THE IMPACT OF AN EVIDENCE-BASED CULTURAL COMPETENCE WORKSHOP FOR UNIVERSITY STUDENT HEALTH CENTERS’ LICENSED PERSONNEL

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By

Kori Beth Lapham, M.S.N.

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Kori Beth Lapham, M.S.N.

Thesis Faculty Advisor: Krista White, Ph.D.

ABSTRACT

The lack of cultural competence (CC) by health care personnel (HCP) has been identified as a barrier to equitable care. In a closed environment, such as a university setting where all students have health care access, disparities persist. Literature reveals racial/ethnic minority groups are impacted by health care disparities and suffer unnecessarily. Culturally competent care can help mitigate health care disparities. *The American College Health Association (ACHA, 2011)* recommends CC training for HCP who affect student health outcomes.

This quasi-experimental pre/post project examined the impact of an in-person, evidence-based, CC workshop on CC scores of university student health centers’ licensed HCP. Secondary aims (1) compared CC scores between demographic groups; (2) evaluated the workshop format; and (3) appraised facilitators and barriers to implementation of CC skills addressed in the workshop.

Participants included nurses, nurse practitioners, and physicians from three university student health centers. A one-hour CC workshop was conducted at each site. Demographics and the Inventory for Assessing Process of Cultural Care-Revised© (IAPCC-R©) were completed in hardcopy before the workshop. One week after the workshop, the IAPCC-R© and workshop evaluation were completed electronically. Six weeks after the workshop, the facilitators and barriers to implementation survey was completed electronically.
Mean total IAPCC-R© scores rose from 70.84 to 78.21 ($p < 0.001$) across all participants. Further, HCP (N=19) had increases in CC constructs (awareness, skill, knowledge, encounters and desire) from pre-test to post-test. All constructs except desire showed significant improvements ($p < .05$). Nurses (n=9) had the largest improvement in construct scores. Those participants with CC content in their educational curriculum (n=9) had higher knowledge scores on the pre-test. Most HCP agreed or strongly agreed the workshop format was conducive to learning. HCP indicated lack of time was a common barrier to implementing the concepts learned in the workshop (36%).

HCP must explore CC to deliver equitable health care. Policy implications involve HCP in student health centers participating in yearly CC training. Educational implications include embedding CC in curriculum for the personnel affecting student health outcomes. Future research should examine CC levels of university HCP and its relationship to student satisfaction ratings.
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Chapter I

Introduction

Cultural Competence (CC) in health care is defined as a continuous activity in which licensed health care personnel (HCP) strive to effectively work within the cultural (beliefs of group) context of the client including the individual, family, and community (Campinha-Bacote, 2007). Literature confirms that the lack of health care personnel cultural competence is a barrier to equitable care (Alizadeh & Chavan, 2015; Betancourt, Green & Anaheh-Firempong, 2003; Campinha-Bacote, 2002). Moreover, racial and ethnic minority groups receive inequitable treatment in health care, suffer from worse clinical outcomes, and have a lower life expectancy than their white counterparts in both the general public and in university student health settings (Agency for Health Care Research and Quality, 2014; Hunt, Eisenberg, & Gathright, 2014; National Center on Cultural Competence [NCCC], n.d.; Center for Disease Control and Prevention, 2012; Office of Minority Health, 2018). Ethnic and minority patients in health care settings suffer, and ethnic and minority student patients suffer at universities.

This chapter links the concept of cultural competence to the relationship between health care disparities and the licensed health care personnel who contribute to clinical outcomes. In addition, the chapter articulates the research questions, defines relevant terms, examines the needs assessments of the data collection sites, and includes the model and the theoretical framework of Campinha-Bacote.

Statement and Significance of the Problem

The cost of racial disparities to society are extraordinary. Some experts argue that closing the gap on health care disparities could gain $8 trillion dollars in the United States (U.S.) economy by 2050 (Turner, 2018). Turner’s 2018 report “The Business Case for Racial Equity: A
"Strategy for Growth" further outlines the gains in the U.S. economy by advancing racial equity with a translation of significant rises in consumer spending by people of color. Estimates in gain could be $109 billion spent on food, $286 billion on housing, and over $147 billion on transportation (Turner, 2018). In addition, the Joint Center for Political and Economic Studies (LaVeist, Gaskin, & Richard, 2011) estimates between 2003 and 2006 the pooled expenditures of health inequalities and premature death in the U.S. were $1.24 trillion and growing. The cost of not mitigating racial disparities will prove harmful to both the U.S. economy and to clinical outcomes for racial and ethnic minorities.

Racial disparities and cultural competence are linked. The origins of cultural competence can be traced to nursing theorist Madeleine Leininger, through the illumination of her seminal work on the theory of Culture Care Diversity and Universality. She identified a link between cultural care and improved clinical outcomes (Leininger, 1978). Cultural care was distinguished by Leininger as a key dimension missing in health care and nursing. She further recognized that cultural care had influence on human manifestations related to illness, health, and wellbeing (Leininger, 1978). Leininger refined her theory with dissemination to the nursing profession. Nursing brought culture care to the frontline, and other disciplines soon adopted the theory into practice guidelines.

**Governmental Role Regarding Health Disparities**

The role of government in the health care inequity and cultural competence movement is well defined. *The Heckler Report* (written in 1985), published by the Secretary’s Task Force, uncovered the rarely discussed and unregulated problems of health disparities (OMH, 2015). This report studied mortality rates of black Americans and minority health, which lead to the discovery of disturbing rates of care disparities, poor clinical outcomes, early mortality, and
unnecessary morbidity. As a result of the *Heckler Report*, the Office of Minority Health (OMH), was formed in 1986. In 1990, the OMH received federal funding to research racial and ethnic groups, and their reality of treatment within the health care system. That research lead to the enactment of the Culturally Linguistically Appropriate Services (CLAS) standards (Office of Minority Health [OM])-United States Department of Health and Human Services [USDHHS], (2001). The standards encompass 15 steps to eliminate health care disparities and advance health equity. The standards also address language and cultural needs of patients and act as recommendations for Medicare reimbursement and through Joint Commission on Accreditation of Health Care Organizations (The Joint Commission, 2010). Examples of CLAS services include language-lines that allow providers and patients to communicate effectively about illness management. CLAS standards exist today but with little federal oversight, as it is challenging to monitor various health care systems for adherence. Unfortunately, the racial and ethnical groups who would benefit most from CLAS standards are often not aware of their existence, and thus do not request the services available to them (OMH, 2001). HCP who work within systems that do not comply with CLAS standards are at a disadvantage to deliver quality health care to their racial and ethnic minority patients.

In 1990, the U.S. Department of Health and Human Services released *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. This initiative was implemented as a tactic to provide equitable care and improve the health for all Americans (CDC, 1990). The USDHHS continued the initiative by releasing objectives in the Healthy People 2010 report (CDC, 2000). Both *Healthy People 2000* and *Healthy People 2010* included the elimination of health disparities as a goal (CDC, 1990; CDC, 2000). Interestingly, *Healthy People 2000* and *Healthy People 2010* came and went with negligible improvement to health
care disparities. This minimal change was reported by the Center for Disease Control (CDC) and the National Center for Health Statistics (NCHS), who monitored the nation's progress toward meeting the Healthy People objectives. Continuing with the theme, the goals of Healthy People 2020 include the goal of health equity for all, and elimination of disparities (CDC, 2010). With the evolution of government agencies leading the charge to mitigate racial and minority group health care disparities, the current structure of status quo was expected to change favorably.

Forty years later, despite theories and current regulations to guide care of patients, health care disparities are pervasive (CDC, 2019; OMH, 2018). Health care personnel must assume some responsibility for poor clinical outcomes as they relate to racial and ethnic minority patients. The unfortunate reality is that exclusions of quality care and inadequate standards of care occur across America (OMH, 2018). Literature acknowledges multifactorial influences surrounding poor clinical outcomes and health inequities for racial and minority groups. These influences include social determinates of health, behaviors of HCP, and lack of cultural competence (OMH, 2018).

System-wide Contributions to Health Disparities

Nearly twenty years ago, two reports highlighted the problem of health care disparities, attempted to improve awareness about culturally competent care, and set benchmarks in relation to CC. First, the Institute of Medicine’s (2001) pivotal report, Crossing the Quality Chasm: A New Health System for the 21st Century, indicated “The U.S. health care delivery system does not provide consistent, high-quality medical care to all people” (p.1) and described the drastic changes that must occur within the health care system to offer quality, safe, effective, patient-centered, timely, efficient and equitable care to all patients. These goals are best known as the Six Aims (IOM, 2001). Of these aims, the equitable aim strives to provide care that does not vary
The second pivotal report was the Institute of Medicine’s (IOM, 2002) report titled *Unequal treatment: Confronting racial and ethnic disparities in health care*, which showed inequitable treatment for people of color, minorities, and those of low socioeconomic status. The report raised awareness to well-known but non-disclosed issues of racial inequities. It highlighted that the previously mentioned groups are more likely to have poor clinical outcomes, such as premature death, lost productivity and poor quality in all areas of health care, when compared to their white counterparts with higher socioeconomic status (Alizadeh & Chavan, 2015; Betancourt et al., 2003; Like, 2011; IOM 2002; OMH, 2018). This report further emphasized the need for a deeper look into the US health care delivery system and to examine reasons for inequitable treatment of racial groups. A resounding theme in the report showed many HCP lacked aspects of CC (Alizadeh & Chavan, 2015; IOM, 2002; OMH, 2018).

*Education about CC is key for HCP.*

**Curricular Contributions to Health Disparities**

HCP need training to understand aspects of CC and to progress on their journey toward CC. Unfortunately, there are no consistent current CC standards in medical licensed personnel school curriculum. As early as 2004, graduate medical education programs in the U.S. with a focus on health equity were sparse (Furin et al., 2006). More recently, an examination of 302 schools showed a lack of consistency with medical residency programs training of health care disparities. This evaluation revealed that programs varied considerably in curricular elements and used a wide variety of training strategies (Hasnain, Massengale, Dykens & Figueroa, 2014).

There are no consistent CC standards in advanced practice nursing school curriculum either. Within the *Essentials of Master’s Education in Nursing*, there is no specific mention of
cultural awareness education and training (American Association of Colleges of Nursing [AACN], 2011). Nor are there formal mandates for continuing education on cultural competence similar to the mandate requiring all advanced practice registered nurses (APRNs) have continuing education credits related to opioid prescribing. CC education occurs with APRNs who are working within a system monitored for adherence to CLAS standards. In these settings, CC education occurs as a result of federal mandates (OMH, 2001). Beginning in 2008, many APRNs received CC training within undergraduate nursing programs (AACN, 2008a).

Registered Nurse (RN) programs differ in their consistency in offering CC and health care disparities training. Standards from the AACN Essentials in Baccalaureate Education for Professional Nursing Practice outline CC training for both educators and the nursing students they teach (AACN, 2008b). In addition to didactic nursing curricula, simulation activities through the National League for Nursing encourages dialogue in diverse nursing care (NLN, 2018). Considering the inconsistency of resources across nursing programs, there is no guarantee of the simulation training related to diverse nursing care.

With limited standards for CC curricula, HCP may not have had the opportunity to train with those able to facilitate CC. Without the training in CC, HCP may not be familiar with CC. HCP who actively request enhanced familiarity with CC must individually seek out the information to understand the inequities in health care. Without an understanding of delivering equitable care, HCP may themselves become a barrier to quality health care.

**Individual Contributions to Health Disparities**

Often, HCP are unaware they too contribute to the problem of health care disparities. HCP may say they are CC as they treat every patient the same, contributing to a circumstance called cultural blindness (Cross, 1988). Unfortunately, using equality as an approach of treating
all patients the same creates problems, as it disregards the fact that patients have unique needs (Cross, 1988). Patients must first be given the resources needed, such an interpreter or discharge instructions in their native language, or the potential to cause health disparities and health inequities is unavoidable (Butler et al., 2016; Hall et al., 2015). Instead, equitable health care is desired. Equitable health care is health care individually tailored for each patient, dependent of their needs and beliefs (OMH, 2018). In addition, patient-centered care follows an equitable approach when demonstrating the quality of health care in the 21st century. In patient-centered care, patients are part of their care plan and wellness. They are included in setting goals and given choices with their cultural beliefs explored (IOM, 2001). Patient-centered care is one of the Six Aims of health care (IOM, 2002).

In order to offer patient-centered care, adequate communication in the patient’s target language, and culture exploration is needed to gain the patient’s trust and facilitate goal attainment (Blair et al., 2013; Cuevas, O’Brien, & Saha, 2017; OMH, 2001). Lack of trust in the provider leads to lack of patient engagement, which lends itself to health disparities (Blair et al., 2013; Campinha-Bacote, 2002; Cuevas et al., 2017).

It is foreseeable that health care personnel can have a role in the improvement of health inequities and disparities for ethnic and racial minority groups. Furthermore, there are well-supported links in literature between a lack of cultural competence of individual health care professionals, and health care disparities and inequities of racial and ethnical minorities in general (Alizadeh & Chavan, 2015; Betancourt et al., 2014b; NCCC, n.d.).

**University Health Settings and Student Health Disparities**

The problem of health care inequity in the general population has been well documented. Hunt et al. (2014) found health care disparities also persisted in closed environments such as a
university setting where all students have unlimited health care access. The study confirmed that despite access to care being removed as a barrier to equitable care, poor clinical outcomes remained within the population of racial and ethnic minority students. Hunt et al. (2014) study revealed a link between HCP lack of CC and poor student outcomes including health disparities.

In response to the persistent concern of decreased CC of HCP and subsequent disparate health care of ethnic and racial minority patients, The American College Health Association (ACHA) published a white paper discussing cultural competence. The ACHA is the principal advocate and leadership body of university student health care services. The ACHA white paper recommended CC training for HCP who have access to students and student clinical outcomes (ACHA, 2011). The American College Health Association also lists seven Standards of Practice for Health Promotion in Higher Education, Third Edition, for university health centers.

Standard four pertains to CC (ACHA, 2012). Standard four on CC promotes commitment of the continued development of CC and defines CC as a “long-term development process” (ACHA, 2011). The standard challenges all levels of student health care delivery (i.e., institutional, association, and individual) to start the process of becoming CC. The ACHA further promotes opportunities to improve CC of HCP in its non-discrimination policy which lists the need for cultural inclusion, cultural respect, cultural equality, and cultural equity (ACHA, 2011). Additionally, the ACHA states a climate of CC support is essential for quality college clinical outcomes and an equitable campus environment.

Combining the ACHA initiatives with government agencies was a logical next step. Subsequently, the ACHA partnered with the CDC Division of Adolescent and School Health to create ACHA’s Building Healthy Campus Communities project to achieve three goals: conducting a cultural competence needs assessment, assessing campus strengths and
weaknesses, and implementing a plan to improve CC among licensed personnel (Hoban & Ward, 2003). These steps taken by the ACHA were necessary to address student health disparities.

**Moving Toward Cultural Competence**

To reduce the problem of health care disparities, changes must occur at both a system and an individual level. Systems must support and provide resources for HCP to communicate effectively in the patient’s target language. Adhering to CLAS standards may foster a smooth transition from illness to wellness as HCP provide both printed and written discharge information through language interpreters for effective communication with patients (OMH, 2001). Systems must also provide CC training for all HCP to improve their CC self-reflection as they care for racial and ethnically diverse patients.

To be part of a solution, individual HCP need to discover cultural awareness as the ability to self-reflect and become humble about their own culture and potential biases (Campinha-Bacote, 2002). The use of CC tools will equip HCP to recognize those biased feelings toward patients. Cultural awareness is one part of the process toward CC (Campinha-Bacote, 2002). A desire to improve relationships with patients is also needed. Cultural desire (Campinha-Bacote, 2002) is yet another part of the process of CC. Campinha-Bacote and others agree that HCP who have CC skills and CC knowledge are best equipped at engaging patients and strengthening the patient-provider relationships (Alizadeh, & Chavan, 2015; Campinha-Bacote, 2002; NCCC, n.d.; OMH, 2015).

