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## **Cultural Competency Training: How Do We Measure Outcomes?**

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The term “cultural competency” in healthcare is meant to convey an understanding of cultural and linguistic differences that exist within and between distinct social groups and a sensitivity to these differences that may allow for improved health care outcomes to occur. Many pre-licensure cultural competency training programs have emerged due to the perceived benefits of cultural competency training to medical education and its possible influence on patient health status and healthcare delivery. However, few studies have evaluated the clinical impact and success of these training programs. In this brief and limited review, 15 programs were identified and a comparison was performed amongst 10 of the pre-licensure programs and analyzed with respect to six domains of cultural competency identified by our literature review. This brief review revealed that a majority of pre-licensure cultural competency training programs are still heavily focused on implementing non-patient centered self-assessments to evaluate effectiveness. If training programs constrain the assessment tools to only non-patient centered approaches, then it becomes more difficult to quantify the medical impact of cultural competency on patient health. The authors propose a unified approach to measure the efficacy of cultural competency programs via four important characteristic outcomes: Non-patient centered: Fact-based knowing, Non-patient centered: Self-Assessments, Patient-centered assessments, and Healthcare resource utilization. Though this approach has yet to be tested, the authors believe that incorporating these four assessments will better enable healthcare professionals to design a new form of cultural competency training that fosters deeper clinical reasoning for providers and improves patient outcomes.

**Keywords:** Cultural Competency | Continuing Medical Education

The term ‘cultural competency’ is a popular phrase that is widely used within the medical education curricula and healthcare profession. The Association of American Medical Colleges (AAMC) adopted ‘cultural competency’ as one of its core competencies for a physician in training, and developed a tool to assess cultural competency training (TACCT) (Association of American Medical Colleges, 2005, 2016; Lie, Boker, & Cleveland, 2006). While the analysis performed by Beach et al. (2005) validates the utility of cultural competency courses in improving healthcare education, physician communication, and attitudes, there is a lack of studies on assessing patient-centered outcomes. Here we use the

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term patient-centered from a non-clinical perspective. By this terminology we mean the overall impact on the patient's health; both in their subjective experience and objective clinical measures such as blood pressure and LDL levels. These outcomes could also include willingness to return to the clinic or increased expression of trust in the doctor-patient relationship. Non-patient centered outcomes then refer to the healthcare provider's experience undergoing cultural competency training and learning the correct medical terminology.

A systematic review that encompassed 8000 patient encounters assessed cultural competency's effect on patient-centered outcomes and its broad implications for providers and patients. It however specifically excluded "entry-level, entry to practice, or pre-licensed education programs" and secondary patient-outcomes, such as training program evaluations, from its study of cultural competency outcomes (Horvat, Horey, Romios, & Kis-rigo, 2014). We approached this study from a limited perspective and made no attempt to review this large field of literature. Rather, we wanted to review what is known about assessing outcomes of pre-licensed education programs, or cultural competency training programs. We sought an answer to the following questions: How do we know that we have made a healthcare professional more culturally competent? Do cultural competency training programs address patient centered outcomes?

Definitions of cultural competency have been fraught with ambiguity as the term encompasses inter-relational social skills and beliefs, cultural knowledge, and health disparities outcomes (Beach et al., 2005; Cross, Bazron, Dennis, & Isaacs, 1989; Horvat et al., 2014). Indeed, culture and ethnicity have been used interchangeably in the literature (Betancourt & Lopez, 1993). Ethnicity refer 'to the ethnic quality or affiliation of a group, which is normally characterized in terms of culture.' Culture as a "knowledge generator" affects directly an individual's perception of health and healthcare delivery (Gray & Thomas, 2005). We recognize that the aspects of diversity represented by persons of different social groups (socio-cultural backgrounds) include ethnicity, race, religion, sexual orientation, gender, nationality; but also go beyond these categories (Betancourt & Green, 2010; Betancourt & Lopez, 1993; Cross et al., 1989; Gray & Thomas, 2005). In our discussion we have chosen to subsume these two concepts of ethnicity and culture under the term 'social group'. The term 'cultural competency' is meant to convey an understanding of these cultural and linguistic differences between social groups and a sensitivity to these differences between (and within) them (cultural, ethnic, racial, religious, etc.) that allows for increased effectiveness of human relations in regards to communications, interventions, and outcomes in the healthcare setting. Cross et al. (1989) offered the following definition for cultural competency as: "a set of congruent behaviors, attitudes and policies that come together in a system, agency or amongst professionals and enables that system, agency or those professionals to work effectively in cross cultural situations." Another relevant concept in the literature is 'cultural safety' which reflects the Australian experience with health care delivery to indigenous New Zealanders (Richardson & Williams, 2007). While this term encompasses some overlapping concepts with cultural competency, we chose to use the term competency because cultural safety lacks a concise and practical framework that is easily applicable to diverse providers and patient populations (Gerlach, 2012). The definition of cultural competency cited above offers the possibility of discrete measures of cultural competence at both the individual and institutional level (e.g. what behaviors are changed by cultural competency training? What

