       |   |                                  | • | Health professional                |     | Center at the Fenway                                  |
|                       |   |                                  |   | associations visibility            |     | Health Center).                                       |
|                       |   |                                  |   | and advocacy efforts               |     |   |
|                       |   |                                  |   | around SGM health                  |     |   |
|                       |   |                                  |   | training should be                 |     |   |
|                       |   |                                  |   | advanced                           |     |   |
| Lack of research and  | • | Minimal data on healthy          | • | All entities, at all               | •   | Inclusive healthcare                                  |
| data                  |   | lifestyle trends and data        |   | levels from local to               |     | intake forms and                                      |
|                       | • | Minimal data on successful       |   | national, should add               |     | electronic medical                                    |
|                       |   | health interventions for         |   | measures of sexual                 |     | records systems                                       |
|                       |   | SGM populations                  |   | orientation, gender                | •   | Research efforts that                                 |
|                       | • | Invisibility of demographic      |   | identity, and intersex             |     | include SOGI data and                                 |
|                       |   | data bases for analysis of       |   | status to all data                 |     | analysis  |
|                       |   | health data                      |   | collection efforts and             | •   | 2016 NIH official                                     |
|                       | • | Perpetuation of                  |   | instruments. This                  |     | designation of SGM                                    |
|                       |   | misinformation and myths         |   | should include                     |     | populations as a health                               |
|                       |   | in health for SGM                |   | population-based                   |     | disparity population for                              |
|                       |   | populations                      |   | surveys, clinical                  |     | NIH research.   |

| Barriers to<br>Health | Manifestation in SGM<br>Populations | Recommendations to Address  | Facilitators of Healthy<br>Lifestyles in SGM<br>Populations |
|-----------------------|-------------------------------------|-----------------------------|---|
|                       | Invisibility of identification      | records, and forms          | All of Us Research  |
|                       | of inequities because of            | used to collect             | Program   |
|                       | failure to collect and              | demographics. <sup>12</sup> | (https://allofus.nih.gov/)                                  |
|                       | measure sexual orientation          | Funders and                 | • 2015 Establishment of                                     |
|                       | and gender identity                 | researchers should          | the Sexual & Gender   |
|                       | information                         | fund/conduct                | Minority Research   |
|                       |                                     | methodological              | Office (SGMRO) at the                                       |
|                       |                                     | research to develop,        | NIH   |
|                       |                                     | improve, and expand         |   |
|                       |                                     | measures that capture       |   |
|                       |                                     | the range of sexual         |   |
|                       |                                     | and gender diversity        |   |
|                       |                                     | in the population and       |   |
|                       |                                     | the determinants of         |   |
|                       |                                     | well-being for these        |   |
|                       |                                     | communities. 12             |   |
|                       |                                     | US OMB convening            |   |
|                       |                                     | relevant stakeholders       |   |
|                       |                                     | to address barriers to      |   |
|                       |                                     | linking data from           |   |
|                       |                                     | different datasets to       |   |
|                       |                                     | facilitate research on      |   |
|                       |                                     | the health status and       |   |
|                       |                                     | well-being of these         |   |
|                       |                                     | communities.                |   |
| Environmental         |                                     |                             |   |

| Barriers to<br>Health                             | Manifestation in SGM<br>Populations | Recommendations to<br>Address | Facilitators of Healthy<br>Lifestyles in SGM<br>Populations |
|---|-------------------------------------|-------------------------------|---|
| Inequitable                                       | Higher disparities in               | Adopt a Health in All         | 2020 Supreme Court  |
| local, state,<br>national anti-<br>discrimination | employment stability,               | Policy (HiAP)                 | Ruling in Bostock v.  |
| protections                                       | housing security, public            | framework to health-          | Clayton County, GA:   |
|   | accommodations safety               | related rights and            | federal employment  |
|   | Hate crimes                         | obligations. <sup>11</sup>    | protections for SGM   |
|   | Legalized, societally               | Conduct                       | communities   |
|   | endorsed discrimination             | comprehensive CHNA            | Local and state employer                                    |
|   | Fear of living as SGM               | inclusive of SGM              | and public  |
|   | authentic selves to survive         | populations and a             | accommodation anti-   |
|   |                                     | focus on                      | discrimination  |
|   |                                     | intersectionality             | protections   |
| Non-Inclusive                                     | Lack of gender neutral              | All-gender bathrooms          | LGBTQ+ friendly   |
| physical and<br>clinical health<br>spaces         | facilities                          | should be available in        | provider lists  |
| spaces  | Lack of transgender                 | all spaces                    | Inclusive non-  |
|   | inclusive athletic policies         | All-gender locker             | discrimination policies                                     |
|   | (23 bills in 18 states              | room spaces or single-        | with supportive linked                                      |
|   | introduced in 2020). 18             | use space should be           | procedures for  |
|   | Exclusion from sports all           | allocated                     | implementation  |
|   | together- manifests as              | All clinical spaces           | Institutional programs                                      |
|   | detrimental to physical and         | should have diverse           | with LGBTQ+ resources                                       |
|   | mental well-being,                  | and inclusive                 | Equitable resource  |
|   | academic performance,               | representation in             | allocation to SGM   |
|   | academic attendance,                | materials of SGM              | population health and                                       |
|   | graduation rates                    | populations                   | focus   |
|   |                                     | Utilize a variety of          |   |
|   |                                     | ways to convey                |   |