To bridge the health disparities gap by improving poor clinical outcomes for university student minorities and those in a low socioeconomic status, HCP need CC to engage in critical dialogue with patients. Discussions must be initiated about the patient’s beliefs and their
understanding about illness (Hall et al., 2015; Alizadeh & Chavan, 2015; NCCC, n.d.; CDC, 2019; OMH, 2015).

Structured continuing education, such as a CC workshop, may begin the journey toward CC for licensed HCP, but maintenance is essential to strengthen the effect. In order for HCP to remain current and progress on the path of CC, yearly continuing education for HCP on CC is necessary (Elminowski, 2015). Live workshops are the preferred method of instruction per a study of nurse practitioners (N=30) who improved their CC after attending such an implementation (Elminowski, 2015).

**Organizational Needs Assessment**

To fully understand the project sites, a needs assessment was completed. Several types of needs assessment exist. For this scholarly project the Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis was used (Moran, Burson, & Conrad, 2017).

**Project Sites Overview**

The practice setting for the project was three university health centers in the mid-Atlantic region of the U.S. The student demographics noted on each university site’s website indicate a large diverse population of international students, with representation from many countries. For the purposes of this DNP project, the three student health centers were selected because of student body diversity and the comprehensive nature of their health center. Each student health center provides care which range from basic first aid care and acute point of care testing, to preventative care such as vaccines, sexual health needs, and chronic physical and mental health needs. When needed, the HCP can refer to health care specialists, including mental health counselors for acute mental health needs, and to urgent care and hospitals. Faculty and staff are
not permitted access to student health centers; the centers are designated for students only. Visiting students are not eligible for care, unless they are a current registered university student.

**Project Sites Licensed Personnel**

The project sites differ in the staffing models used. The licensed HCP at *Site #1* includes an on-site physician medical director, five licensed practical nurses (LPNs), eight APRNs and 12 physicians. The HCP vary in diversity as they represent multiple ethnicities. In contrast, the HCP at *Site #2* includes one off-site physician medical director, a nurse manager, three part-time physicians, nine RNs, and eight APRNs. The off-site medical doctor is available as needed for clinical decision-making support. The HCP are limited in the representative diversity of the university’s student population. *Site #3* employs one part-time RN and one part-time APRN, one full-time APRN, and one consulting off-site physician. The off-site physician is available as needed for clinical decision-making support. The clinic is managed by a certified emergency medical services medic. The diversity of the staff is not representative of the student population.

**Current Continuing Education Structure**

Of the three university student health centers in the project, only *Site #2* currently offers non-mandatory online cultural competence educational training. All sites offer faculty development, with various topics presented on student health and clinical outcomes. *Site #1* and *Site #2* have a dedicated day each week for faculty development and staff shared governance meetings.
Table 1. Project Site’s SWOT Analysis

<table>
<thead>
<tr>
<th>Site</th>
<th>Type</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Large, private, metropolitan, faith-based institution</td>
<td>Providers similar in diversity to students</td>
<td>Must pay to access, not free care</td>
<td>High Ratio of MDs on staff</td>
<td>Lack of manager to guide processes</td>
</tr>
<tr>
<td>2</td>
<td>Large, public, metropolitan, non-sectarian</td>
<td>Free care through school access</td>
<td>Lack of diverse providers/staff</td>
<td>Offer non-mandated CC education online/yearly</td>
<td>Manager expected to retire</td>
</tr>
<tr>
<td>3</td>
<td>Small, private, rural, faith-based institution.</td>
<td>Free care through school access</td>
<td>Lack of diverse providers/staff</td>
<td>NP led clinic, limited oversight</td>
<td>Run by a non-licensed HCP</td>
</tr>
</tbody>
</table>

Clinical Question and Secondary Aims

The primary clinical question clearly defines the subject matter and the direction of the project. As the question is refined, this relevant material will provide a defendable DNP scholarly project, immersed in evidence-based practice (Moran et al., 2017). The PICOT is broken down into components: P for population, I for intervention, C for Comparison, O for outcome, and T for time (Moran et al., 2017). Based on the need to explore the discrepancies within the standards of care for university students, the PICOT question was as follows: What is the impact of a live evidence-based cultural competence workshop on university student health services licensed personnel's perceived level of cultural competence?

The Population was licensed health care personnel working in student health services in a university setting. The Intervention was a live cultural competency workshop based on Campinha-Bacote’s work which outlines the five constructs of CC and Campinha-Bacote model; The Process of Cultural Competence in the Delivery of Healthcare Services developed in 1998 (Campinha-Bacote, 1999). The Comparison was no CC workshop or baseline. The Outcomes
were scores of the Inventory for Assessing the Process of Cultural Competence among HCP-Revised© (IAPCC-R©) (Campinha-Bacote, 2002) pre- and post-workshop. Finally, the Time was six weeks.

There were three secondary aims of the study: (1) to compare cultural competence scores between different demographic groups; (2) to evaluate the evidence-based workshop intervention format; and (3) to appraise the facilitators and barriers to implementation of the cultural competence skills addressed in the workshop.

**Theoretical Framework**

The scholarly project explored cultural competence of licensed HCP within university student health services, using the theoretical framework of Campinha-Bacote. *The Process of Cultural Competence in the Delivery of Healthcare Services* model was developed by Campinha-Bacote in 1998. This model is depicted as five intertwined circles, representing a Venn diagram. No one construct is superior to another and all need to be explored together, without any order, to have goal attainment of cultural competence. Understanding circles have no end and no beginning visually represents CC as a process that is ongoing, and never ending, with a goal of competence and yet no end point, as HCP will consistently learn about themselves and patients (Campinha-Bacote, 1999; 2002).


![Cultural Competence](http://transculturalcare.net/the-process-of-cultural-competence-in-the-delivery-of-health-care-services)

**Figure 1. The Process of Cultural Competence in the Delivery of Health Care Services**
(Figure loosely based on the model by Campinha-Bacote in 1998)
Each component of the model is described in detail for clarity and provides context for this DNP scholarly project. *Cultural Competence* in health care is a continuous activity involving the integration of cultural awareness, at the top of the model. *Cultural Awareness* signifies self-examination and in-depth exploration of our personal biases, stereotypes, prejudices and assumptions that we hold about individuals who are different from us (Campinha-Bacote, 1999). Cultural awareness was taught to HCP as one of the five CC constructs. Cultural awareness relates to the project as it allows identification of the HCP beliefs and understanding of their own limitations to offer CC care to their patients.

Moving to the right, *Cultural Skill* is defined as the ability to collect relevant cultural data regarding the patient’s presenting problem, as well as accurately performing a culturally based, physical assessment in a culturally sensitive matter (Campinha-Bacote, 1999. For example, asking about diet, roles of family members, and health care practices based upon culture can offer insight into the patient’s beliefs about their illness. The cultural assessment will be used by the HCP to develop a plan of care with the patient that is sensitive to the needs and beliefs of the patient. Cultural skill relates to the DNP project as an important piece in the plan of care. Explaining the construct in detail and providing examples of a cultural assessment during the CC educational intervention will strengthen the HCP expertise to assess the cultural data of patients.

*Cultural knowledge* is the process of seeking and obtaining an educational base about culturally diverse groups, while not stereotyping (Campinha-Bacote, 1999). Cultural knowledge includes racial treatment efficacy and ethnic pharmacology which are controversial (Campinha-Bacote, 2007). Treatment efficacy is multifactorial and requires knowledge which includes genetics, environmental factors and cultural beliefs. Cultural knowledge can be gained by
textbooks, conferences or by continuing education. Cultural knowledge relates to the DNP project offering HCP new CC knowledge through an evidence-based educational intervention.

The fourth construct is Cultural Encounter. This can be defined as the act of directly interacting with students from culturally diverse background (Campinha-Bacote, 1999). Interacting directly with students from many cultural groups might help re-model the HCP’s existing CC beliefs to prevent stereotyping and increase the CC of the HCPs. Medical students agree that being involved in many environments where patients were not culturally similar to their own belief system offered them the best opportunities to learn about various cultures (Like, 2011; Kutob, Bormanis, Crago, Harris, Senf, & Shisslak, 2013).

The last construct is Cultural Desire which can be defined as the spiritual construct that provides the energy source and foundation for one’s journey toward cultural competence. It is the motivation of the HCP to want to engage in the process of cultural competence, not the “have to” (Campinha-Bacote, 2002). This last construct is difficult to teach. Voluntary participation in the DNP project and attendance at the live workshop demonstrated the HCP are doing so based on a desire to seek information about CC.

Campinha-Bacote’s theoretical framework was applicable to the scholarly project as it defines the process needed for HCP to begin the journey to CC. Each of the five constructs defined here were operationalized with the IAPCC-R© tool. Understanding that CC is a journey and not a destination will lead HCP to a positive affirmation of the continuum of the daily journey.
Definition of Terms

In order to explain the project in its entirety, the commonly used terms must be defined for understanding. The conceptual and operational definitions used in the scholarly project are described for the purpose of this paper:

Licensed Health Care Personnel were defined as; Medical Doctors, Doctors of Osteopathy (also referred to as physicians), Nurse Practitioners (also referred to as APRNs or NPs), and Registered Nurses (RNs) or Licensed Practical Nurses (LPNs) (also referred as nurses). All licensed HCP were required to be graduates of an accredited medical, nursing, or nurse practitioner program, hold a current license, and/or be board certification in their field. Employees were included if they worked full time, part time, or PRN (as needed) or temporary. Medical fellows and residents and APRN students were included in the study since they hold a professional license. Licensed personnel were included even if they did not serve a role in direct student health access, such as in an administration/support role. Unlicensed personnel (i.e., medical assistants and front office staff) were not be included in this study. For the purpose of this DNP project, medical students and pre-licensure nursing students were excluded based on non-licensure status. The term licensed personnel will be used interchangeably with health care personnel (HCP) throughout the paper.

University Student Health Center was defined broadly as a basic first aid center to a more comprehensive health center with specialty medical care that assist students seeking health care in a university setting. In addition, there are several models of campus health services available including; primary care, ambulatory care, urgent care and acute/emergent care (ACHA, 2011). The term university student health center will be used interchangeably with student health center or campus health center.
Student was defined as a registered matriculated person accessing a university health center for health management. Any student who is currently enrolled at the university may access services provided by the health center, with university identification. Some health centers offer free services, while some have a small insurance co-pay for encounters and send away labs, and tests.

Cultural Care can be defined as care delivery which is tailor-made to fit with individual cultural values, beliefs, and lifestyles in order to provide or support meaningful, beneficial, and satisfying health care services (Leininger, 1978).

Culture as defined by Leininger (1991) states it is “… the learned and shared and transmitted values, beliefs, norms, and lifeways of a particular culture that guides thinking, decisions, and actions in patterned ways…” (p.13).

Cultural Competence in health care was defined as a continuous activity which the health care provider strives to effectively work within the cultural context of the client (individual, family, community), while involving the integration of cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire (Campinha-Bacote, 2002). CC in this scholarly project was operationalized through the use of a validated quantitative research tool developed by Campinha-Bacote (the IAPCC-R©) and was used in the measurement of HCP CC scores before and after the live workshop.

Health Disparities were defined as “…differences in the quality of health care that are not due to access-related factors or clinical needs, preferences or appropriateness of intervention…” (IOM, 2003). To further define is to understand that differences between groups are not always disparities. It is only when the differences which negatively and systematically impact less advantaged groups are classified as disparities (Braveman, 2006).
Equity was defined by the World Health Organization as “the absence of avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically or geographically…” (WHO, 2018). See Figure 2.

![Equality vs. Equity](image)

**Figure 2. Equality vs. Equity**  
[Attribution allowed by the Robert Wood Johnson Foundation, 2017]

Minority Groups were defined as “…any group of people who, because of their physical or cultural characteristics, are singled out from the others in the society in which they live for differential and unequal treatment, and who therefore regard themselves as objects of collective discrimination.” (Wirth, 1945)

Workshop was defined as a one-hour, in-person, interactive, evidence-based class. The live class delivered information about CC to a group of licensed HCP. Content of the workshop related directly to the theoretical framework for the project: the model of The Process of Cultural Competence in Health Care Delivery (CCHCD) developed by Campinha-Bacote in 1998
(Campinha-Bacote, 1999). For the purpose of this paper, the term workshop is interchanged with educational intervention or CC workshop.

**Conclusion**

This chapter linked the concept of cultural competence and intersection of the relationship between health care disparities and the licensed health care personnel who contribute to clinical outcomes. In addition, the chapter articulated the clinical questions, defined relevant terms, examined the needs assessments of the data collection sites, and included the model and the theoretical framework of Campinha-Bacote.
Chapter II

Review of the Literature

This project was guided by a PICOT question and an extensive review of literature (Moran, et al., 2017). The review of literature is an iterative process which continues until the final project is defended. Objectivity is added to a scholarly project when searching databases to critique relevant articles with inclusion of the PICOT question components. The review of literature maintains transparency of the literature search, affording easy replication to future researchers.

This chapter discusses the detailed search strategy for relevant, up-to-date theoretical articles, expert opinion literature, empirical research literature, and systematic reviews. The retained articles were individually reviewed to explore content significance in relation to the PICOT for inclusion in and support of the project. A leveling or grading system used to appraise the quality of the literature is described. The chapter concludes with rationale for the project.

Search Criteria and Strategy

A review of literature began with searching three professional databases: Cumulative Index of Nursing and Allied Health Literature (CINAHL), Ovid/PubMed, and Google Scholar for studies relevant to the elements of the PICOT question. Librarian assistance was used for expert guidance during the literature search.

The components of the PICOT were: \( P \) for population, and was defined as student health university licensed health care personnel; \( I \) for intervention, which was a live evidence-based one-hour CC workshop; \( C \) for comparison before the CC workshop; \( O \) for the outcome of CC scores before and after an educational intervention; and \( T \) for time, which was six weeks from the beginning to the conclusion of data collection.
In addition to searching for relevant studies, the Institute of Medicine’s pivotal reports Crossing the Quality Chasm (IOM, 2001) and Unequal treatment: Confronting racial and ethnic disparities in health care (IOM, 2002) were investigated for CC information. The researcher intentionally included years from 1990 to the present to improve the chance of locating seminal works in the area of health disparities as well as CC.

The CINAHL literature search used subject headings and Boolean phrases. Boolean phrases (AND, OR, and NOT) are used to narrow or broaden article findings. The subject headings and the Boolean operators used were: “cultural competence” OR “transcultural nursing/care” and “cultural awareness” OR “cultural bias” OR “cultural sensitivity” OR “student health services”, “colleges”, “university”, and “attitudes of university health personnel”. The total number of articles located was 28,000. Then “ethnic groups” OR “racial groups” terms were added. This search resulted in the location of 16,500 articles. Then “health care disparities” OR “health disparities” was added; 36 articles matched these criteria. Then “providers” OR “doctors” OR “nurses” were added, resulting in 34 articles. The search resulted in the location of 34 publications.

Each of these 34 pieces of literature was reviewed carefully to determine relevance to the project. Relevant studies were retained based on limiters and inclusion criteria of: (1) having a relationship to elements of the PICOT question; (2) being from peer-reviewed journals; and (3) being published in English. The final sample of 18 retained articles included: one pilot study (Brown, 2012); four large cohort studies (Blair et al., 2013; Campbell, Aurebach, & Keisler, 2007; Hudak, Carmack, & Smith, 2018; Hunt et al., 2014); six cross-sectional studies (Ahmed & Bates, 2017; Benkert, Hollie, Nordstrom, Wickson & Bins-Emerick, 2009; Delgado et. al, 2013; Grubb et al., 2015; Kendrick, Nuccio, Leiferman, & Sawaia, 2014; Michalopoulou, Falzarano,
two systematic reviews of CC in health care (Hall et al., 2015; Truong, Paradies & Priest, 2014); and five theoretical reviews (Betancourt et al., 2003; Betancourt, & Tan-McGrory, 2014a; Campinha-Bacote, 1999; Like, 2011; Purnell, 2000).