larger social policy has emerged in response to cultural competency training?). Measures of effective cultural competency learning could involve reduction of health care disparities and institutional level outcomes such as readmission rates and increased rates of follow-up in the outpatient clinic. For example, effective cultural competency learning could reduce the disparities in achieving effective glucose control between Hispanic and African American patients with diabetes (Rawlins, Toscano-Garand, & Graham, 2007). Similarly, health care disparity has been observed in outcomes for hip fracture patients between non-Hispanic whites and minority groups (non-Hispanic black, Hispanic and Asian). Effective cultural competency learning could also reduce the disparities seen in predicted length of stay, odds of home discharge, and measures of functional independence at discharge and follow-up post discharge (Graham, Chang, Bergés, Granger, & Ottenbacher, 2008).

Cultural competency training may even help clinicians mitigate against health disparities within subgroups (Like, 2011; Renzaho, Romios, Crock, & Sønderslund, 2013). As a result of the perceived potential benefits to healthcare delivery and outcomes, many cultural competency training programs have emerged to help hospitals and healthcare professionals reduce health disparities, and to provide an increasingly culturally diverse patient population with high-quality, culturally, sensitive healthcare.

However, few studies have evaluated the clinical success of those training programs beyond participant self-evaluation utilizing Likert scales by health care professionals attending a cultural competency training course (Beach et al., 2005; Truong, Paradies, & Priest, 2014). We sought to assess the literature as it pertains to measuring the success of these pre-licensure programs and their long-term outcomes. We also offer a brief comparison of programs, a general discussion of the literature as it pertains to cultural competency training metrics, and recommendations for better measuring the impact of cultural competency programs on the provider and patient.

## **Methods**

We identified cultural competency programs by two methods. The first approach utilized Bing and Google search engines with the keywords “cultural competency training,” “cultural competency programs for physicians,” “medical cultural competency resources,” “healthcare cultural competency eLearning,” “cultural competency medical school resources,” and “cultural competence healthcare professionals.” Our results were limited to English language only. The date range for the searches was from May 2016 to July 2016. Through these two search engines, we identified eight programs that reported to be specifically focused on cultural competency. Secondly, we reviewed the programs mentioned in the peer-review article by Like (2011). From Like’s (2011) Table C3: Selected Online Cultural Competency CME Programs, we searched for these programs online and found seven of those resources that were still relevant today. Thus, a total of 15 cultural competency programs were identified for possible review (Table A1).

We then sought to identify if any programs in Table A1 had compared and contrasted its services with another program’s services. We viewed each program’s website content and attempted to contact representatives for program comparison information. No such comparisons were identified. Therefore, we explored the feasibility of performing a comparison with every program in Table A1. Some programs offered free self-reporting assessments that health professionals can use to improve quality care. Other programs

provided training modules for healthcare professionals and consulting services. It was not feasible to fully evaluate all programs listed since not all programs in Table A1 were truly pre-licensure programs. Some sites primarily offered only toolkits (i.e. C-CAT or HRSA) while others were one to two-page articles that briefly mentioned the importance of cultural competency (i.e. American Academy of Family Physicians and CSU at San Marcos: Cultural Intelligence). Therefore, we ultimately compared 10 cultural competency resources from Table A1.

We focused specifically on these 10 training programs because they are widely-used by institutions and hospitals. They covered the spectrum of approaches to cultural competency training found on the internet: free resource to paid-services, classroom learning to eLearning, and allied healthcare professionals to physicians.

Since scant publications have addressed how clinically relevant to the patients the outcomes that were generated from current cultural competency metrics are (Betancourt & Green, 2010; Bloom, 2005; Gomez, Bereknyei, & Braddock, 2011; Hobgood, Sawning, Bowen, & Savage, 2006; Lie, Lee-rey), this analysis focuses on each program's assessment components, curricula type, and reported outcomes. We also incorporate several other metrics, such as teaching approach and target user, which the literature identified as important (Betancourt & Green, 2010; Bloom, 2005; Fuller, 2002; Gregg & Saha, 2006; Horvat et al., 2014; Lie et al., 2011; Marinopoulos et al., 2007; Mazmanian, 2009; Moattari, Yadgari, & Hoseini, 2014; Wynia, Johnson, McCoy, Griffin, & Osborn, 2010). We then reviewed the available content on these sites and gave each program a point in each category if the program primarily used andragogical teaching methods, provided some form of assessment, focused on healthcare professionals, was approved by a continuing medical education institution, and used primarily non-self-reporting measurements. The cost category was excluded in this portion of the analysis because of limited financial information and the inability to determine the fair market price for a general cultural competency program. The results were then summed up for each category and for each program to delineate the relative strengths and weaknesses of current programs, and to allow us to make recommendations for future directions.