| Barriers to<br>Health  | Manifestation in SGM<br>Populations   | Recommendations to<br>Address   | Facilitators of Healthy<br>Lifestyles in SGM<br>Populations   |
|--|---|---|---|
| A 4' LORTO   |   | welcoming environments: rainbow stickers, HRC stickers, etc.  • Advocacy efforts and inclusive policies relative to sport participation at every level that allows safe participation of transgender athletes | Role-models of inclusive practices and advocacy for inclusive space   |
| Anti-LGBTQ+<br>Legislation /<br>Religious<br>Freedom Laws<br>targeting SGM<br>populations as<br>exemptions | <ul> <li>Same as above for inequitable antidiscrimination protections</li> <li>Continued politicization of SGM lives</li> <li>Minority stress and cumulative trauma</li> <li>Fear in living authentic selves; fear of being "out"</li> <li>Decreased sense of spirituality/religious well-being because of exclusion</li> </ul> | <ul> <li>Advocacy efforts and educational efforts for equal rights for SGM populations</li> <li>Equitable resource allocation to lobbying and efforts for inclusive equal rights</li> </ul>                   | <ul> <li>Continued legal         precedents for equal         rights     </li> <li>Inclusive LGBTQ+         legislation     </li> </ul> |

Adapted and expanded on from: Maclain, Thomas, and Yehia, 2018 Sexual Minority SDOH

#### APPENDIX C: SURVEY COMPONENTS

# **PreTest Components**

| Are you a licensed physical therapist? |  |
|--|--|
| O Yes                                  |  |
| O No                                   |  |

Project Title: An asynchronous LGBT+ cultural competency training for physical therapists

Principal Investigator: Chris W. Condran, PT, DPT, EdD (c), MBA-HCM, MS

Faculty Advisor: Diane Gill, PhD

I am asking you to participate in this research study because you have been identified as a licensed physical therapist who is likely engaging with patients from the LGBT+ communities. This research project is being conducted by an EdD student from UNCG who is interested in understanding physical therapists' level of cultural competency with LGBT+ patients and what potential impact if any a cultural competency training may have on physical therapists. This research project will take about 3 hours total including the training. It will involve you taking surveys before and after participating in an asynchronous self-paced training.

Your participation in this research project is voluntary. The potential negative effect is none other than the time you spend participating there are no known or foreseeable risks involved with this study.

You may obtain benefit from participating in the training to become more LGBT+ culturally competent. The sole compensation for participating is the benefit of free LGBT+ cultural competency training.

We will do everything possible to make sure that your information is kept confidential. All information obtained in this study is strictly confidential unless disclosure is required by law. There are no physical risks associated with this study. There is, however, the potential risk of loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. We will be asking you specific demographic questions about your racial, ethnic, and gender identities. You may select "prefer not to say" if you are not comfortable answering these questions. Absolute

42

#### **Qualtrics Survey Software**

confidentiality of data provided through the Internet cannot be guaranteed due to the limited protections of Internet access. Please be sure to close your browser when finished so no one will be able to see what you have been doing. You do not have to be part of this study. This study is voluntary and it is up to you to decide to participate in this research study.

If you agree to participate, at any time in this study you may stop participating without penalty.

You can ask the Primary investigator Chris W. Condran via email at cwcondran@gmail.com or Faculty advisor Diane Gill dlgill@uncg.edu anything about the study.

If you have concerns about how you have been treated in this study call the Office of Research Integrity Director at 1-855-251-2351.

Please print a copy of this consent form for your records.

University of North Carolina at Greensboro's IRB has approved the solicitation of participants for the study.

I voluntarily give my consent to participate in this research study.

O yes

O No

During this study you will follow these steps to participate:

- 1. Complete the below survey, be sure to input your email at the end so you can receive the link to the teachable cultural competency course.
- 2. Receive email with linked course.
- 3. Complete teachable cultural competency course. (course is approximately 2 hours in length)

| 4. Follow course completion link at end of course to complete the post test survey  |
|---|
| 5. Receive email with course completion certificate following post test survey  |
| Identify your gender (May select more than one)  Female  Male  Non-binary  Transgender  Cisgender  Agender  Genderqueer  Prefer to self-describewrite in  Prefer not to say |
| Identify your sexual orientation  Straight/Heterosexual  Gay  Lesbian  Bisexual  Queer  Asexual  Prefer to self-describewrite in  Prefer not to say                         |
| Identify your race  American Indian Alaskan Native Asian Black African American Native Hawaiian   |