The PubMed/OVID database was used for the next literature search. Medical Subject Headings (MeSH) were used for indexing articles for the MEDLINE®/PubMed® database. The MeSH headings used in the search of relevant literature were: “transcultural nursing” OR “culturally competent care” OR “cultural competency” OR “cultural awareness”. The total number of articles located was 7,357. Added to the search were the terms “providers”, “licensed health care personnel”, “medical doctors, nurse practitioners”, and “campus health care personnel”. This refinement of the search resulted in the location of a total of 569 studies. The following terms were added: “attitudes of the health care personnel”, “attitudes of the patient”, attitudes of the student”, “student satisfaction”, “patient satisfaction”, and “patient mistrust”. This refinement of the search resulted in the location of 267 articles. The following search terms were added: “university health services” and “campus health services”. This search resulted in 22 publications. Each of the 22 pieces of literature was reviewed carefully to determine relevance to the project. Relevant studies were retained based on limiters and inclusion criteria of: (1) a relationship to elements of the PICOT question; (2) being from peer-reviewed journals; and (3) being published in the English language. The final sample of literature chosen for comprehensive review was 14 articles and includes: six cross sectional studies (Butler et al., 2016; Braveman, 2006; Cuevas et al., 2017; Doorenbos, Schim, Benkert, & Borse, 2005; Kennedy, Mathis, & Woods, 2007; Kutob et al., 2013); one systematic review (Horvat, Horey, Romios, & Kis-Rigo, 2014); and seven theoretical reviews (Albougami, 2016; American College Health Association,
2011; American Nurses Association [ANA], 2018; Harris-Haywood, Goode, Gao, & Smith, 2014; Leininger, 1978; Smith et al., 2007; Smith, 2018).

The final search was completed on Google Scholar using the terms “workshop format” AND “CC tool”, “IAPCC-R©”, AND “models of CC”. From that search, the following studies were retained: one systematic review of quantitative CC tools (Doorenbos et al., 2005); and one systematic review of CC models (Alizadeh & Chavan, 2015).

Many theoretical reviews and studies examined each of the PICOT elements separately or semi-combined. However, no study found to-date, measured the impact of cultural competence training on licensed health care personnel in a university/college student health center setting.

**Literature Appraisal and Synthesis**

LEGEND (Let Evidence Guide Every New Decision) was used for scoring of the relevant literature. Developed by Cincinnati Children’s Hospital Medical Center to create common language for all disciplines as they work through and evaluate evidence. It is a tool developed to steer practitioners to synthesize evidence of published studies in a logical step-by-step process. The LEGEND levels individual studies and scores the entire body of literature. A score of 5 signifies a low grade, while a score of 1 signifies a higher grade. In addition to scores, quality is assessed and given a rating of a or b (Clark, Burkett, & Stanko-Lopp, 2009).

**History of Cultural Competence**

The term CC is not without controversy (Butler et al., 2016). CC is a challenging concept to operationally define. Many definitions and models exist, and multiple theories have contributed to its development. In 1978, Madeleine Leininger, a nurse theorist, wrote her first of several works pertaining to the concept of Transcultural Nursing. In her seminal work on the theory of *Culture Care Diversity and Universality*, she outlined nursing’s role in becoming
culturally competent. Her focus was on awareness of the patient and the nurse’s cultural differences and the effect on patient care. Leininger (1978) was interested in the perception of both the nurse and the patient during the health care visit, and the resultant outcomes.

A public health scholar from Harvard Medical School has studied the effects of CC on health care delivery since the 1990s. His work defined CC and recognized interventions to address disparities at all levels of health care. He identified health care disparities within racial and minority groups and offered solutions to identify and repair the long-term damage to those mentioned groups. Betancourt and his colleagues (2003) completed a literature review related to health care disparity solutions. These solutions included strategies such as hiring minorities into health professions, providing health care information in the patient’s language, and educating providers on CC (Betancourt et al., 2003).

Campinha-Bacote investigated the link between CC and health care disparities. Her works offered solutions to assist in the repair of the problem within ethnic and racial minority groups (Campinha-Bacote, 1999). She suggested increasing the CC of licensed personnel who treat patients, and stressed the importance of HCP’s cultural encounters to understand CC (Campinha-Bacote, 1999, 2002). The development of her compilation of CC assessment tool is used to gauge the baseline for licensed personnel and students. The Inventory to Assess the Process of Cultural Competence Among Healthcare Professionals measures change in the progress of CC (Campinha-Bacote, 2007).

Purnell (2000) developed a framework in 1995 for nursing assessments called the Purnell Model of Cultural Competence. The model is not limited to nursing but has utility in other disciplines as well. Purnell’s model is a complex circle with 12 cultural domains from which four rims line the circle. The model show patients’ health will improve dramatically by starting with
providers who can use the nursing process (assess, diagnose, plan, intervene and evaluate) in a culturally competent direction when delivering health care (Purnell, 2000).

The history of CC was presented with the support of theoretical reviews and expert opinion. Although the theories are grounded in many years of development, the strength and quality of scientific studies is absent. Based upon the scoring criteria for prevalence guidelines the LEGEND score is a 5 (Clark et al., 2009).

**History of Health Care Disparities**

“…Culture is tightly interwoven into the life of man and continuously pervades his thinking, actions, feelings and particularly his health state” (Leininger 1978, p.37). Simply stated, culture must be addressed for quality care to be delivered. Disparities are a sign of inequitable quality (Betancourt, Corbett, & Bondaryk, 2014b). Disparities are not always the differences between health care groups. Disparities are classified when the differences negatively and/or systematically impact less advantaged groups (Braveman, 2006).

In the late 1980’s, reports emerged which identified health care disparities and highlighted premature death and poor clinical outcomes within ethnic and minority groups. Poor clinical outcomes included ethnic and minority groups receiving inappropriate cardiac drugs and lack of tests and lifesaving interventions as detailed in the 1985 Heckler Report (OMH, 2015). In fact, these groups were more likely to receive unnecessary procedures such as amputations related to diabetes (OMH, 2015). Following the Heckler Report, the Office of Minority Health (OMH) was formed under the umbrella of the United States Department of Health and Human Services (OMH, 1986). The OMH is a government organization funded to protect the health of ethnic and racial minorities, and guide organizations to strategize remedies that minimize health
care disparities (OMH, 1986). In 1987, OMH started a resource center as a repository of information about health inequities within the racial and ethnic minority groups.

In 1999 Congress asked for a report of racial inequities from IOM. Before the reports were released, previous information on racial injustices led to the development of federal agencies and regulations, including the Center for the Linguistic and CC in Health Care, and Culturally and Linguistically Appropriate Service (CLAS) standards (OMH, 2001). The CLAS standards have five domains. Domain three explains that language assistance services must be in place for health care systems that are recipients of federal funds, including Medicare and Medicaid reimbursement (OMH, 2001). In addition, *Healthy People 2000* had three goals for the American people to achieve, one of which included a goal of mitigating health disparities for Americans (CDC, 1990).

After Congress’s request, the IOM (now the National Academies of Health and Science) published two seminal reports (in 2001 and 2002) which outlined ethnic and racial health care problems along with offering solutions: *Crossing the quality chasm; A new health system for the 21st Century* (IOM, 2001), and *Unequal treatment: Confronting racial and ethnic disparities in health care* (IOM, 2002). These two publications cataloged health care injustices and disparities of racial and ethnic minority groups while issuing government agency mandates. The IOM initiated change in the current health care delivery system of the 21st century.

Other government agencies also joined the discussion of solutions to the problems of inequities in health care delivery. *Healthy People 2010* continued to support efforts to mitigate health care disparities (CDC, 2000). Also, in 2010, The Affordable Care Act, section 1557, spoke to the disparities by mandating that hospital systems (as related to reimbursements) implement language services for limited English proficient patients seeking and receiving care.
Gradually, health care inequities were uncovered, brought into the light, and published. Embedded in reports and with government involvement was a discovery of licensed health care personnel’s role (both positive and negative) in health care disparities.

The history of health care disparities was presented with the support of government agency reports utilizing systematic reviews and qualitative studies and meta synthesis. Based upon the scoring criteria for prevalence guidelines, the LEGEND score for this body of evidence was determined to be 1b (Clark et al., 2009).

**Licensed Health Care Personnel Style of Interaction**

Behaviors and interaction styles of the health care personnel can affect patient care in both a positive and negative manner. Culturally competent interactions can have a positive clinical outcome for patients (Betancourt & Tan-McGrory, 2014a; Campinha-Bacote, 2007). Biases of HCP can have a negative effect on the health care delivery and outcomes of patients (Alizadeh, & Chavan, 2015; CDC, 2019; OMH, 2001). Other regulatory bodies agreed. In fact, the American Nurses Association’s, *The Nurse’s Role in Addressing Discrimination: Protecting and Promoting Inclusive Strategies in Practice Settings, Policy, and Advocacy* stated racism and discrimination negatively affect the health care system, minorities, and the nursing profession (ANA, 2018).

A cross sectional study by Grubb et al., (2015) surveyed third-year primary care residents providing cancer care (*N* = 78) about their attitudes, knowledge, and comfort levels with addressing culturally based care. Over 29.5% (*n* = 23) did not feel they understood socioeconomic status while 25.6% (*n* = 20) did not feel comfortable discussing treatment when patients’ beliefs conflicted with their own beliefs. In addition, 26.5% did not feel they possessed the abilities to overcome patient-provider mistrust. Clinical significance supports the need for
expanded CC training of medical residents.

Kendrick et al., (2014) surveyed family medicine providers, including APRN, RN, MD (N=115), regarding attitudes and perceptions about disparities and the relationship to hypertension control. Family medicine physicians, when compared to internal medicine physicians (p = .03), self-reported a lack of disparities contributing to their patient outcomes but generalized that the disparities occurred only at the national level. Providers reported patient factors contributed to health care disparities, such as limited health literacy (60%) and behavior (63%). This attitude of “it’s not me” was pervasive. Providers took little ownership for their contribution to health disparities, and yet 40% rated training in CC as fair/poor. Interestingly, females, more so than males, reported miscommunication leads to disparities (p = .02) and lack of time to explain treatment options are a barrier to care (p = .045). This study showed that HCP are not fully aware of their contribution to health care disparities.

Blair et al., (2013), implemented a telephone survey of 2,908 patients, stratified for race/ethnicity as Black/Latino and by clinician. The 134 clinicians involved in the study took an implicit-bias test. The providers were matched with their patients. Differences existed between provider’s high implicit-bias scores and patients of color lower satisfaction rates (t (2.05), p = .04). This shows HCP style of interaction is related to patient’s satisfaction scores. In this study where HCP who had scores showing implicit bias against racial and ethnic groups, the patients of color could sense this lack of engagement and responded with lower satisfaction scores.

The Licensed Health Care Personnel Style of Interaction was presented with the support of systematic review, cross sectional and cohort studies. Based upon the scoring criteria for prevalence guidelines, the LEGEND score for this body of evidence was determined to be a 3a (Clark et al., 2009).
**Patient Perceptions of Cultural Competence Care**

Patient satisfaction, trust, and engagement is vital in health care delivery. Patients who do not believe their provider values their belief systems (i.e., lacks CC) will not engage nor adhere to medication treatment regiments (Alizadeh, & Chavan, 2015; Betancourt et al., 2014b; CDC, 2019; OMH, 2001).

**Primary care setting.** Patients’ trust in their health care team is vital to goal attainment for clinical outcomes. The uncovering of the Tuskegee study in the 1930s-1970s, which inflicted known harm on men of color and withheld life-saving treatments, broke the trust of HCP within the African American community. It is well documented that the African American population, even today, remains hesitant to trust the health care system and the personnel licensed to treat them (Benkert et al., 2009; Brown, 2012; Kennedy et al., 2007; Michalopoulou et al., 2010). Mistrust emerging from these atrocities may be passed on to future generations leading to a circle of mistrust.

Mistrust could also be a factor in the study results of Blair et al. (2013). Patient satisfaction with clinicians was examined ($N = 2908$) for Latina/o and African Americans patients and the 134 HCP who provided care for them. Interestingly, in the same study where African Americans gave their HCP poor satisfaction scores, Latino patients gave even lower patient satisfaction ratings. Yet no correlation was found in Latinos between low patient ratings and high implicit bias in HCP.

Two other studies examined the concept of mistrust (Brown, 2012; Cuevas et al., 2017). In the first study, African Americans were electronically surveyed about their reluctance toward organ donation ($N = 55$). Findings showed 58% of participants agreed mistrust of the health care system was a reason associated with reluctance of organ donation (Brown, 2012). Mistrust of the
system is different from mistrust of other cultures. Interestingly, when asked of the African American participants who had reluctance to donate organs, would they choose to direct their organ donations to only African American patients if they could; 44 of the 55 (80%) participants said they would not agree with only offering their organs to other African Americans (Brown, 2012).

The second study revealed that general mistrust of the system during the entire patient encounter was a reality for African Americans patients. They perceived that discrimination started with long wait times and receptionist greeting (Cuevas et al., 2017). In this qualitative study of 142 participants in community-based focus groups of African Americans, Latino, and European Americans, many themes about mistrust prevailed. For example, African Americans believed their clinicians assumed they were drug seeking and did not provide adequate pain medication. African Americans also mentioned the system failures when they discuss insurance coverage and provider/hospital bias toward those with less coverage.

Mistrust, patients’ fear of providers, and CC are linked. In fact, there is a word describing fear of doctors called iatrophobia. Ahmed and Bates (2017) completed a cross sectional survey design study with rural, suburban, and urban clinic patients in Appalachian Ohio. The patients’ (N = 306) fears of physicians and perceptions of the physicians’ CC were explored. Negative correlations exist between the fear of physicians and the perceptions of the physician’s low cultural competence ($r = -.143, p=0.05$). Providers’ attempts to connect with their patients through a cultural competence assessment can break down barriers which are held by patients rooted in fear.

A Cuevas et al., (2017) study also examined trust of physicians and characteristics of a worthy patient-provider relationship. Patients across all ethnic groups preferred physicians who
valued their beliefs and who encouraged them to actively participate in their care. The importance of open communication between providers and patients was another common theme (Cuevas et al. 2017). Similarly, Benkert, Hollie, Nordstrom, Wickson, and Bins-Emerick (2009) conducted a descriptive-correlational study of African American adult patients ($N=100$). The researchers examined patient satisfaction and mistrust of primary care nurse practitioners. Results showed participants with greater suspicion of the health care system had lower satisfaction with provider delivered care ($r = -0.29, p < .01$). Overall, patients reported being satisfied with NP care and having health care system mistrust and cultural mistrust of European Americans.

Kirk, Hildebrandt, Davis, Crandall, Siciliano, and Marion (2014) examined both the clinician’s consideration of the impact of culture on diabetes management and patient reports of satisfaction with their clinician. Providers self-reported an increased comfort with standard, non-personalized treatment plans, as opposed to discussing patient-centered information such as health care beliefs. African Americans and non-white Hispanic patients ($N=153$) reported the health care provider did not address their cultural beliefs with them (> 50%); however, they did address benefits of controlling blood sugar (91%). The disconnect occurs with the HCP addressing the clinical outcomes expected without first considering the patient’s cultural beliefs involved with achieving these desired clinical outcomes. The two aspects of care must be congruent for clinical outcome success (Alizadeh & Chavan, 2015; Blair et al. 2013; Cuevas et al., 2017).