| 0    | Pacific Islander  |
|------|---|
| 0    | White   |
| 0    | Prefer to self-describewrite in   |
| 0    | Prefer not to say   |
|      |   |
| Ider | ntify your ethnicity  |
| 0    | Are you of Hispanic, Latino/a/x, or of Spanish origin? (one or more categories may be selected) |
| 0    | No, not of Hispanic, Latino/a/x, or Spanish origin  |
| 0    | Yes, Mexican, Mexican American, Chicano/a/x   |
| 0    | Yes, Puerto Rican   |
| 0    | Yes, Cuban  |
| 0    | Yes, Another Hispanic, Latino/a/x or Spanish origin   |
| 0    | Prefer to self-describewrite in   |
| 0    | Prefer not to say   |
|      |   |
| lder | ntify your age  |
| 0    | 18-25   |
| 0    | 26-35   |
| 0    | 36-45   |
| 0    | 46-55   |
| 0    | 56-65   |
| 0    | 66-75   |
| 0    | 75+   |
|      |   |
| Whi  | ch region do you live in?   |
| 0    | Midwest - IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI  |
| 0    | Northeast - CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT                                      |
| 0    | Southeast - AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV                                      |
| 0    | Southwest - AZ, NM, OK, TX  |
| 0    | West - AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY   |

| vvnic | in terminal degree have you obtained?                |
|-------|--|
| 0     | DPT  |
| 0     | MPT or MS  |
| 0     | BS   |
| 0     | Other please describe                                |
|       |  |
| Whic  | h setting do you practice in?                        |
|       | acute care   |
| _     |  |
|       | outpatient   |
|       | skilled nursing facility<br>inpatient rehabilitation |
|       | home health  |
| O     | nome neam  |
|       |  |
| How   | many years have you been practicing PT?              |
| 0     | 1-4  |
| 0     | 5-10   |
| 0     | 11-15  |
| 0     | 16-20  |
| 0     | 20 or more   |
|       |  |
| Do y  | ou hold a Board Certification?                       |
| 0     | Yes, Cardiovascular and Pulmonary                    |
| _     | Yes, Clinical Electrophysiology                      |
| 0     | Yes, Geriatrics                                      |
| 0     | Yes, Neurology                                       |
| 0     | Yes, Oncology  |
| 0     | Yes, Orthopedics                                     |
| 0     | Yes, Pediatrics                                      |
| 0     | Yes, Sports  |
| 0     | Yes, Women's Health                                  |
| 0     | Yes, Wound Management                                |

| 1 0                                     | No  |
|---|---|
| O (                                     | ou hold any other certificates (ie: CLTs, ATCs, CSCS)  Yes, please describe   |
| Are y                                   |   |
| 0 | Γ+ cultural competency knowledge is essential to physical therapy curricula.  Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree    |
| progr                                   | T+ cultural competency knowledge should be CAPTE mandated in academic DPT rams.  Strongly Disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree |
| 0 1 0 1 0                               | T+ clinical practice guidelines for PT's should be published.  Strongly Disagree  Disagree  Neither agree nor disagree  Agree                                   |

# O Strongly agree

ı

O Strongly agree

Bidell, M. P. (2017). The Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS): Establishing a new interdisciplinary self-assessment for health providers. Journal of Homosexuality, 10, 1432–1460. doi: 10.1080/00918369.2017.1321389

Instructions: Items on this scale are intended to examine clinical preparedness, attitudes, and basic knowledge regarding lesbian, gay, bisexual, and transgender (LGBT) clients/patients. Please use the provided scale to rate your level of agreement or disagreement for each item. Please note, items on this scale primarily inquire about either sexual orientation (LGB = lesbian, gay, and bisexual) or gender identity (transgender). Two questions are inclusive and refer collectively to lesbian, gay, bisexual, and transgender (LGBT) clients/ patients.

I am aware of institutional barriers that may inhibit transgender people from using health care services.

| O  | Strongly disagree  |
|----|--|
| 0  | Disagree   |
| 0  | Somewhat disagree  |
| 0  | Neither agree nor disagree   |
| 0  | Somewhat agree   |
| 0  | Agree  |
| 0  | Strongly agree   |
|    |  |
| am | aware of institutional barriers that may inhibit LGB people from using health services |
| 0  | Strongly disagree  |
| 0  | Disagree   |
| 0  | Somewhat disagree  |
| 0  | Neither agree nor disagree   |
|    |  |
| 0  | Somewhat agree   |
|    | Somewhat agree Agree   |

| I thi | nk being transgender is a mental disorder.   |
|-------|--|
| 0     | Strongly disagree  |
| 0     | Disagree   |
| 0     | Somewhat disagree  |
| 0     | Neither agree nor disagree   |
| 0     | Somewhat agree   |
| 0     | Agree  |
| 0     | Strongly agree   |
| l wo  | uld feel unprepared talking with a LGBT client/patient about issues related to their |
| sexu  | ual orientation or gender identity.  |
| 0     | Strongly disagree  |
| 0     | Disagree   |
| 0     | Somewhat disagree  |
| 0     | Neither agree nor disagree   |
| 0     | Somewhat agree   |
| 0     | Agree  |
| 0     | Strongly agree   |
| A sa  | ame sex relationship between two men or two women is not as strong and committed     |
| as o  | ne between a man and a woman.  |
| 0     | Strongly disagree  |
| 0     | Disagree   |
| 0     | Somewhat disagree  |
| 0     | Neither agree nor disagree   |
| 0     | Somewhat agree   |
| 0     | Agree  |
| 0     | Strongly agree   |
|       |  |