Correlations exist between patients’ mistrust of HCP and a lack of CC among HCP. Overall, patients want open communication and value from their HCP, with encouragement to participate in their care plan. Culturally diverse patients want to be heard and respected. They
want to be asked about the beliefs related to health care. While these studies focused on patients in the general population, students in university settings express many of the same concerns and character requests of their HCP.

The patient perceptions of cultural competence care in primary care was presented with the support of cross sectional and cohort studies. Based upon the scoring criteria for prevalence guidelines, the LEGEND score for this body of evidence was determined to be a 4a (Clark et al., 2009).

**University health care setting.** University student health centers provide health care to students to support wellness. Currently in the United States there are 20 million college and university students (ACHA, 2018). Most students will access their student health center at least to drop off paperwork, while many will access their health center to receive acute or chronic health care. University student health settings are similar to primary care offices/clinics, encompassing primary care, ambulatory care, and provide counseling for students (ACHA, 2018).

Studies done in student health settings investigated HCP perceptions and student’s perceptions of care delivery, health beliefs of students and examined HCP and student relationship (Campbell et al., 2007; Hudak et al., 2018; Hunt et al. 2014). Hudak et al. (2018) electronically surveyed and compared internationally born (n = 21) and U.S. born students (n = 246) to gauge perceptions of university health center HCP level of CC, student satisfaction, and student attitudes toward the university health center HCP. Results in student populations were similar to studies in primary care that examined similar concepts. U.S. born students, compared to their internationally born counterparts, rated university health center HCP CC levels as low, language needs not being met, and belief systems not being valued (all \( p < .001 \)). Interestingly,
international students were more likely to report compliance with HCP recommendations than were their U.S. born equivalents. The authors explain this compliance might be related to the HCP communicating differently with the international students due to awareness of their different culture (Hudak et al., 2018).

Campbell et al., (2007) evaluated patient–provider relationships at a university student health center. Eighty HCP and students participated in a cross-sectional study completing surveys before and after encounters with HCP and at a two-week follow up. Students were asked about satisfaction with their provider’s participation behavior, and the student’s ability to manage health outcomes. A positive correlation supports a match between the actual participatory level of the student and the desired level of participation ($r = .613, p < .001$). In addition, patient satisfaction scores were higher if the actual participatory level of the student and the desired level of participation were the same ($r = -0.537, p < .001$). This study confirms findings from other studies that found students have preferences that need to be addressed to achieve high satisfaction rates and lead to student adherence of the recommendations given by their HCP (Alizadeh, & Chavan, 2015; Betancourt & Tan-McGrory, 2014a). Such omissions in students’ health care may lead to low student adherence with the plan of care and a lack of student satisfaction with the provision of care.

Disparities among ethnic and racial minority university students exists. Hunt et al., (2014) conducted the Healthy Minds Study. They surveyed students ($N = 13,028$) about their use of mental health services at university health services. The study found African American (2.49%), Asian (0.83%), and Hispanic (3.32%) university students had a lower predicted probability of utilizing mental health care than their white counterparts (6.25 %). This finding for disparities among diverse university student is congruent with disparities found in the general
The patient perceptions of cultural competence care in university health care was presented with the support of cohort studies. Based upon the scoring criteria for prevalence guidelines, the LEGEND score for this body of evidence was determined to be a 3a (Clark et al., 2009).

Measurement Tools Related to Cultural Competence

Several quantitative instruments were found in the literature which measure CC in HCP. Three of the most commonly utilized tools are discussed here to provide context for the current DNP project; The Cultural Competence Assessment (CCA) (Doorenbos et al., 2005), the Cultural Competence Health Practitioner Assessment (CCHPA-67), (Harris-Haywood et al., 2014), and the Inventory for Assessing the Process of Cultural Competence among Health Care Professionals-Revised© (IAPCC-R©) (Campinha-Bacote, 2002).

The CCA is an established and validated tool used to measure the CC behaviors of HCP, and is linked to a CC model; thus, providing theoretical rationale for the tool. The CC model uses a jigsaw puzzle to link the four CC constructs of awareness, diversity, sensitivity, and competence (Doorenbos et al., 2005). The tool contains 38 items, uses a 5-point Likert scale (from 1 = no opinion to 5 = strongly agree), and was originally designed for use with hospice nurses. The reliability is 0.92 for the full tool and 0.75 to 0.93 across the two subscales; CAS which measures (cultural awareness and sensitivity) and CCB which measures (cultural competence behaviors). The authors used the IAPCC-R© by Campinha-Bacote to establish validity by correlation of scores as the CCA had similar underlying constructs. This tool was not chosen for this project as it lacks the specific CC constructs desired by the Principal Investigator.
The Cultural Competence Health Practitioner Assessment (CCHPA-67) was created by Georgetown University’s National Center for Cultural Competence and is an established and validated tool (Harris-Heywood et al., 2014). It has three domains: knowledge, adapting practice, and promoting health for culturally and linguistically diverse populations. The tool contains 67 items, uses a 4-point Likert scale (from 1 = not at all /never to 4 = very well/always). The Cronbach’s alpha for the tool is 0.92. The tool was not chosen as it is a self-reflection for use by HCP and did not lend itself to a pre-test, post-test design.

The IAPCC-R© is an established and validated tool used to measure the CC behaviors of HCP and is linked to a CC model; thus, providing theoretical rationale for the tool. The tool and the CC model were developed by the same researcher. The scale contains five constructs: awareness, skill, knowledge, encounters, and desires that are relevant to HCP serving various ethnic and racial minority students in health centers on university campuses. The tool contains 25 items, uses a 4-point Likert scale (from 1 = strongly disagree to 5 = strongly agree), and was originally designed for use with medical personnel. Cronbach alpha ranges from 0.75 to 0.93 across the five constructs, with 0.89 for the full tool. There is controversy with the IAPCC-R© as critics claim the tool is written at an advanced reading level (Doorenbos et al., 2005). However, the tool is regarded as a strong predictor for CC of HCP as there is a link to a theoretical model, defining the constructs.

The IAPCC-R© tool (2002) and model (1998) representation in studies in the most recent five years (2014-2019) were poorly represented in U.S. literature (Campinha-Bacote, 2002). Delagado et al. (2013) used the IAPCC-R© to measure the effect of a one-hour CC class for hospital staff members including RNs, patient care assistants and unit secretaries (N = 98) at baseline, at three, and at six months after the class. A statistically significance change in scores
was found from baseline to three-months and \( t(2.38), p = .02 \) to six-months \( t(2.08), p = .04 \).

However, results were reported only for two of the four levels of CC, “culturally aware” and “culturally competent”. Results were not reported for the other two levels of CC, “culturally proficient” and “culturally incompetent”. The content and objectives of the workshop were well-defined, improving its ability to be replicated. Overall, this study was related to the current DNP project’s intervention but differed in its population and setting. Rationale for the selection of the IAPCC-R© for this DNP project was based on the structure and format of the tool, the five specific constructs it measures, the link to an evidence-based CC model, its applicability to the project’s sample, and its ease for use in a pre-test, post-test format (Campinha-Bacote, 2002, 2007). The tool is further detailed in Chapter III.

**Continuing Education**

Patients are often dissatisfied with the quality of culturally based care (Alizadeh, & Chavan, 2015; Betancourt & Tan-McGrory, 2014a). Literature shows HCP are not CC competent (Blair et al., 2013; Grubb et al., 2015). A gap exists between the quality care patients desire from HCP and the actual provision of care delivered (Blair et al., 2013; Grubb et al., 2015).

CC training may help bridge the gap between lack of patient-centered care and poor patient satisfaction to quality care that patients desire (Betancourt et al., 2003). CC education is needed for HCP who care for patients in both a university setting and in the general public. However, CC training implementation and CC content vary in consistency (Betancourt et al., 2003). Some CC educational programs aim to reduce bias and some aim to promote awareness (Cuevas et al. 2017). Expert consensus agrees programs should be tailored to the groups requesting training (Smith et al., 2007). HCP can also benefit from CC course developed as a
multidisciplinary approach, including content reviewed and developed by experts in anthropology, psychology, medicine and racial and ethnic minorities (Kutob et al. 2013; Smith, 2018).

In addition, an operational definition of CC is desirable to allow CC baseline measurements and CC improvements (Alizadeh & Chavan, 2015; Betancourt et al., 2003; Doorenbos et al. 2005; Truong et al., 2014). Without a definition of CC there cannot be a consensus of CC understanding and measurement. Although not ideal with all the definitions of CC in existence, there are similar constructs which allow delivery of CC education.

There are many platforms by which to deliver CC continuing education. An evidence-based workshop serves as an effective platform to offer CC training (Like, 2011; Smith et al., 2007). Both online and face-to-face workshop formats offer unique challenges. Online workshops offer convenience and a relaxed atmosphere for instruction. However, online workshops are reserved for those with self-motivation to complete assignments and readings (Kutob et al., 2013). Face-to-face workshops offer a more structured environment with live interactions (Like, 2011). Until continuing education about CC is mandated, HCP must intentionally and individually seek out opportunities to learn about and practice CC. Patient outcomes depend on it (Like, 2011; Kutob et al., 2013; Smith et al., 2007).

CC curriculum in medical, nursing, and allied health schools has an obligation to teach students in various disciplines about cultural assessments and awareness. Medical schools have set a standard through the Liaison Committee on Medical Education encouraging CC curriculum to be implemented in undergraduate programs, and the Accreditation Council on Graduate Medical Education has included cultural sensitivity in its competencies (Smith et al., 2007).
Included in the curriculum should be comprehension of stereotypes and biases (i.e., implicit bias) as well as knowledge of health disparities and self-reflection (Smith et al., 2007).

Nursing organizations have penned white papers promoting CC to mitigate health care disparities. The AACN released a culture competence statement for both graduate and undergraduate nursing schools grounded in ethical treatment for all patients (AACN, 2008a). However, without competencies to measure CC in the curriculum, teaching of CC relies on the nursing faculty’s interpretation of CC concepts, which may or may not be effective.

Teaching through modeling CC care can be beneficial to students. Recommendations exist for treating patients with mutual respect and initiating cultural sensitive interactions in clinical sites when precepting both undergrad and graduate nurses (Smith, 2018). In addition to patient care, nurse educators have a role in educating ethnically diverse student nurses who are needed to bridge a gap in diversity among nursing (Smith, 2018).

**Overall Summary of the Body of Evidence**

The body of evidence identified the following literature with LEGEND scores: the history of CC (5), the history of health care disparities (1b), the HCP style of engagement (3a), patient perceptions of cultural competence care in primary care (4a), and patient perceptions of cultural competence care in university care (3a). Based on the lack of literature of randomized controlled trials or case control trials related to PICOT components, the LEGEND score for this entire body of evidence was determined to be a 3a (Clark et al., 2009).

**Rationale for the Project**

Health care disparities are pervasive within our vulnerable populations (CDC, 2019; OMH, 2015). Patients in primary care feel disconnected from their HCP’s lack of patient-centeredness (Ahmed & Bates, 2017). Patient centeredness encompasses CC and is a standard of
care through IOM, now the National Academy of Medicine (IOM, 2015). The 3rd aim of the IOMs, *Six Aims of Health Care*, address patient-centered care which guides care delivery. The 6th aim discusses equitable care for all patients regardless of ethnic or racial makeup (IOM, 2001). Without CC incorporated into the daily encounter with patients, a direct link exists to health care disparities. To bridge the health disparities gap and improve clinical outcomes for racial minorities and ethnic groups, HCP need to practice aspects of CC to engage in critical dialogue with patients. This dialogue includes discussions about the patient’s beliefs and understanding about illness (Hall et al., 2015). Providing culturally competent health care strengthens provider-patient engagement and leads to improved clinical outcomes (Ahmed & Bates, 2017; Alizadeh, & Chavan, 2015; CDC, 2019; OMH, 2018).

University health centers are concerned with the wellness of students. Within the university setting, students are patients. Reasonable inferences can be made about the provision of culturally competent care between patients in the general public and students utilizing health centers. Hunt et al. (2014) found that disparities in health care for racial and minority students were apparent even after removing many perceived barriers to care. Students warrant positive clinical outcomes similar to the clinical outcomes anticipated for patients in the public sector (Hudak et al., 2018). In fact, students want HCP to acknowledge their cultural beliefs (Campbell et al., 2007). Lack of CC in the delivery of health care leads to health disparities of students. Mitigation of disparities in student health remains a directorial principal for CC standards of care.

Standards exist to guide health care of university students. Standard four of the American College of Health Association’s seven standards details CC for university health care personnel. The standard directs HCP to prioritize their efforts to become culturally competent, with an end
goal of reduction of health care disparities for ethnic and racial minority students on college campuses (ACHA, 2011). As students visit health care centers throughout college campuses, the culturally competent care delivered will enhance student-provider relationships. This care will further engage student patients and improve clinical outcomes by providing a patient centered approach (Campbell et al., 2007). The trusting relationship in which every student feels valued will further ensure success of students in college and beyond (ACHA, 2011; Campbell et al., 2007).

Bridging the gap of translating the existing evidence in primary care to the student health center is realistic. No studies were found that examined an intervention of CC training of HCP in a university student health care setting. Most relevant literature discovered was in primary care of patients. However, students are patients too. Qualified HCP who treat students are also qualified to treat patients in family clinics. When students leave their university setting for summer breaks, they return to their local clinics for health treatments. Thus, students become patients in the general public. By improving the CC of HCP in university settings, students will benefit from improved clinical outcomes throughout all levels of their health care needs. Therefore, this project implemented an evidence-based CC workshop for licensed HCP and measure CC scores using the IAPCC-R© tool.

**Conclusion**

The link between CC of HCP and health care disparities is established both in the literature and with the regulatory bodies of the Institute of Medicine and the Office of Minority Health (IOM, 2001; OMH, 2018). This chapter detailed literature search criteria and appraised the body of literature. It also synthesized the relevant literature searched. Finally, the chapter concluded with a rationale for the project.
CHAPTER III

Methodology

Literature shows a relationship exists between provider’s lack of cultural competence (CC) and poor patient outcomes for racial and ethnic minority groups in the general public (Alizadeh & Chavan, 2015; Betancourt et al., 2003; NCCC, n.d.). Literature also shows health care disparities of racial and ethnic minority university student groups in a university student health center environment (Campbell et al., 2007; Hudak et al., 2018; Hunt et al., 2014). Both of these populations of patients and students could be better served by HCP who have CC.

This chapter describes the methodology of the DNP project that provided a live, evidence-based workshop on CC for licensed university student health care personnel (HCP). The type and design of the project and sampling framework are articulated. Primary and secondary project aims are discussed. Data collection procedures and measurement tools are examined. Data analysis procedures are included in detail, and the protection of study participants is described.

Design and Type of Project

The study used a quasi-experimental, one group, pre-test/post-test design. This design is beneficial when the intervention is considered to have an impact, and there are limited potential causes. Polit and Beck (2012) agree the drawbacks to this study design include weak support for causality. However, a benefit to the one group, pretest-posttest studies, is they allow the opportunity to infer that the intervention was the cause of post-test knowledge increase compared to pre-test. This study offered a brief educational intervention, with data obtained before the intervention, and post-test data collected immediately after the intervention. Additionally, a six-
week post-workshop assessment of implementation barriers and facilitators concluded the data collection phase of the study.

The DNP project on the process of cultural competence among HCP within a university student health center setting is a translational research project. Most literature related to CC education and HCP has been conducted in the primary care setting, while few studies have focused on CC in the university student health setting. As such, this project translated the knowledge about the benefits of CC education of HCP with improved patient outcomes to the setting of higher education. The Principal Investigator (PI) implemented a CC workshop which offered the HCP at three university student health sites a deeper understanding of CC after the workshop intervention. Thus, translating research into practice.

This project followed the Six Aims of the Institute of Medicine (IOM, 2001), particularly the 3rd and 6th aims. The 3rd aim addresses patient-centered care while guiding care delivery, and the 6th aim discusses equitable care for all patients, regardless ethnic or racial makeup (IOM, 2002). The project was also justified through the ACHA, which published guidelines for quality assurance of health promotion. Standard four of the ACHA guidelines pertains specifically to CC, including HCP awareness of disparities and guidelines for designing health promotion initiatives which are focused on equity (ACHA, 2012). Although the project was based on HCP treating students seeking medical care at a university student health center, the project has implications that could benefit allied health, particularly HCP in all disciplines and settings.

**Primary and Secondary Aims**

The research aims guided the direction of the scholarly project. The primary aim of the DNP project was to explore the impact of a live evidence-based cultural competence workshop on university student health services licensed personnel's perceived level of cultural competence.
There were several secondary aims of the scholarly project: (1) to compare cultural competence scores between different demographic groups; (2) to evaluate the evidence-based workshop intervention format; and (3) to appraise the facilitators and barriers to implementation of the cultural competence skills addressed in the workshop.

**Project Resources**

Projects require the support and multiple contributions from many individuals and entities to reach completion. The PI used the physical locale of three university student health centers to recruit participants and collect data. In addition, breakfast was catered for each site during the CC workshop to allow HCP to feel comfortable and valued.

**Human Support**

Several content experts were consulted to assist with the development and review of CC workshop content. These experts included personnel at the Georgetown University’s National Center for Cultural Competence, a state director at the Department of Health’s Office of Health Equity, and a content expert serving as one of the DNP project team members. Statistical support was offered to DNP scholars as a resource. Faculty support included the student’s own project team: a primary mentor, a cultural competence expert, and a clinical expert in university student health. Continuing educational credit was obtained through a central credentialing agency allowing the American Nurses Credentialing Centers support for nurse credits and the American Medical Association support for physician credits.

**Additional Support**

Physical resources necessary at each site for the workshop included a conference room with desks or tables for approximately 20 participants and a sign-in table at the entryway to the room. The PI was fiscally responsible for tool purchase, continuing education credit through a
credentialing agency, statistician payment, and purchase of the raffle prize for participants. In addition, payment was made to a copy services for preparing hard-copy packets, printing recruitment fliers, and preparing toolbox notebooks for each site.

**Setting and Sampling**

The three sites for the project were university student health centers, all located in the mid-Atlantic region of the U.S. *Site #1* is a large private faith-based university with approximately 19,000 students enrolled, with 125 countries represented in their student body, 49% of which are diverse students. It is located in a metropolitan city serving a diverse population of both international and U.S. students. The health center has approximately 16,000 student visits per year and has 15 licensed personnel, with multiple administrative and support staff. *Site #2* is a large public university located in an urban area in the mid-Atlantic region of the U.S., with approximately 36,000 students enrolled, with 100 countries represented in their student body. It is centrally located between the other two sites. The health center has approximately 18,000 student visits per year, and 59% are diverse students. The site has 20 licensed personnel, with 10 support and administrative staff. *Site #3* is a small private faith-based university of 4,000 students of which 66 countries are represented. The university is located in a rural area. The health center serves approximately 3,000 student visits per year and has five licensed personnel, with four support and administrative staff.

A convenience sampling framework was used to obtain study participants. This type of sampling allows the researcher to include all the participants in the three settings and helps limit bias when the structure of the project allows for open enrollment (Polit & Beck, 2012). Individuals were screened for eligibility at each university student health center. Inclusion and exclusion were established for the study.
Inclusion criteria for the study were: (1) licensed health care professionals including physicians, medical or nursing residents, nurse practitioners (APRNs), registered nurses (RNs) and licensed practical nurses (LPNs) and (2) employed full time, part time or per diem or have a temporary status at university student health services study locations. The participants were (3) graduates of either an accredited school of medicine and residency with board certification, or graduates of an accredited university with board certification. The licensed health care personnel were required to (4) hold a current license to practice medicine or nursing in the U.S., (5) agree to participate, (6) read and speak English, and (7) be 18 years or older.

Exclusion criteria for the study were: (1) unlicensed health care personnel (i.e., office staff, medical assistants) employed at the student health centers and (2) unlicensed nursing or medical students rotating through the student health centers. Office staff were invited to attend the workshop (if instructed by their center director) but were not included as study participants. Rationale for the exclusion of unlicensed HCP was related to the IAPCC-R© tool’s reliability testing occurred with licensed HCP. Rationale for student exclusion was that their current educational curriculum may have embedded cultural competence education; thus, influencing results of the study.

A power analysis is a computation completed to determine the number of participants needed in the study, and to minimize risk of a Type II error (Moran et al., 2017; Polit & Beck, 2012; Sylvia & Terhaar, 2018). A priori power analysis was completed using G*Power 3.1.9 (Faul, Erdfelder, Lang, & Buchner, 2007) and revealed a target sample size of 27 participants needed to potentially reach statistical significance at a power of 80% and medium effect size. The alpha or level of significance for the study was set at 0.05 to reduce the risk of a Type I
error. A Type I error indicates the probability of rejecting the null hypothesis when it is actually true (Polit & Beck, 2012).

**Data Collection Instruments**

Four data collection tools were used in the scholarly project. The first is a demographic survey, consisting of 13 of questions. The second was the IAPCC-R© tool (Campinha-Bacote, 2002). The third was a short survey to evaluate the workshop format. The final was a brief questionnaire related to facilitators and barriers to implementation of the information addressed in the live workshop.

**Demographic Characteristics Survey**

The demographic items were presented as nominal, ordinal, and ratio level variables. To minimize bias, participants completed the demographic survey after they completed the pre-IAPCC-R©. Psychological studies confirm that participants respond differently when asked for demographic data prior to answering a study-related survey (Polit & Beck, 2012).

The descriptive questions included age and gender of the participants, as well as years in practice, years in practice in student health, and CC training. Each demographic item was assigned a code number for the purposes of data analysis (Sylvia & Terhaar, 2018). See Appendix A for the demographic characteristics survey.

**Cultural Competence Tool**

The research instrument used to operationalize the primary outcome of the study was *The Inventory for Assessing the Process of Cultural Competence Among Health Care Professionals* (IAPCC-R©) (Campinha-Bacote, 2002). The IPACC-R© tool was applicable to the study as it is based upon the theoretical model by the tool developer and is intended for use by licensed health
care professionals (Campinha-Bacote, 1999). Further, Campinha-Bacote’s model is used as the theoretical framework for this scholarly project.

Validity and reliability are used to assess both the study and the measuring tool’s merit (Polit & Beck, 2012). Validity is defined as the accuracy with which what is intended to be measured is actually being measured (Sylvia & Terhaar, 2018). Content validity of the IPACC-R© tool was established by an expert panel of fifteen nurses on a research committee in an acute care hospital and content validity was assessed by five national health care experts in the transcultural nursing field (Campinha-Bacote, 1999). Construct validity was established by the known-group technique using 200 nurses who participated in a full day workshop of cultural competence (Campinha-Bacote, 1999).

Reliability is defined as the consistency of the instrument’s information (Polit & Beck, 2012). The tool has a Cronbach’s alpha reliability score of 0.83. Cronbach’s alpha is a reliability index examining the internal consistency of a measure with many subparts. For strong reliability of a measurement tool, the suggested Cronbach’s alpha should be > 0.7 (Polit & Beck, 2012), with the higher score equivalent to a higher reliability. Cronbach’s alpha scores range from 0.00 to +1 (Polit & Beck, 2012). Initially, the tool was limited in its reliability; a half-split technique did not result in an acceptable correlation coefficient (Campinha-Bacote, 1999). When the tool was reworked to add the construct of Cultural Desire, and 5 items, a strong reliability of 0.83 was revealed (Campinha-Bacote, 2002). Based on the tool’s measurement of Campinha-Bacote’s five constructs of CC, and to prevent a limitation in post-test measurement of CC, the training of CC must be based on Campinha-Bacote’s model (Campinha-Bacote, 1999). The IAPCC-R© tool has been translated into multiple languages.
Estimated completion time for the IAPCC-R © survey tool is 10-15 minutes. The tool consists of 25 items across five constructs: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire. Each of the five constructs is represented by five questions. The tool uses declarative statements to address each of the five constructs. For instance, two items read: “It is more important to conduct a cultural assessment on ethnically diverse clients than with other clients”, and “I feel comfortable asking questions that relate to the client’s ethnic/cultural background”. The IAPCC-R© tool uses a four-point Likert scale, is self-administered, and participants answer each question one time. Depending on the construct being evaluated, response options range from (1) I strongly disagree to (4) I strongly agree and (1) I am not very comfortable to (4) I am very comfortable. Five questions are reverse scored.

Scoring of the IAPCC-R© tool is completed in several ways. Each of the five constructs receives a separate composite score. Therefore, construct scores range from 5 to 25. Additionally, the overall scale receives a summed score. Thus, total scale scores range from 25 to 100. Higher scores indicate a higher degree of cultural competence. Summated construct and total scale scores are treated as interval-level for the purposes of data analysis (Sylvia & Terhaar, 2018). The score further indicates the HCP performance at different levels (i.e., proficient, competent, aware, or incompetent).

There is a fee to use the tool both in hardcopy and in the electronic version. The tool was used with permission of the instrument developer. The entire IAPCC-R© tool is not provided due to copyright constraints and non-permission of the instrument developer.

Workshop Evaluation Survey

This survey evaluated the workshop format itself and the three workshop objectives. It asked 10 questions about the workshop format, design, and the facilitator’s knowledge of the
topics presented. The rating of the questions was noted on a four-point Likert scale, from (1) strongly disagree to (4) strongly agree. This survey measured a secondary aim of the study. See Appendix B for the workshop evaluation survey.

Facilities and Barriers to Implementation Survey

Participants were asked three questions using a four-point Likert scale: 1-never, 2-some encounters, 3-most encounters, 4-every encounter. Questions including: “Over the past 6 weeks, how often were you able to implement the following when interacting with ethnic and racial minority students? 1) Use the “ask me three” technique, 2) Ask patients about cultural concerns that may impact their care, and 3) Discuss the patient’s perceptions of illness?” Two more questions followed. One question addressed ease of implementation of the information addressed in the live workshop into practice, and the other question examined barriers to practice. The last question was a Yes/No about the use of the toolbox provided. This survey measured a secondary aim of the study. See Appendix C for facilitators and barriers survey.

Toolbox of Resources

The PI offered a hard binder to each site comprised with notebook paper inside. The pieces of paper had hardcopy links of resources for the participants to self-explore. Some were listed as the NCCC at Georgetown University and thinkculturehealth.org. See Appendix D for toolbox of resources.

Evidence-Based Educational Workshop Intervention

The workshop entitled, Reflect & Connect: The Importance of Cultural Competence for Patients® was an educational evidence-based workshop filling a need as recognized by standard four of the ACHA (2011). Standard four of the seven Standards of Practice for Health Promotion in Higher Education, recognizes that CC is a process of which the HCP must be a
part. In order to deliver high quality, individualized health care to students, HCP need to receive education regarding CC (ACHA, 2011).

The educational intervention in the study was a one-hour in-person CC workshop. The workshop was designed by the PI using the model *The Process of Cultural Competence in the Delivery of Health Care Services*, using the mnemonic A.S.K.E.D. This model was developed by Campinha-Bacote in 1998 (Campinha-Bacote, 1999). The five constructs used in the survey were duplicated in the workshop. The constructs are: Awareness, Skill, Knowledge, Encounters, and Desire. Campinha-Bacote’s book, *The Process of Cultural Competence in the Delivery of Health Care Services* (2007), assisted in the development of workshop used for the workshop. The workshop content was reviewed by three CC experts and feedback was provided. Revisions were made based upon their feedback. One workshop was offered at each site. The workshop was held during regularly scheduled time for staff development. It was offered before a staff meeting at two sites and at a mutually beneficial time for the third site.

**Evidence-based Workshop Content**

Objectives were the expectations of the workshop and were stated as such: “By the completion of this workshop the learner will be able to achieve the following…” 1) Discuss an overview of cultural competency in health care delivery; 2) Define cultural competence in health care delivery; and 3) Discuss the five components of cultural competence in health care delivery.
Table 2. Outline of Cultural Competence Workshop

<table>
<thead>
<tr>
<th>Content Outline</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collection (Demographics and Pre-IAPCC-R©)</td>
<td>15 minutes</td>
</tr>
<tr>
<td>I. Introduction</td>
<td></td>
</tr>
<tr>
<td>a. Introduction of presenter</td>
<td>5 minutes</td>
</tr>
<tr>
<td>b. Overview of the presentation</td>
<td></td>
</tr>
<tr>
<td>c. Justification of the need for cultural competence</td>
<td></td>
</tr>
<tr>
<td>II. Cultural Competence</td>
<td>10 minutes</td>
</tr>
<tr>
<td>a. Definitions</td>
<td></td>
</tr>
<tr>
<td>b. Current federal and national standards/guidelines</td>
<td></td>
</tr>
<tr>
<td>III. Campinha-Bacote’s Model and Application of Cultural Competence</td>
<td>20 minutes</td>
</tr>
<tr>
<td>a. Cultural Awareness</td>
<td></td>
</tr>
<tr>
<td>b. Cultural Knowledge</td>
<td></td>
</tr>
<tr>
<td>c. Cultural Skill</td>
<td></td>
</tr>
<tr>
<td>d. Cultural Encounters</td>
<td></td>
</tr>
<tr>
<td>e. Cultural Desire</td>
<td></td>
</tr>
<tr>
<td>IV. Conclusion</td>
<td>10 minutes</td>
</tr>
<tr>
<td>a. Summary-tools for reflection</td>
<td></td>
</tr>
<tr>
<td>b. Question/answers</td>
<td>15 minutes</td>
</tr>
</tbody>
</table>

Procedures and Timelines

Data were collected during June, July, and August 2019. All data were collected by the PI after approval from the University Institutional Review Board (IRB). Letters of support for recruitment and data collection were obtained from each of the three project sites.

Recruitment of Subjects

A convenience sampling framework was used to obtain study participants. The source of the subjects were licensed health care personnel employed at the three university student health centers in the mid-Atlantic region of the U.S. Participation was fully voluntary and was conducted preceding a scheduled staff meeting. Recruitment was completed only after IRB approval was obtained.
Recruitment was completed in several ways. First, a recruitment flyer introducing the study was placed in student health center break rooms at each location two weeks prior to the scheduled workshop date. Second, with the permission from the center director, the front office staff emailed a script provided by the PI two weeks prior to the start of the project. This email introduced the PI, described the purpose of the study, and encouraged participation. The email was sent to all staff and personnel, noted the date and time of the workshop, and informed staff the workshop would be conveniently held during a regularly scheduled staff meeting time. One continuing education credit was approved for the workshop. A raffle for one computer tablet was offered to participants who completed the study in its entirety (pre-workshop, post-workshop, and the facilitators and barriers to implementation survey). Mention of the education credit and raffle were noted in the pre-workshop email as a small enticement for participation. Participants did not receive any monetary compensation from the PI for taking part in the study.

Subjects were self-identified at the workshop sign-in as licensed HCP employed at the three student health center locations. Participants were eligible only if they met inclusion criteria. All unlicensed personnel at the three university student health centers were invited to attend in the workshop. No unlicensed personnel received an envelope with data collection forms, nor did they complete data collection. At the conclusion of the workshop, unlicensed personnel simply received a PI-created certificate of attendance.

Partial participation in the study was allowed. For instance, participants could choose not to complete any data or any possible combination of data collection. All data collected was used in data analytic procedures as appropriate.
Pre-Workshop Survey

First, participants were seated during the workshop in conference room space at the student health centers. After a brief introduction by the health center director, the PI introduced the study explaining in detail the three data collection points (pre- and post-IAPCC-R©, and six-week facilitators and barriers survey). Participants were encouraged to ask questions for clarification. The PI provided a sealed manila envelope to potential participants who acknowledge they are licensed personnel. The envelope contained the informed consents, the demographic survey, and Campinha-Bacote’s IAPCC-R©.