I am aware of research indicating that LGB individuals experience disproportionate levels of health and mental health problems compared to heterosexual individuals.

| O    | Strongly disagree   |
|------|---|
| 0    | Disagree  |
| 0    | Somewhat disagree   |
| 0    | Neither agree nor disagree  |
| 0    | Somewhat agree  |
| 0    | Agree   |
| 0    | Strongly agree  |
| LGE  | B individuals must be discreet about their sexual orientation around children.  |
| 0    | Strongly disagree   |
| 0    | Disagree  |
|      | Somewhat disagree   |
|      | Neither agree nor disagree  |
|      | Somewhat agree  |
|      | Agree   |
|      | Strongly agree  |
| disp | aware of research indicating that transgender individuals experience proportionate levels of health and mental health problems compared to cisgender viduals. |
| O    | Strongly disagree   |
| 0    | Disagree  |
| 0    | Somewhat disagree   |
|      | Neither agree nor disagree  |
| 0    | Somewhat agree  |
|      | Agree   |
| O    | Strongly agree  |
| Whe  | en it comes to transgender individuals, I believe they are morally deviant.   |
| 0    | Strongly disagree   |
| 0    | Disagree  |
| Õ    | Somewhat disagree   |
| _    | ·   |

| 0           | Neither agree nor disagree  |
|-------------|---|
| 0           | Somewhat agree  |
| 0           | Agree   |
| 0           | Strongly agree  |
|             |   |
|             | ve received adequate clinical training and supervision to work with transgender ats/ patients.  |
| 0           | Strongly disagree   |
| 0           | Somewhat disagree   |
| 0           | Neither agree nor disagree  |
| 0           | Somewhat agree  |
| 0           | Strongly agree  |
|             |   |
| O<br>O<br>O | ve received adequate clinical training and supervision to work with lesbian, gay, and xual (LGB) clients/patients  Strongly disagree  Somewhat disagree  Neither agree nor disagree  Somewhat agree  Strongly agree |
| The         | lifestyle of a LGB individual is unnatural or immoral.  |
| 0           | Strongly disagree   |
| 0           | Disagree  |
|             | Somewhat disagree   |
|             | Neither agree nor disagree  |
|             | Somewhat agree  |
| 0           | Agree   |
| 0           | Strongly agree  |
|             |   |

I have experience working with LGB clients/patients.

| 0                          | Strongly disagree   |
|----------------------------|---|
| 0                          | Disagree  |
| 0                          | Somewhat disagree   |
| 0                          | Neither agree nor disagree  |
| 0                          | Somewhat agree  |
| 0                          | Agree   |
| 0                          | Strongly agree  |
|                            |   |
| I fee                      | l competent to assess a person who is LGB in a therapeutic setting.   |
| 0                          | Strongly disagree   |
| 0                          | Disagree  |
| 0                          | Somewhat disagree   |
| 0                          | Neither agree nor disagree  |
| 0                          | Somewhat agree  |
| 0                          | Agree   |
| 0                          | Strongly agree  |
|                            |   |
|                            |   |
| I fee                      | l competent to assess a person who is transgender in a therapeutic setting.   |
| _                          | Il competent to assess a person who is transgender in a therapeutic setting.  Strongly disagree   |
| 0                          |   |
| 0                          | Strongly disagree   |
| 0 0 0                      | Strongly disagree Disagree  |
| 0000                       | Strongly disagree Disagree Somewhat disagree  |
| 00000                      | Strongly disagree Disagree Somewhat disagree Neither agree nor disagree   |
| 000000                     | Strongly disagree Disagree Somewhat disagree Neither agree nor disagree Somewhat agree  |
| 000000                     | Strongly disagree Disagree Somewhat disagree Neither agree nor disagree Somewhat agree Agree  |
| 000000                     | Strongly disagree Disagree Somewhat disagree Neither agree nor disagree Somewhat agree Agree  |
| 000000                     | Strongly disagree Disagree Somewhat disagree Neither agree nor disagree Somewhat agree Agree Strongly agree   |
| 000000                     | Strongly disagree Disagree Somewhat disagree Neither agree nor disagree Somewhat agree Agree Strongly agree  ve experience working with transgender clients/patients.                             |
| 000000                     | Strongly disagree Disagree Somewhat disagree Neither agree nor disagree Somewhat agree Agree Strongly agree  Ve experience working with transgender clients/patients.  Strongly disagree          |
| 0<br>0<br>0<br>0<br>0<br>0 | Strongly disagree Disagree Somewhat disagree Neither agree nor disagree Somewhat agree Agree Strongly agree  Ve experience working with transgender clients/patients.  Strongly disagree Disagree |

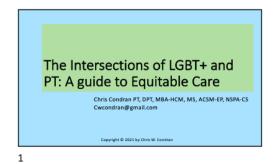
| O Agree   |
|---|
| O Strongly agree  |
|   |
| People who dress opposite to their biological sex have a perversion.                                |
| O Strongly disagree   |
| ODisagree   |
| O Somewhat disagree   |
| O Neither agree nor disagree  |
| O Somewhat agree  |
| O Agree   |
| O Strongly agree  |
|   |
| I would be morally uncomfortable working with a LGBT client/patient.                                |
| O Strongly disagree   |
| O Somewhat disagree   |
| Neither agree nor disagree  |
| O Somewhat agree  |
| O Strongly agree  |
|   |
| Please enter your email address to be sent a link to the Teachable LGBT Cultural Competency Course. |
|   |
| Powered by Qualtrics  |

# Post Test Components

- 1. Have you completed the Pre Test and LGBT Cultural Competency Course?
  - Yes
  - No
- 2. LGBT-DOCSS repeated as shown above in Pre-test components
- 3. *LGBT*+&*PT Survey* repeated as shown above in Pre-test components
- 4. I am confident that I can apply this training to clinical practice effectively.
  - Strongly disagree

- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree
- 5. Course Evaluation Survey
- \*\*Participant Rated each comment: Excellent, Good, Fair, Poor
  - 1. The course as a whole was:
  - 2. The course content was:
  - 3. The course organization was:
  - 4. The clarity of instructor's voice was:
  - 5. The 2-hour duration was:
  - 6. The usefulness of content was:
  - 7. The amount you learned was:
  - 8. The quantity of content covered was:
  - 9. The intellectual challenge was:
  - \*\*Participant Open Ended Questions
    - 1. What would you like to see more of?
    - 2. What content did you feel was missing?
    - 3. Any additional comments you would like to share?
    - 4. Please enter your email address to be sent a course completion certificate.

# APPENDIX D: LGBT+ CULTURAL COMPETENCY COURSE SLIDES





2

4



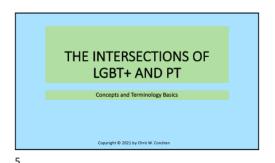
Area of Domain of Practice: Personal and Professional Development

OPEN DISCUSSION

 Think of the therapy setting.
 •What things might make a person who identifies as LGBTQ+ feel excluded?

Capyright © 1021 by Chris W. Candran

Area of Domain of Practice: Personal and Professional Development



Concepts and Terminology Basics

What does LGBTQ+ represent?

Copyright © 2021 by Chris W. Condran

Area of Domain of Practice: Patient Care and Knowledge for practice



Concepts and Terminology
Basics

Cisgender
Vs.
Transgender

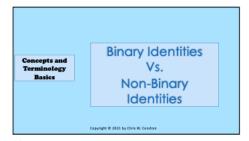
7

Area of Domain of Practice: Patient Care and Knowledge for practice

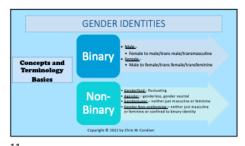
Area of Domain of Practice: Patient Care and Knowledge for practice



Area of Domain of Practice: Patient Care and Knowledge for practice



Area of Domain of Practice: Patient Care and Knowledge for practice



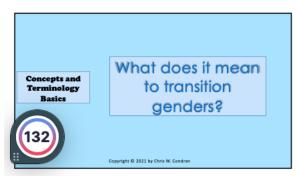
Area of Domain of Practice: Patient Care and Knowledge for practice



12

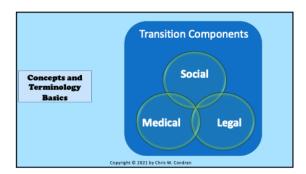
8

Area of Domain of Practice: Patient Care and Knowledge for practice



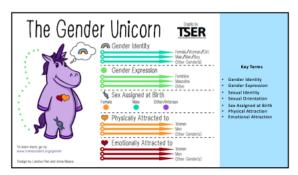
13 Area of Domain

Area of Domain of Practice: Patient Care and Knowledge for practice



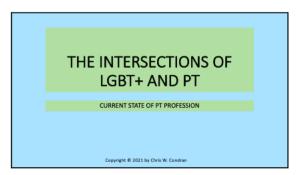
14

Area of Domain of Practice: Patient Care and Knowledge for practice



15

Area of Domain of Practice: Patient Care and Knowledge for practice

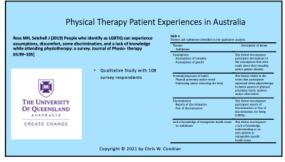


16



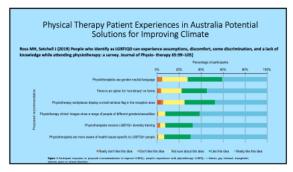
17

Area of Domain of Practice: Patient-Based Learning and Improvement



18

Area of Domain of Practice: Patient-Based Learning and Improvement



Area of Domain of Practice: Patient-Based Learning and Improvement Institute of Medicine:
Health of LGBT People Personal & Structural
Barriers to Care

"Personal-level barriers are created by the attitudes, beliefs, and behaviors of individuals within the health care system—both providers and patients" (p. 62).

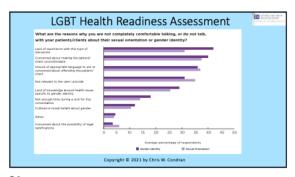
Enacted stigma- outward, overt stigmatizing of population (refusing care, verbal abuse, etc.)