Second, the envelope was opened by the participants. The researcher asked participants to create a unique identification number by using the last four digits of their primary phone number. Identifications numbers were used for matching purposes only. Participants were asked to supply their work email address so follow-up surveys could be sent by the PI. Participants wrote that unique identifier on both the IAPCC-R© and the demographic survey on the designated line. The envelope contained two informed consents, one for the participant to retain and one for the PI. The informed consent was the first document in the envelope. Document two was the 25-item IAPCC-R© tool (Campinha-Bacote, 2002). Document three was the demographic survey. All documents in the envelope were completed (if the person chose to participate) and participants were asked to place them back in the envelope. Completion took about 15 minutes. The PI stepped out of the room during data collection. Once the envelopes were sealed, they were returned to the box on the table as they exited the room. Any person not wishing to participate in the study simply did not sign the consent and did not complete the surveys. Time was set aside for questions as participants reviewed documents. Each envelope was coded for site location.
with the letters, “G”, “S”, or “M” written on the top right corner. The envelopes were coded for PI convenience only.

Evidence-Based Workshop

The workshop commenced after envelopes were collected. The workshops Reflect & Connect: The Importance of Cultural Competence to Patients © was held at each location in the same room as usual staff meetings. The workshop was one hour in length. The workshop was interactive with a time allowed for questions and answers at the end. The five CC constructs of Campinha-Bacote model were discussed in detail.

At the conclusion of the workshop, participants were informed of the remaining two data collection points in the study. They were told to expect an email, sent by the PI, to their work email account in one week followed by two reminder emails. They were informed that completion of the evaluation form was required by the continuing education provider in order to receive continuing education credit and certificate. Permission to offer continuing education credit was obtained by an accredited credentialing center through one of the study locations. Participants were informed to expect a six-week follow-up survey sent to their work email by the PI. They were notified that the six-week post-workshop email with survey link and two reminders would be the last communication from the PI. After the six-week follow-up survey the data collection phase of the study was complete.

After the completion of workshop at each of the three locations, the PI wrote the unique identifiers and the work email addresses on separate pieces of graph paper. Those documents were placed in a larger manila envelope labeled for each location with a “G”, “M”, or “S” and placed that information in the PI’s home office in a locked file cabinet. The information is not comingled with the PI’s personal files.
At the conclusion of the workshop the PI offered a resource toolbox to each location. This was a hardcover binder with a list of resource links to CC-appropriate materials. For instance, the website for Office of Minority Health and the Harvard Implicit Bias website were included.

**One Week Post-Workshop**

One week after the workshop, participants were asked to complete the 25-item IAPCC-R© tool, and the workshop evaluation survey through Qualtrics (XM), the University approved e-survey platform. The PI sent emails to participants at each location with a Qualtrics (XM) survey link using the work email addresses provided. Participants were blind carbon copied on all follow-up emails to protect their identity. Question one on the survey asked participants to note their unique identifier (the last 4 digits of their primary phone number). Participants then completed the IAPCC-R© and concluded with the workshop evaluation survey. Completion of the workshop evaluation was required for participants to receive their continuing education certificate. Two email reminders were sent by the PI.

**Six Weeks Post-Workshop**

Six weeks after the evidence-based CC workshop an email with a survey link was deployed to all participants by the PI. Again, participants were blind carbon copied to protect their identity. This survey was entitled *Facilitators and Barriers to Implementation Survey*. This short survey was deployed through the university approved, secure Qualtrics (XM) platform. Two email reminders were sent by the PI. The survey remained open for seven days.
Figure 3. Data Collection

Protection of Human Subjects

The protection of human subjects is the highest importance when conducting research (Polit & Beck, 2012) with university IRB approval necessary for research exploration (Moran et al., 2017). The university where the PI is a doctoral student was the IRB of record for the study. The PI was not required to obtain IRB approval from any of the three study sites IRB. However, each site’s IRB office drafted a letter of support for the project, and permission was granted from each site’s director of student health. In addition to IRB approval, the PI and mentors were current with Collaborative Institutional Training Initiative (CITI) training. CITI training is a series of modules that tests the researcher’s ability to understand research integrity. Approval of the IRB (expedited review) was granted prior to recruitment of subjects and data collection.
Consent is needed for each participant entering a study (Polit & Beck, 2012). Written informed consent was obtained from each study participant. The written informed consent process took place prior to workshop commencement. There was a two-week waiting period between informing the prospective subjects and obtaining the consent. The PI was the only individual involved in the consent process for participants at all three student health center locations. Participants had the opportunity to read the consent and ask questions before signing. Steps were taken to minimize the possibility of coercion or undue influence. All potential participants received an envelope, but they could choose to complete or not complete the paperwork. The clinic director was present during the consent process. The participants were reminded their participation was voluntary and there would be no consequence for non-participation. Steps taken to ensure the subjects’ understanding included: asking the participants to verbalize understanding of the consent and how to withdraw if they wished. Each participant physically signed a hardcopy consent to indicate their willingness to participate in the study.

Ongoing consent of the participants was ensured during the one-week and six-week follow-up surveys. Participants could choose not to complete the electronic surveys or self-select participation. Completion of the surveys indicated their consent to participate in that data collection point. All follow-up surveys were emailed using the blind carbon copy feature to ensure participant privacy.

There was minimal risk to subjects who participated in the study. The content of the study is not emotionally charged. There may have been racial components where biases may have caused uncomfortable feelings. Participants had the PI’s contact information on the consent form. Participants were reminded to contact the PI to discuss further, but no participants
contacted the PI. There was no economic risk as participants attended the workshop during a regularly scheduled staff meeting time.

Data Management and Confidentiality

Maintaining confidentiality of participant information is ethically mandatory in data collection (Polit & Beck, 2012). Demographics and the pre-IAPCC-R© data were collected by the PI in hardcopy. Identifiable data was collected from participants who voluntarily shared his or her email address for follow-up. The researcher had participants choose an identification number they could easily remember (the last four digits of their phone number). Participants wrote that unique identifier on their pre-workshop data collection forms. The researcher maintained a secure list of all participants’ unique identifiers. The list of identification numbers and work email addresses was not shared with the project mentor or the statistician.

The three site envelopes were placed in a non-marked, waterproof binder and secured in a locked file cabinet in the home-office of the PI. Once data collection was complete, the raw data were sent to the study statistician through the secure university repository (GU-Box™). Hardcopy surveys and electronic data are retained for three years after the study concludes and then appropriately discarded (i.e., hardcopies shredded, electronic files deleted and the ‘trash bin’ emptied, GU-Box deleted).

Securing and Storing Data

Data collected was the minimum amount necessary to answer the research questions. Data gathered included work email addresses, unique identifiers, demographics, workshop evaluation survey, facilitators and barriers to implementation survey, and pre- and post-workshop CC scores.
The hardcopy survey data was manually entered into a spreadsheet and double checked for accuracy. The spreadsheet file was uploaded to the university approved secure data electronic storage system for access and use by the statistician. Box™ is a password protected electronic repository approved by the university. Two-factor authentication is required by all users to access Box. Only the PI, the project faculty mentor, and the statistician had access to the Box.

Electronic data were also collected in the study. Electronic data collected included the post IAPCC-R© scores, workshop evaluation, and facilitators and barriers to implementation survey. The Qualtrics (XM) electronic survey platform was used in the study. This platform is the approved university e-survey system; it does not collect nor retain any traceable IP addresses. The PI accessed Qualtrics (XM) through the approved link provided by the university. The PI accessed both Box and the Qualtrics (XM) platform through the PI’s personal computer. The PI’s computer is a Mac™ and uses password protected Wi-Fi connection. The PI’s personal computer is equipped with firewall protection. University email was not used to collect, store, or transmit sensitive human subject research data.

**Outcome Measurements and Data Analysis Plan**

The DNP project was a translational project accomplished for the goal of meeting project aims and improving outcomes (Sylvia & Terhaar, 2018). Once data collection has been completed, primary and secondary aims of the study outcomes are measured for accurate results (Sylvia & Terhaar, 2018). The primary endpoint of the project was identified as the six-weeks after attending the CC educational workshop. However, because of the allowance of partial participation, participants may have pre- and post-workshop data only.
Primary Aim Data Analysis

To measure the primary aim, the researcher tallied data on pre- and post-workshop CC mean scores related to IAPCC-R© tool. The five constructs of the theoretical model and the IAPCC-R © tool: Cultural Awareness, Cultural Skill, Cultural Knowledge, Cultural Encounters, and Cultural Desire, were measured for knowledge change from the pre-workshop to the post-workshop surveys (Campinha-Bacote, 2002). To evaluate total and construct-related baseline knowledge and construct change after the educational intervention, paired $t$-test was used. The paired $t$-test is used to show a difference between the one group mean at two points in time as pre-and post-surveys (Moran et al., 2017; Sylvia & Terhaar, 2018).

Secondary Aims Data Analysis

The secondary aims were: (1) to compare cultural competence scores between different demographic groups; (2) to evaluate the evidence-based workshop intervention format; and (3) to appraise the facilitators and barriers to implementation of the cultural competence skills addressed in the workshop. Additional statistical procedures included the use of descriptive statistics to examine demographic characteristics and to analyze data related to secondary aim #2 and #3, such as mean, SD and frequencies. Pearson’s $r$ coefficient was used to compare CC score and different demographic variables (i.e., CC scores based upon type of professional licensure). Comments written in the “Additional Comments” boxes of the surveys were reviewed and analyzed thematically.

Conclusion

The methodology discussed in chapter three guides the researcher to remain within the scope of the project, remain on time for deliverables and detail the large undertakings of the project (Moran et al., 2017; Sipes, 2020; Sylvia & Terhaar, 2018). Many layers must be
conjoined for a study to be implemented, resulted and defined to allow replication. Careful detail must be followed to protect the participant and the participant’s confidentiality (Sylvia & Terhaar, 2018). Additionally, outcome measurement allows the study aims to be quantified and resulted. Finally, the DNP project is a translational research project allowing for translation of research into practice, with the downstream goal of improvement of HCP CC understanding through changes in IAPCC-R© scores.
Chapters IV

Analysis of Data

After data were collected, results were computed and reported. The project started with the pre-workshop data collection and concluded after the six-week facilitators and barriers to implementation survey was completed. The data were analyzed with the Statistical Package for the Social Sciences (SPSS), Version 24, by the university staff statistician. This chapter describes in detail the results of the study, beginning with the demographics survey, the pre- and post-workshop CC scores, the workshop evaluation, and finishing with the six-week post-workshop survey.

Characteristics of the Health Care Personnel

Data were collected from HCP employed at three university student health centers. Eligible participants who met inclusion criteria across the three sites was approximately 50. About half of eligible participants completed the demographic survey and pre-workshop IAPCC-R© (N=27). Nineteen participants completed the pre- and post-workshop IAPCC-R© (N=19). The final sample of 19 was used for the purposes of most data analyses. The response rate was 38%. Eight participants completed the six-week follow up survey about facilitators and barriers to implementation of the survey. *A priori* power analysis was completed using G*Power 3.1.9 (Faul et al., 2007) and revealed a target sample size of 27 participants needed to potentially reach statistical significance at a power of 80% and medium effect size. The alpha or level of significance for the study was set at 0.05 to reduce the risk of a Type I error. A Type I error indicates the probability of rejecting the null hypothesis when it is actually true (Polit & Beck, 2012). For this study, the IAPCC-R© Cronbach’s alpha=0.883, demonstrating good internal reliability.
Note that by groups, 28.6% of physicians dropped out, 0% of APRNs dropped out, and 40% of nurses dropped out from the pre- to post-workshop IAPCC-R©. Attrition was expected as there were three data collection points (Sylvia & Terhaar, 2018). There are no significant differences between those who completed both pre- and post-surveys and those who did not. Although the differences in type of participant who dropped out were not statistically significant using chi square, the cell size assumption for chi square was not met, so results of the test should be viewed with caution.

The majority of participants were white, while all were female with English as their native language. The groups were evenly split between physicians (n = 5), and advanced practice registered nurses (n = 5), with about twice as many nurses (n = 9). For reporting purposes, physicians included: doctors of osteopathy and medical doctors. For the purpose of this study nurses included: registered nurses and licensed practical nurses. See the Table 3 for demographic characteristics of the sample.

**Table 3. Demographic Characteristics (N=19)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Characteristic</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Licensure</strong></td>
<td>APRNs</td>
<td>5 (26.3%)</td>
</tr>
<tr>
<td></td>
<td>Physicians</td>
<td>5 (26.3%)</td>
</tr>
<tr>
<td></td>
<td>Nurses</td>
<td>9 (47.4%)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td>White</td>
<td>16 (84.2%)</td>
</tr>
<tr>
<td></td>
<td>Black/African</td>
<td>2 (10.5%)</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>1 (5.3%)</td>
</tr>
<tr>
<td><strong>Role</strong></td>
<td>Direct student care</td>
<td>13 (68.4%)</td>
</tr>
<tr>
<td></td>
<td>Administration</td>
<td>2 (10.5%)</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>4 (21.1%)</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>Full-time</td>
<td>16 (84.2%)</td>
</tr>
<tr>
<td></td>
<td>PT</td>
<td>3 (15.8%)</td>
</tr>
<tr>
<td></td>
<td>PRN</td>
<td>0</td>
</tr>
<tr>
<td><strong>Country of Education</strong></td>
<td>United States</td>
<td>19 (100%)</td>
</tr>
<tr>
<td><strong>Years in practice</strong></td>
<td>Mean=17.3 (+3.4)</td>
<td></td>
</tr>
<tr>
<td><strong>Years in Student Health</strong></td>
<td>Mean=6.30 (SD)</td>
<td></td>
</tr>
</tbody>
</table>
The average age of groups was physicians 47 years, APRNs 48 years, and nurses 44 years. Nurses had been in practice the longest, with 19 years of experience on average. The APRNs had spent more time in student health with 8.6 years on average.

![Bar chart showing different cultural competence training methods.]

**Figure 4. Cultural Competence Training Methods**

Figure 4 shows the different context in which the participants had experience with CC prior to the workshop intervention. The most frequent method reported was a workshop. Only one participant reported no previous CC training.

**Project Aims**

**Impact of the Evidence-Based Cultural Competence Workshop**

The primary aim of the study was to evaluate the impact of an evidence-based cultural competence workshop on licensed HCP employed at three university student health centers. The IAPCC-R© was used to establish a baseline of CC and to determine change of the CC scores after the workshop. Composite scores of the IAPCC-R© relate to various levels of cultural
competence (Campinha-Bacote, 2002). Ranges of scores determine various levels of CC. See Table 4.

**Table 4. Cultural Competence Levels of the IAPCC-R©**

<table>
<thead>
<tr>
<th>Levels of Competence</th>
<th>Cultural Competence Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culturally proficient</td>
<td>91-100</td>
</tr>
<tr>
<td>Culturally competent</td>
<td>75-90</td>
</tr>
<tr>
<td>Culturally aware</td>
<td>51-74</td>
</tr>
<tr>
<td>Culturally incompetent</td>
<td>25-50</td>
</tr>
</tbody>
</table>

The IAPCC-R© composite scores from pre- to post-improved for the total participants \((N=19)\). The total of all the participants’ pre-workshop IAPCC-R© mean score was 70.84 \((N=19)\), indicating a level of being Culturally Aware at baseline. One week after the conclusion of the workshop, the mean IAPCC-R© score rose to 78.21, indicating a level of being Culturally Competent. The difference in the mean = 7.37 \((p < .001)\). See Table 5 for IAPCC-R© Mean Scores and Constructs for all participants.

**Table 5. IAPCC-R© Mean Scores and Constructs \((N = 19)\)**

<table>
<thead>
<tr>
<th>IAPCC-R© Construct</th>
<th>Possible Range of Scores</th>
<th>Mean Pre-Workshop</th>
<th>Mean Post-Workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAPCC-R total</td>
<td>25-100</td>
<td>70.84</td>
<td>78.21</td>
</tr>
<tr>
<td>Awareness construct</td>
<td>5-20</td>
<td>14.68</td>
<td>16.42</td>
</tr>
<tr>
<td>Knowledge construct</td>
<td>5-20</td>
<td>11.84</td>
<td>13.89</td>
</tr>
<tr>
<td>Skill construct</td>
<td>5-20</td>
<td>13.16</td>
<td>15.16</td>
</tr>
<tr>
<td>Encounter construct</td>
<td>5-20</td>
<td>13.89</td>
<td>14.79</td>
</tr>
<tr>
<td>Desire construct</td>
<td>5-20</td>
<td>17.26</td>
<td>17.95</td>
</tr>
</tbody>
</table>
The participants (N=19) had statistically significant improvements in scores in four of the five constructs from pre- to post-workshop: cultural awareness, cultural skill, cultural knowledge and cultural encounters. Although scores on the cultural desire construct did not reveal a statistically significant change, there was a small increase in the mean score from the pre-to post-scores of the CC educational workshop.

Paired t-test were used to test the difference between same group means at two separate points in time (Sylvia & Terhaar, 2018). The five constructs were scored on a four-point Likert scale with scores ranging from 5-20 points per construct. In addition to the composite, the five constructs; cultural awareness, cultural skill, cultural knowledge, cultural encounters and cultural desire, for all participants showed improvement, with 4 of the 5 constructs showing significance. See Table 6.

Table 6. IAPCC-R© Pre-and Post-Scores Paired T-test

<table>
<thead>
<tr>
<th></th>
<th>N=19</th>
<th>t-test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAPCC-R© Total pre</td>
<td>-7.368</td>
<td>-4.241</td>
<td>*.000</td>
</tr>
<tr>
<td>IAPCC-R© Total post</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awareness pre</td>
<td>-1.737</td>
<td>-3.095</td>
<td>*.006</td>
</tr>
<tr>
<td>Awareness post</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge pre</td>
<td>-2.053</td>
<td>-3.541</td>
<td>*.002</td>
</tr>
<tr>
<td>Knowledge post</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill pre</td>
<td>-2.000</td>
<td>-3.699</td>
<td>*.002</td>
</tr>
<tr>
<td>Skill post</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encounters pre</td>
<td>-0.895</td>
<td>-2.766</td>
<td>*.013</td>
</tr>
<tr>
<td>Encounters post</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire pre</td>
<td>-0.684</td>
<td>-1.689</td>
<td>.108</td>
</tr>
<tr>
<td>Desire post</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* denotes statistically significant at p < .05

Comparisons were also made between the three groups (physicians, advanced practice nurses and nurses) on IAPCC-R© composite and construct scores, using a Kruskal-Wallis test. Between
the groups, all composite and construct scores of the pre- and post- IAPCC-R© increased. The increase in each group scores from pre- to post- had no statistical findings but does indicate some clinical significance. The mean change of the increase in IAPCC-R© composite scores for the nurses (mean =12.00). Nurses had more than double the composite score increase over the physicians (mean change pre- to post- = 3.0) and APRNs (mean change pre- to post- = 5.0). See Figure 5.

Figure 5. IAPCC-R© Composite Scores by Group

The Kruskal-Wallis test was used to compare the IAPCC-R© scores by the licensure type of the demographics. Composites scores as well as the five construct scores were compared from pre- to post-workshop. In order to recognize if there were differences by licensure type in the amount of change in IAPCC-R© scores, a difference score was created by subtracting pre-score from post-score. The differences were significantly skewed for the total score and several construct scores. To compare the amount of change in scores from pre- to post-workshop by licensure type, Kruskal-Wallis test was used rather than the ANOVA because of the skewed scores and small sample size (Moran et al., 2017). There were not statistically differences by
licensure type in the amount of change for total scores or any of the construct scores. See Table 7.

**Table 7. Normality for IAPCC-R® Scores**

<table>
<thead>
<tr>
<th>Scale Construct</th>
<th>Shapiro-Wilk Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic((df))</td>
</tr>
<tr>
<td>IAPCC-R® total. Difference pre to post</td>
<td>0.89(19)</td>
</tr>
<tr>
<td>Awareness construct. Difference pre to post</td>
<td>0.90(19)</td>
</tr>
<tr>
<td>Knowledge construct. Difference pre to post</td>
<td>0.92(19)</td>
</tr>
<tr>
<td>Skill construct. Difference pre to post</td>
<td>0.85(19)</td>
</tr>
<tr>
<td>Encounter construct. Difference pre to post</td>
<td>0.85(19)</td>
</tr>
<tr>
<td>Desire construct. Difference pre to post</td>
<td>0.93(19)</td>
</tr>
</tbody>
</table>

\(df\) = degrees of freedom  
* denotes statistically significant at \(p < .05\)

**Table 8. Comparison of IAPCC-R® Pre-and Post-Scores by Licensure**

<table>
<thead>
<tr>
<th></th>
<th>Physicians (M (SD))</th>
<th>APRN (M (SD))</th>
<th>Nurses (M (SD))</th>
<th>Kruskal Wallis</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total IAPCC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>76.2 (7.3)</td>
<td>75.0 (8.7)</td>
<td>65.6 (6.1)</td>
<td>5.11</td>
<td>.078</td>
</tr>
<tr>
<td>Post</td>
<td>79.2 (4.7)</td>
<td>80.0 (3.2)</td>
<td>76.7 (4.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awareness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>16.2 (1.3)</td>
<td>15.4 (2.8)</td>
<td>13.4 (1.2)</td>
<td>3.15</td>
<td>.207</td>
</tr>
<tr>
<td>Post</td>
<td>16.8 (1.8)</td>
<td>16.6 (0.9)</td>
<td>16.1 (1.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>13.2 (2.5)</td>
<td>13.4 (2.2)</td>
<td>10.2 (1.2)</td>
<td>3.35</td>
<td>.188</td>
</tr>
<tr>
<td>Post</td>
<td>14.6 (1.3)</td>
<td>14.0 (1.2)</td>
<td>13.4 (1.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>14.0 (2.3)</td>
<td>14.2 (1.9)</td>
<td>12.1 (2.0)</td>
<td>3.09</td>
<td>.213</td>
</tr>
<tr>
<td>Post</td>
<td>15.0 (1.0)</td>
<td>16.0 (2.6)</td>
<td>14.8 (1.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encounters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>14.8 (2.0)</td>
<td>13.4 (1.7)</td>
<td>13.7 (2.0)</td>
<td>0.90</td>
<td>.610</td>
</tr>
<tr>
<td>Post</td>
<td>15.4 (1.7)</td>
<td>14.6 (1.5)</td>
<td>14.6 (1.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>18.0 (1.9)</td>
<td>18.6 (1.5)</td>
<td>16.1 (2.3)</td>
<td>5.88</td>
<td>.053</td>
</tr>
<tr>
<td>Post</td>
<td>17.4 (1.8)</td>
<td>18.8 (0.8)</td>
<td>17.8 (1.9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The five CC construct scores showed a marked improvement in mean pre-scores to the post scores for the three groups of participants: physicians, APRNs, and nurses. Interestingly, the physicians had highest scores on pre-awareness and pre-encounters. The APRNs had the highest scores on the pre-knowledge and pre-skill and pre-desire. The nurses had the highest gain from the pre- to post-score. On the post-scores, physicians had the higher scores on awareness, knowledge and encounters. The APRN’s had the higher scores on skill and desire. The nurses had the highest gain from the pre-to the post-score.

**Demographic Characteristics and Scores**

A secondary aim of the study compared and correlated the demographic characteristics and CC scores. The homogeneity of variance assumption was met for both pre-and post- total scores. Total score and all subscales were normally distributed.

Various correlation coefficients were computed in the study. No correlation was found between years in practice and composite CC pre \((r = .119, p > .050)\) and post-scores \((r = .065, p > .050)\). Similarly, no correlation was found between years employed in student health and composite CC pre-scores \((r = .152, p > .05)\), and post-scores \((r = .201, p > .05)\). No significant difference was found between role in student health (i.e., direct student care and administration) and CC composite scores. However statistical significance was found between years in student health and encounters post-score \((r = .49, p = .03)\). No significant difference was found in the same group and pre-scores.

Positive correlation exists between participants who had CC in their educational curriculum and pre-workshop composite IAPCC-R© scores \((r = .50, p = .029)\). No significant difference was found for the same groups post-score. In addition, no correlation was found between those who attended a CC conference, read a journal article pertaining to CC,
participated in a CC continuing education event, or attended a CC workshop and their CC composite pre-scores.

**Workshop Intervention Evaluation**

A secondary aim of the study evaluated the CC workshop for content and design as well as for presenter competence. A one-hour intervention was offered one time at each of three sites. The workshop was entitled *Reflect & Connect: The Importance of Cultural Competence to Patients*.

The workshop evaluation survey contained nine questions and was anonymous. The survey was offered electronically through Qualtrics™. All nine questions are charted in Figure 6.

**Figure 6. Workshop Evaluation (N=19)**
The three objectives of the workshop were also evaluated. Objective #1: The facilitator discussed the problem of CC in health care delivery; Objective #2: The facilitator discussed CC in health care delivery; Objective #3: The facilitator discussed the five constructs of CC in health care delivery- A.S.K.E.D.©.

**Facilitators & Barriers to Implementation**

The last secondary aim of the study evaluated the six-week follow up through an electronic survey. The survey was entitled: *Facilitators & Barriers to Implementation*. The survey was emailed to all participants by the PI. Forty-two percent of the participants responded (n = 8). All participants who responded to the survey were nurses. No physicians or APRNs who responded to this data collection point. The questions included six questions: three questions about aspects of performing a cultural assessment with patients, two select all that apply, and three yes/no questions about using tools to further HCP CC knowledge, and. See Figure 7 for details.

![Bar chart](image)

**Figure 7. Facilitators & Barriers Survey (n=8)**
Two questions on the survey used a select all that apply response. These questions examined barriers and facilitators to implementing CC knowledge and skill as it related to the CC workshop. The participants were able to choose multiple facilitators and barriers to their implementation of the CC skills with diverse students. The HCP denoted confidence (25%), and in-person interpreter (19%) were facilitators to implementing CC constructs learned in the workshop. Time was acknowledged as a barrier to implementation of the CC skills learned in the workshop by (36%) of the participants. While (43%) participants reported, there were no barriers, and (17%) of the participants reported lack of an in-person interpreter was a barrier.

Lastly, three questions asked for a yes/no response. Seven of the eight nurses who responded to the facilitators and barriers survey indicated they had referred to the binder toolbox left at each site at the conclusion of the workshop. The other two questions asked about use of the links for The Harvard Implicit bias test and the Georgetown Cultural Competence test. Five out of the eight participants admitted to viewing the two sites mentioned above.

**Conclusion**

This chapter described in detail the results of the study. It began with the demographics survey, the pre & post-CC scores, the workshop evaluation, and finished with the six-week post-workshop survey. While statistical significance was found in the total participants (N=19) composite and construct scores, there was no significance found among the three HCP small groups as shown by the Kruskal -Wallis results.
Chapter V

Discussion of Findings

After data are analyzed, discussion is needed to further investigate all findings of the scholarly project (Moran et al., 2017). This chapter discusses the findings of the primary and secondary aims. It also examines limitations, implications, and practice recommendations.

Characteristics of Health Care Personnel

The demographic make-up of the study participants was examined for consistencies and inconsistencies with the literature related to HCP. The majority of participants were white females, which is consistent with literature showing the nursing profession (both nurses and APRNs) has limited diversity (ANA, 2018; Albugami, 2016; Betancourt et al., 2003). Consistent with the study demographics and the literature is a lack of male gender and a lack of diversity. Nursing professionals are 90% female, 75% white, and 25% diverse, with only 1% employed in student health (Minority Nurse, 2019). Also, consistent within the physician profession is a lack of diversity and gender, with only 10% of physicians representing ethnic and racial diversity and with less than 1% practicing in student health (Murphy, 2017). There is equal representation of female and male gender among physician, with 49.5% female and 50.5% male (Kaiser Family Foundation [KFF], 2019). This finding was consistent with the physician participants in this study.

Project Aims

Impact of the Evidence-Based Cultural Competence Workshop

The primary aim of the study evaluated the impact of an evidence-based cultural competence workshop on HCP employed at three university student health centers. A surprising finding showed the HCP (N=19) overall mean composite pre-workshop scores were higher than
expected. According to the IAPCC-R© tool, participants in this study started at a baseline level of Culturally Aware. With limited studies showing HCP self-reported CC levels, it is hard to find similarities between the study results and literature. However, literature does reveal, per patient reports, that HCP have inadequate levels of CC. This is coupled with the fact that patients’ perceptions of HCP CC levels are low in both the general public and in university students (Campbell et al., 2007; Cuevas et al., 2017; Hudak et al., 2018).

University student diversity could be one reason for higher composite scores of HCP at baseline. HCP at the three university sites serve a large number of diverse students. The universities reside in areas that support populations of many ethnic and racial groups. Literature shows CC increases with HCP who have encounters with diverse patients (AACN, 2008a; Abrishami, 2018; Campinha-Bacote, 2007; Leininger, 1978; Smith, 2018). Another reason for the higher than expected baseline scores could be related to 18 out of the 19 participants having had some form of CC training. Short-term sustainability (3-6 months) has been identified in one-hour workshops using the IAPCC-R© (Brathwaite, 2005; Delgado et al. 2013). However, literature does not support long term CC sustainability (over a year) for short-term CC interventions. A meta-analysis of interventions to improve CC in health care showed multiple reviews fell short of strong evidence to support any intervention of teaching CC with sustainability (Truong et al., 2014).

In this study with these participants, composite scores and four of the five constructs of CC improved significantly after a one-hour workshop. The expected improvement of post scores might not be the result of the workshop exclusively. A few thoughts about the high post-workshop scores should be considered. One thought is the workshop generated conversation and interest among the HCP, and it encouraged participants to further their CC awareness before
A surprising finding was that the desire CC construct started higher, by several points, than any other construct and had the least amount of change from pre- to post-workshop. Many possibilities exist to support this result. Understanding the internal drive to want to interact with diverse students is a difficult concept to teach. It appears; however, this population of university student health HCP wants to make a difference in student lives. Further, the pay rate for university student health care is lower for all groups; physicians, advance practice nurses, and nurses, when compared to private practice (KFF, 2019; Minority Nurse, 2019; Murphy, 2017). Perhaps the HCP are employed in student health for altruistic reasons, and their internal desire to improve student outcomes has led them to this professional arena. Another possibility to explain desire scores is the gender makeup of this population (100% female) lending itself to the nurturing, compassionate attitudes associated with females (Keltner, Marsh, & Smith, 2010).

Another unexpected finding showed nurses had the largest rise in composite CC scores. Overwhelmingly, the nurses’ pre-workshop total scores were lower than the pre-workshop scores of the APRNs and physicians. The nurses pre-scores could be better explained if there was a known equivalence in the nurses’ educational environment and time in practice. Literature supports practical experience within diverse patient settings assists with cultural knowledge and offers HCP confidence when treating diverse cultures (AACN, 2008a; Betancourt et al., 2003; Campinha-Bacote, 2007; Cuevas et al., 2017). The demographic questions did not specifically ask about educational preparation of the nurses (i.e., baccalaureate or associate degree nurse).
It may be that nurses who had four years of training are better equipped to understand CC and have a higher skill level over two-year degree nurses. Literature supports baccalaureate prepared nurses offer better clinical outcomes for patients and a higher than average degree of skill (Fisher, 2014).