Felt stigma "awareness of the possibility that stigma will be enacted in particular situations" (p. 63).

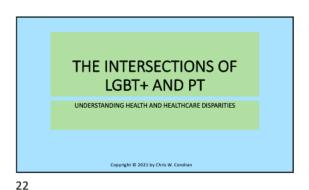
Internalized stigma- "accepting the legitimacy of society's negative regard for the stigmatized group" (p.64)

Compounded by other

Area of Domain of Practice: Patient-Based Learning and Improvement



Area of Domain of Practice: Patient-Based Learning and Improvement



BARRIERS TO EQUITY AND INCLUSION

Fair and inclusive Workspaces

Access to Health insurance

Access to Competent Healthcare

Lidentity Documents

Gender Marker Changes

Freedom from discrimination

Hate crimes laws

Astibulitying and Safe schools

Athetic Competition Policies

Secure Legal lies between parents and children

Walsoming Fails Communities

Commission Therapy

Hespital policies for caring for a sick partner or child

Freedom to marry

Public Access - bathroom, locker nom, etc.

Messing

Generation

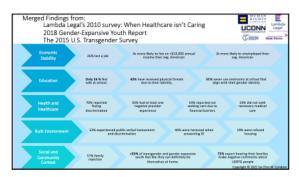
Housing

Generation

Area of Domain of Practice: Patient Care/Systems-Based Practice Health and Healthcare Disparities

| Company | Continue | Continue

Area of Domain of Practice: Patient Care/Systems-Based Practice



25

Area of Domain of Practice: Patient Care/Systems-Based Practice



26

Area of Domain of Practice: Patient Care/Systems-Based Practice

#### Mental Health Considerations of Transgender Individuals

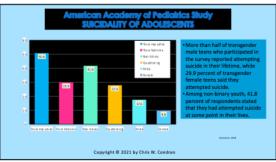
- Kaiser Permanente health system multilocation retrospective health record review study from 6,459 transgender people and 127,668 non-transgender people found<sup>11</sup>:

  - Nearry ail mental health conditions were more common among transgender people than people who aren't transgender.
     Self-harm and thoughts about suicide were more common among transgender youth ages 10 to 17 years than non-transgender youth of the same age.

Copyright © 2021 by Chris W. Condran

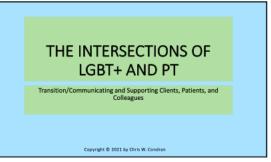
27

Area of Domain of Practice: Patient Care/Systems-Based Practice



28

Area of Domain of Practice: Patient Care/Systems-Based Practice

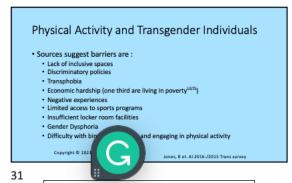


29



30

Area of Domain of Practice: Personal and Professional Development



TRANS-ATHLETE POLICIES

Copyright © 2021 by Chris W. Condran

32

Area of Domain of Practice: Patient Care/Systems-Based Practice

AS OF 2015,

Male-to-female transgender athletes may compete without undergoing transition surgery

Maintain a maximum testosterone level of 10 nanomoles per liter for at least 12 months prior to competition

But some scientists reportedly feel this is too lenient, considering women's testosterone levels average between 0.12 and 1.79 mol/l and men's between 7.7 and 29.4 nmol/l.

Transmen compete with cisgender men and are subject to the same testing.

1. A trans male (FTM) student-athlete who has received a medical exception for treatment with testosterone for diagnosed Gender Identity Disorder or gender dyschroir, for purposes of NCAA competition may compete means than without changing that team status to a mixed team.

2. A trans female (MFF) student-athlete being treated with testosterone suppression medication for Gender Identity Disorder or gender dysphoria, for the purposes of NCAA competition may continue to compete on a mem's team status until Competing one calendar year of testosterione suppression treatment.

Any transgender student-athlete who is not toking hormone treatment related to gender transition may participate in sox-separated sports activities related to gender transition may participate may compete the student athlete who is not toking hormone treatment.

2. A trans male (FTM) student-athlete who is not toking hormone treatment.

3. A trans male (FTM) student-athlete who is not more transition may participate on a mem's or women's team.

4. A trans female (MTF) transgender student-athlete who is not taking hormone treatments related to gender transition may not compete on a women's team.

Copyright 0 2021 by thris W. Condran

Area of Domain of Practice: Patient Care/Systems-Based Practice Area of Domain of Practice: Patient Care/Systems-Based Practice

PIAA Guidelines-TRANSGENDER POLICY

"Where a student's guestioned or uncertain, the decision of the Principal as to the student's gender will be accepted by PIAA."

STATE ATHERICASSOCIATION GUIDANCE

ON INCLUSION DE TRANSGENDER NOVEMBRISH OF TRANSGEND

**Athletic Competition and Policies** 

• +22 minutes

• No League Of Their Own: Transgender Athletes

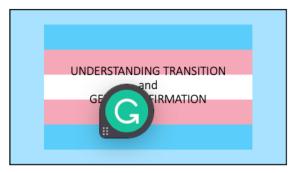
https://youtu.be/qZ8axU8POs4

Copyright © 2021 by Chris W. Condran

Area of Domain of Practice: Patient Care/Systems-Based Practice

35

36



Transition Components

Social

Oothing
I lair style
Pronouns
Name

Legal

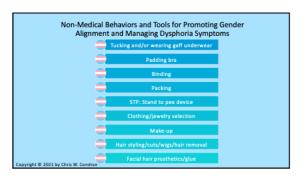
Court ordered name
Other's Scense
Surgery

Copyright © 2021 by Chris W. Condran

37

38

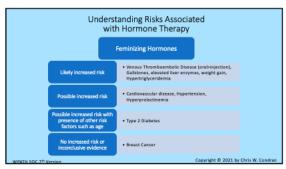
Area of Domain of Practice: Patient Care/Systems-Based Practice/Knowledge for Practice



Area of Domain of Practice: Patient
Care/Systems-Based Practice/Knowledge for
Practice



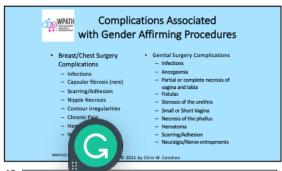
Area of Domain of Practice: Patient
Care/Systems-Based Practice/Knowledge for
Practice



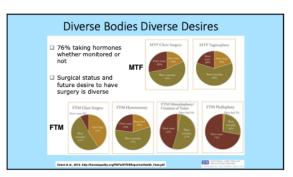
Area of Domain of Practice: Patient
Care/Systems-Based Practice/Knowledge for
Practice



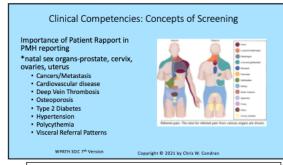
Area of Domain of Practice: Patient
Care/Systems-Based Practice/Knowledge for
Practice



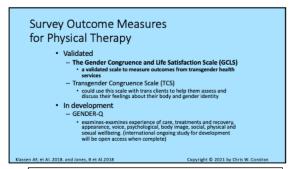
Area of Domain of Practice: Patient
Care/Systems-Based Practice/Knowledge for
Practice



Area of Domain of Practice: Patient
Care/Systems-Based Practice/Knowledge for
Practice



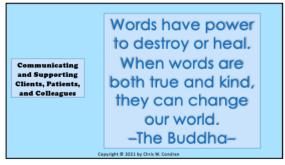
45 Area of Domain of Practice: Patient
Care/Systems-Based Practice/Knowledge for
Practice



46 Area of Domain of Practice: Patient Care/Systems-Based Practice/Knowledge for Practice



Area of Domain of Practice: Personal and Professional Development



48



49

Area of Domain of Practice: Patient Care/Systems-Based Practice/Knowledge for Practice/Interpersonal and Communication Skills



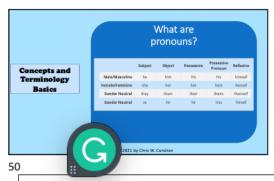
51

Area of Domain of Practice: Patient Care/Systems-Based Practice/Knowledge for Practice/Interpersonal and Communication Skills/Interprofessional Collaboration

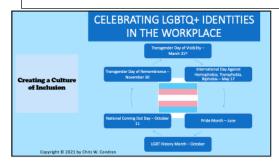


53

Area of Domain of Practice: Patient Care/Systems-Based Practice/Knowledge for Practice/Interpersonal and Communication Skills/Interprofessional Collaboration



Area of Domain of Practice: Patient Care/Systems-Based Practice/Knowledge for Practice/Interpersonal and Communication Skills



52

Area of Domain of Practice: Patient Care/Systems-Based Practice/Knowledge for Practice/Interpersonal and Communication Skills/Interprofessional Collaboration

#### **Tools for Creating an Inclusive Safe Space**

- Maintain Confidentiality.
- Do not make assumptions.
- · Listen and Mirror.
- Provide Representation in the Images in clinical spaces.
- Signal inclusion with pride flag.
- Recognize the diversity in identities and practices.
- Understand there is no "right" way to express identity or transition.
- Use Best Judgement and Necessity not curiosity.
- Understand Gender dysphoria and its triggers.

54

Area of Domain of Practice: Patient Care/Systems-Based Practice/Knowledge for Practice/Interpersonal and Communication Skills/Interprofessional Collaboration/Personal and Professional Development

## Tools for Reducing Gender Dysphoria Triggers and Anxiety

- Ask permission
- Explain what you are doing before you do it
- Names of body parts may be a cause of dysphoria • follow your patients' lead
- Avoid expressing surprise or judgement
- Respect boundaries with regard to disrobing and touch
- Offer gowns or sheets as appropriate
- Tie consent to an action