The completion rate of the first data collection point was remarkable. There was no attrition in the APRN group. However, the physician and nurse groups did see attrition from pre-to post-data collection point. While some attrition was expected, the nurses’ attrition rates were substantial from the pre- to the post-IAPCC-R© data collection point; from 15 nurses, pre-to 9 nurses post-. A reason for these dropouts could be that the nurses, who make up the majority of staff at all three clinic sites, were on vacation during the post-survey, and were not able to complete within the one-week time frame. Literature does not corroborate nurses and non-completion rates of surveys.

**Demographic Characteristics and Scores**

A secondary aim of the study compared and correlated demographic characteristics with CC scores. It was anticipated that those participants who reported receiving CC content within their educational curriculum would score higher on pre-scores. This was expected and congruent with literature recommending CC in all disciplines of HCP curriculum (Albougami, 2016; Betancourt et al., 2003; Like, 2011). Thus, findings from this study affirm the literature that indicates a correlation between sustained CC and CC training in curricular programming (AACN, 2008a; Betancourt et al., 2003; Like, 2011; Smith et al., 2007). The opposite is true about short term CC training exercises such as a conference or a workshop which may offer an increase in understanding of CC, but not necessarily a sustained knowledge level or ability to apply the concepts to practice (Truong, et al., 2014).
An anticipated finding of the workshop’s impact found a positive correlation related to the years a participant had worked in student health and encounters with diverse students on the post scores. It is congruent with the literature explaining that once participants gain knowledge of the meaning of cultural groups, they can identify cultural groups (Campinha-Bacote, 2007). Campinha-Bacote’s model shows all five constructs are equally important with encounters being one construct of CC.

**Workshop Intervention Evaluation**

A secondary aim of the study evaluated the CC workshop for content and design as well as for competence of the presenter. The workshop was designed to use various teaching strategies and included video-visual, power point, and auditory methods (Stirling, 2017). Overwhelmingly, participants were pleased with the design of the workshop and the facilitator’s effectiveness. Evaluation of the length of the workshop was mixed with some positive and negative survey results. Literature reveals workshops of an hour in length, using the constructs in the IAPCC-R©, were favorable (Delgado et al., 2013). Perhaps the wording of that survey question was ambiguous. The question could be reworded to read, “The workshop was too long”.

It was determined after three different sessions of the workshop that modifications would be needed if the workshop were to be repeated. The PI would increase the length of the workshop and allow time for case studies. Literature shows case studies are beneficial as they assist the learner with application of concept learning (Yoo & Park, 2015).

Overall, the facilitator was received positive responses, despite technical difficulties in the first workshop. The facilitators passion about the subject matter and interest in sharing the CC concepts is congruent with literature showing learners respond positively to passionate facilitators (Hobbs, 2012). The three workshop objectives were met with overwhelmingly
positive scores. The three objectives scored strongly agree or agree among 17, 18, and 19 of the 19 participants, respectively. The workshops positive response could be due to its design being fostered with input from CC experts who assisted the PI with content.

Facilitators & Barriers to Implementation

The last secondary aim of the study evaluated the 6-week follow up through an electronic survey. Of the eight participants who completed the study, all were nurses. Perhaps the HCP were on vacation or were not checking their email as frequently during the summer months. Patient volumes at student health centers are often deceased during summer months, permitting HCP more flexible scheduling and allowing for time off. The results of the survey need to be examined with caution as nurses do not generally discharge patients, nor do they write care plans. Nurses do however spend time with patients and intake their health information and will often utilize a language line as needed for patients with limited English proficiency.

There were expected barriers to implementation reported by participants during the final data collection point. Time was noted as the biggest barrier. This is congruent with literature explaining that HCP feel many pressures to complete encounters and chart within an unrealistic time window (Kutob et al., 2013; Like, 2011). Another barrier to implementing CC concepts learned in the workshop was the use (or lack thereof) of language interpreting services. Unfortunately, participants indicated their systems fell short of the CLAS standards. They reported a barrier was the lack of an in-person language interpreter. Depending on the clinic setting and their financial resources, an in-person interpreter maybe cost prohibitive in most clinics. (Betancourt & Tan-McGrory, 2014a). The language line, also an additional cost, is another alternative for translation; however, it does not offer sign language.
Additionally, there were expected facilitators to implementing concepts learned in the CC workshop. Participants reported the use of an in-person interpreter to facilitate CC care. Favorably surprising, system-level resources were in-place for participants to support CLAS standards consistent with literature (Betancourt & Tan-McGrory, 2014; OMH, 2001). Using the patient’s native language to explain their illness and include patients in their plan of care offers the best clinical outcomes for the patient (Betancourt & Tan-McGrory, 2014; OMH, 2001). Other facilitators were identified as self-confidence in the implementation of the CC skills learned, and colleague support to implement the CC skills. Both of these facilitators could have been a result of all HCP having the same information at the same time, and participants assisting each other to practice/remember the assessment skills. Confidence and self-reflection when interacting with diverse students, can increase the patient/student and HCP relationship (Betancourt et al., 2014b; Campinha-Bacote, 2002; Cuevas et al., 2017; Like, 2011).

Limitations

No study is without limitations (Moran et al., 2017; Sylvia & Terhaar, 2018). First, several limitations were expected from the self-reported surveys. Self-report, social-acceptance bias is a limitation as the surveys asked participants to rate feelings, skill, and knowledge. It is normal for participants to respond in favor of the socially expected answer (Moran et al., 2017). Second, the sample size and participation-rate limitations could have been caused by the timing of the study. The data collection occurred over the summer months at each of the three project sites. Many HCP were on vacation during the time span the workshops were offered. Timing also affected the electronic surveys. Many ‘out-of-office-vacation’ email responses were generated after the go-live link was sent. Another confounder was the student makeup at the universities is often different during the summer months than during the regular school year. The
decreased student enrollment during the summer may have impacted the six-week survey where HCP were responding to implementing CC skills with diverse students. Third, the one-week time period between the pre- and the post-workshop CC tool completion allowed participants to potentially learn and/or explore CC concepts independently. The time frame may have inflated both composite scores and group score at the post-workshop data collection point.

Another limitation was the participants who responded to the Facilitators and Barriers Survey were nurses only, not APRNs or physicians. Since nurses do not plan care for the patient after discharge, this limits the impact of the survey results. Nurses do have a valuable role in patient care and their responses were valuable to the study findings.

Overall the results were favorable. The goal was to increase participants CC as per Campinha-Bacote’s model of the five constructs: awareness, skill, knowledge, encounters, and desires; this was accomplished (Campinha-Bacote, 2002, 2007). A logistical limitation existed in the design of the project. The electronic surveys were opened for a week’s time, possibly contributing to fewer participants. A solution is to simply extend the online survey length to more than one week.

Implications and Recommendations

Multiple implications were recognized from the study results as having an impact on practice, education, future research, and health care policy. With the focus on patient care, implications for practice include a change in the way diverse patients are delivered quality health care. Each HCP must start with a desire to reflect/connect with each student, with every encounter, and an increased awareness of the need to self-reflect to explore implicit biases.

Implications for education also exist. With the focus on patient care, implications for education include CC curriculum embedded in all health care disciplines to benefit patient engagement and
outcomes. Implications for future research include a CC workshop for all staff of university student health services, with a downstream desired effect of improving student health outcomes. Implications for policy include: CC training mandates with annual state licensure for all HCP, with a downstream desired effect of improving patient health outcomes.

The ability to measure CC is a concern. Various literature is congruent with the resounding lack of familiarity of how to teach CC related to its varied definition and measurements (Alizadeh & Chavan, 2015; Cuevas et al., 2017; Doorenbos et al., 2005). Without an operational definition of CC, it is difficult to measure outcomes and address challenges. For example, when incorporating CC into HCP curricula, it will be left to chance and personal interpretation without a concrete definition. Further, CC levels will not be able to be measured. Without a starting point of CC constructs defined, it will be impossible to achieve desired outcomes of CC HCP.

A great starting point are for institutions and agencies who impact student outcomes is a CC statement. Entities such as the ACHA (2011) who promote a CC policy with concrete definitions helps to assure CC is discussed and addressed on both the Institutional and individual levels.

Government agencies such as the Office of Minority Health need to define CC and invent/identify /modify a tool as a way to evaluate/measure CC. Once there is a general definition of CC the focus can begin on building consistent, structural educational programs with mandates for health systems and colleges and universities (AHRQ, 2014; Alizadeh & Chavan, 2015; Cuevas et al., 2017; Like, 2011; Truong et al., 2014).

**Conclusion**

This chapter discussed the findings of the primary and secondary aims results. It also discussed the limitations, implications, and recommendations of the results from the previous
chapter. The study results of the *Impact of an evidence-based cultural competence workshop for university student health centers licensed personnel* demonstrated an impact was made on the CC levels of HCP in three student health centers. Future work must be done to continue to foster the learning of CC concepts that help mitigate health care disparities and promote equitable care for all students utilizing student health services. This concludes the paper.
Appendix A

Demographic Characteristics Survey

Reflect & Connect: The Importance of Cultural Competence to Patients®

Directions: Please answer the following questions. Thank you for your participation.

Unique Identifier: ________ (Last 4 digits of your primary phone number).

1. My highest level of current licensure is:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>o MD</td>
<td>o DO</td>
<td>o RN</td>
</tr>
<tr>
<td>o NP</td>
<td>o PA</td>
<td>o LPN</td>
</tr>
</tbody>
</table>

2. My employment status in the student health center is classified as:

   _____ Full time

   _____Part time

   _____Temporary

   _____PRN (per diem)

3. The role that best describes my usual work is:

   o Direct student care

   o Administration

   o Both roles

4. Total years in practice. ____________
   If less than one year write zero.

5. Years practiced in student health services (current and past): _______
   If less than one year write zero.

6. I received my formal education in the following: (Select one only)
7. Have you ever received cultural competence training?
   o Yes
   o No
   o I don’t remember

8. Indicate the cultural competence training you participated in:
   (Select all that apply)
   o Educational curriculum
   o Conference
   o Workshop
   o Continuing education offering
   o Read an article in a journal
   o Taught a class/conference
   o I have not participated in any

9. My native language spoken is: (Select one only)
   o English
   o Korean
   o Spanish
   o Farsi
10. I identify my ethnicity as: **(Select all that apply)**

<table>
<thead>
<tr>
<th>o Asian</th>
<th>o Native American</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Black/African</td>
<td>o Hispanic/Latinx</td>
</tr>
<tr>
<td>o Caucasian/White</td>
<td>o Pacific Islander</td>
</tr>
<tr>
<td>o I prefer to not answer</td>
<td>o Other (please specify)</td>
</tr>
</tbody>
</table>

11. I identify with this set of pronouns:

<table>
<thead>
<tr>
<th>o He/Him</th>
<th>o She/Her</th>
<th>o They/them</th>
<th>o Other (please specify)</th>
</tr>
</thead>
</table>

12. My age in years is: _____

13. For the purposes of offering continuing education credit, your email address is required by the credentialing center. Your identity will be kept strictly confidential.

**Work email address:** __________________________@___________________

Thank you for your participation in the workshop. I hope you are able to reflect and connect with your patients!
Appendix B

Workshop Evaluation Survey
(Completed by participants electronically)

Reflect & Connect: The Importance of Cultural Competence to Patients©

Directions: Please answer each question with one response. Mark the box with an “X”.

Thank you for your feedback!

Unique Identifier (last four digits of your primary phone number) ____________

<table>
<thead>
<tr>
<th>Item</th>
<th>1 Strongly Disagree</th>
<th>2 Disagree</th>
<th>3 Agree</th>
<th>4 Strong Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The one hour allotted for the workshop was enough time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The facilitator of the workshop was knowledgeable about the content</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>delivered.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would recommend this workshop to a colleague.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The power point slides were helpful.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The interactive discussion was effective for my learning needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The question and answers portion was valuable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Please rate the workshop objectives:</td>
<td><em>___</em></td>
<td></td>
<td><em>___</em></td>
<td><em>___</em></td>
</tr>
<tr>
<td>The speaker discussed the problem of cultural competence in health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>care delivery.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The speaker defined cultural competence in health care delivery.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The speaker discussed the five components of cultural competence in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>health care delivery.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any addition comments or feedback would be most helpful.

I hope this workshop helps you to reflect and connect with your patients!
Appendix C

Facilitators & Barriers Survey
(Completed by participants electronically)

Reflect & Connect: The Importance of Cultural Competence to Patients©

Facilitators and Barriers to Implementation

Directions: Thank you for your participation. You are a changing force in providing better health care to all patients. Please answer the following questions.

Unique identifier: (last four digits of your primary phone number) ________________

Over the past 6 weeks, how often were you able to implement the following when interacting with ethnic and racial minority students?

<table>
<thead>
<tr>
<th>1. Use the “ask me three” technique</th>
<th>never</th>
<th>some encounters</th>
<th>most encounters</th>
<th>every encounter</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Ask patients about cultural concerns that may impact their care?</td>
<td>never</td>
<td>some encounters</td>
<td>most encounters</td>
<td>every encounter</td>
</tr>
<tr>
<td>3. Discuss the patient’s perceptions of illness?</td>
<td>never</td>
<td>some encounters</td>
<td>most encounters</td>
<td>every encounter</td>
</tr>
</tbody>
</table>

4. Did you encounter any BARRIERS to implementation of the cultural competence tools learned in the workshop? If so, check all that apply.

- [ ] No barriers
- [ ] Lack of confidence

87
5. Did you encounter FACILITATORS that helped you implement the cultural competence tools learned in the workshop? If so, check all that apply.

<table>
<thead>
<tr>
<th>o No facilitators.</th>
<th>o Colleagues</th>
</tr>
</thead>
<tbody>
<tr>
<td>o In person interpreter</td>
<td>o Interpreter phone equipment</td>
</tr>
<tr>
<td>o Language conversion for discharge planning</td>
<td>o Confidence</td>
</tr>
<tr>
<td>o Other (please specify)</td>
<td></td>
</tr>
</tbody>
</table>

5. I took the cultural competence self-assessment from Georgetown University’s National Center for Cultural Competence.

- o Yes
- o No

7. I took the Implicit Bias test.

- o Yes
- o No

8. I was able to refer to the toolbox that was provided within the past 6 weeks.

- o Yes
- o No
9. Open comment box: If there is additional information about facilitators or barriers to implementation of the cultural competence concept learned in the workshop, I would love to hear about them. Is there anything you would like me to understand? Thank you. Kori
## Cultural Competence Toolbox

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office of Minority Health</td>
<td>Government agency which houses data on racial and ethnic minorities. Lots of information on statistics and policies.</td>
<td><a href="https://www.minorityhealth.hhs.gov/">https://www.minorityhealth.hhs.gov/</a></td>
</tr>
<tr>
<td>Georgetown National Center for Cultural Competence</td>
<td>Housed in Georgetown, this site contains assessments and tools for health care personnel to self-reflect on their journey of cultural competence.</td>
<td><a href="https://ncc.georgetown.edu/assessments/">https://ncc.georgetown.edu/assessments/</a></td>
</tr>
<tr>
<td>Implicit Bias Tool</td>
<td>Site from Harvard University. Offers a Link to a self-assessment tool, to uncover hidden biases and tools to overcome the biases.</td>
<td><a href="https://implicit.harvard.edu/implicit/takeatest.html">https://implicit.harvard.edu/implicit/takeatest.html</a></td>
</tr>
<tr>
<td>Health and Human services</td>
<td>Government agency promoting health equity. This site offers resources and education to assist individuals or health systems in understanding cultural competence.</td>
<td><a href="https://www.thinkculturalhealth.hhs.gov/">https://www.thinkculturalhealth.hhs.gov/</a></td>
</tr>
</tbody>
</table>
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**The Essentials of Master’s Education in Nursing - AACN**


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