Copyright © 2021 by Chris W. Condrar

Links to educational materials can be found at PTProud.org under resources tab

Copyright © 2021 by Chris W. Condran

55 56

# APPENDIX E: PARTICIPANT DEMOGRAPHICS

Table 5
Descriptive statistics of demographic variables

|                                 | Initial Participants |      | Final Participants |      |
|---------------------------------|----------------------|------|--------------------|------|
| Measure                         | N=115                | %    | N=30               | %    |
| AGE                             |                      |      |                    |      |
| 18-25                           | 3                    | 2.6  | -                  | -    |
| 26-35                           | 45                   | 39.1 | 9                  | 30.0 |
| 36-45                           | 41                   | 35.7 | 11                 | 36.7 |
| 46-55                           | 20                   | 17.4 | 9                  | 30.0 |
| 56-65                           | 6                    | 5.2  | 1                  | 3.3  |
| Race                            |                      |      |                    |      |
| Asian                           | 6                    | 5.2  | 1                  | 3.3  |
| Black                           | 2                    | 1.7  | -                  | -    |
| African American                | 1                    | .9   | -                  | -    |
| White                           | 103                  | 89.6 | 28                 | 93.3 |
| Prefer to self-describe         | 2                    | 1.7  | 1                  | 3.3  |
| Prefer not to say               | 1                    | .9   | -                  | -    |
| Sexual Orientation              |                      |      |                    |      |
| Straight                        | 84                   | 73.0 | 22                 | 73.3 |
| Gay                             | 3                    | 2.6  | 1                  | 3.3  |
| Lesbian                         | 3                    | 2.6  | _                  | -    |
| Bisexual                        | 9                    | 7.8  | 2                  | 6.7  |
| Queer                           | 14                   | 12.2 | 3                  | 10.0 |
| Prefer to self-describe         | 1                    | .9   | 1                  | 3.3  |
| Gender Identity                 |                      |      |                    |      |
| Male                            | 7                    | 6.6  | 2                  | 7.4  |
| Female                          | 89                   | 84.0 | 23                 | 85.2 |
| Gender Expansive                | 10                   | 9.3  | 2                  | 7.4  |
| Ethnicity                       |                      |      |                    |      |
| Hispanic/Latino/x or Spanish    | 1                    | .9   | -                  | -    |
| Non-hispanic/Non-Latino/x       | 102                  | 88.7 | 27                 | 90   |
| Mexican/MexicanAmerican/Chicano | 1                    | .9   | -                  | -    |
| Puerto Rican                    | 2                    | 1.7  | -                  | -    |
| Another origin                  | 1                    | .9   | 1                  | 3.3  |
| Prefer to self-describe         | 6                    | 5.2  | 2                  | 6.7  |
| Region                          |                      |      |                    |      |
| Mid West                        | 28                   | 24.3 | 7                  | 23.3 |
| North East                      | 34                   | 29.6 | 8                  | 26.7 |
| South East                      | 24                   | 20.9 | 5                  | 16.7 |
| South West                      | 9                    | 7.8  | 2                  | 6.7  |
| West                            | 17                   | 14.8 | 8                  | 26.7 |
| Terminal Degree                 |                      |      |                    |      |
| DPT                             | 93                   | 80.9 | 23                 | 76.7 |

| MPT/MS  | 10                  | 8.7  | 4      | 13.3 |
|---|---------------------|------|--------|------|
| BS  | 7                   | 6.1  | 3      | 10.0 |
| Other   | 5                   | 4.3  | _      | _    |
| Practice Setting  |                     |      |        |      |
| Acute   | 6                   | 5.2  | 3      | 10.0 |
| Outpatient  | 90                  | 78.3 | 23     | 76.7 |
| Skilled Nursing   | 5                   | 4.3  | 1      | 3.3  |
| Inpatient   | 6                   | 5.2  | 1      | 3.3  |
| Home Health   | 6                   | 5.2  | 2      | 6.7  |
| Years Practicing  |                     |      |        |      |
| 1-4 years   | 29                  | 25.2 | 5      | 16.7 |
| 5-10 years  | 27                  | 23.5 | 8      | 26.7 |
| 11-15 years   | 20                  | 17.4 | 4      | 13.3 |
| 16-20 years   | 11                  | 9.6  | 2      | 6.7  |
| 20+ years   | 28                  | 24.3 | 11     | 36.7 |
| <b>Board Certification</b>                                    |                     |      |        |      |
| Cardio  | 3                   | 2.6  | 1      | 3.3  |
| Geriatrics  | 4                   | 3.5  | 1      | 3.3  |
| Neuro   | 1                   | .9   | 1      | 3.3  |
| Ortho   | 8                   | 7.0  | -      | -    |
| Sports  | 2                   | 1.7  | -      | -    |
| Women's Health  | 20                  | 17.4 | 7      | 23.3 |
| Wound Management  | 1                   | .9   | _      | _    |
| No  | 74                  | 64.3 | 19     | 63.3 |
| APTA Credential CI  |                     |      |        |      |
| Yes   | 47                  | 40.9 | 13     | 43.3 |
| No  | 66                  | 57.4 | 17     | 56.7 |
| ** As some of the participants did not ensure some succession | tions the total num | 1    | 1. 115 |      |

<sup>\*\*</sup>As some of the participants did not answer some questions, the total number is not equal to 115

### APPENDIX F: DISSEMINATION POSTER PRESENTATION