## **Results**

Ten different cultural competency programs were compared with respect to six domains: teaching approach, assessment tools, target user, approval by different certifying authorities, measured outcomes, and estimated cost. The results are shown in Table B2.

All 10 sources implemented assessment tools that help providers navigate through the curriculum and learn knowledge-based facts about different social groups. Nine of the programs focused its content towards a healthcare-minded audience and seven were certified by a continuing medical education institution, National CLAS or Joint Commission, which are required for accredited continuing medical education programs (U.S. Department of Health and Human Services, 2016a, 2016b). The strength of these cultural competency programs was in assessment tools, target user, and approved by.

However, the medical literature identifies that continuing medical education effectiveness depends on the teaching style and its applicability to real life situations (Bloom, 2005; Lie et al., 2011). Tanner states that real development of clinical reasoning and knowledge, such as cultural competency, arises from telling stories of one's experience

as clinicians and applying an andragogical teaching approach (Tanner, 2006). This turns experience into understanding, which can drive behavioral change. Only five sources implemented such andragogical teaching strategies that research has demonstrated to be associated with positive health outcomes.

Although the literature has well documented cultural competency training to be effective as to knowledge, skills, and attitudes acquisition, few have reported any quantitative outcome measures, or even what outcomes were meaningful to the community and patient (Betancourt & Green, 2010; Lie et al., 2011). This tendency is verified in Table B2. All programs used non-patient centered self-reports to measure outcomes. For example: X% felt very confident/confident prior to the program while Y% felt very confident/confident after completing the program. None of the 10 programs reported on any long-term patient or health centric beneficial effects. As a result, our analysis suggests that measured outcomes (as readmission rates to hospital, adherence to medications, improved blood pressure results, etc.) and teaching approaches are the two major weaknesses amongst the majority of cultural competency training programs. Despite these weaknesses, our point-system model allows us to rank order the ten different programs. The top three programs had four of the five desirable attributes in Table B2. However, we would note that there is a cost differential between the top three programs, and all three programs rely on self-reporting methods. The lowest three programs focused mainly on a didactic teaching method with self-reporting measures and limited regulatory accreditation.

## **Discussion**

One stated goal of cultural competency training is to positively change a physician's behavior so as to improve the patient's health status. Studies have demonstrated that the physician's attitude towards minority patients influences the quality of care and the medical communication provided by the doctor (Paez, Allen, Beach, Carson, & Cooper, 2009; Schouten & Meeuwesen, 2006; van Ryn & Burke, 2000).

Although no two cultural competency programs are identical, all resources in Table B2 stress that building "awareness, knowledge, and skill" influences a clinician's behavior and sensitivity towards different social groups. Research has shown that patient adherence to prescribed care and overall satisfaction with healthcare are linked to physician's behavioral change (Stewart, Meredith, Brown, & Galajda, 2000). Thorough knowledge acquisition and attitudinal shifts obtained through participation in cultural competency programs has shown some success in changing physician behavior and patient satisfaction. But it rarely develops a true understanding and comfort for the patient, and may bring a false sense of competence to the provider (Gray & Thomas, 2005; Tanner, 2006). So how do cultural competency programs accurately measure this change in behavior? As Horvat (2014) stated, "Cultural competence education programs need to be better specified and described including...approach to [patient-centered] evaluations."

Most cultural competency results are self-reported and non-patient centered. This may not be rigorous enough in term of clinical outcomes and biomedical methodology to be subjected to a more quantitative tradition, e.g., randomized clinical trials. Horvat et al. (2014) identified only five randomized clinical trials out of over 10,000 citations in her review. Wynia et al. (2010) acknowledged that the C-CAT may not lead to changes in

hospital performance and patient health status. And the AAMC (2005) stated, “[TACCT] may not allow in-depth analysis of...actual learning outcomes achieved.”

From our review, it appears that current programs are trying to address patient and cultural competency training outcomes through the lens of the physician, neglecting the patient’s own perspective when the patient is the expert on assessing whether the provider is catering to his or her cultural beliefs. The framework of current pre-licensure programs is unimodal. It moves unidirectionally from provider to the patient. For example: we sorted all of Beach et al.’s (2005) studies by group affiliation (whether cultural or ethnic) and patient or non-patient-centered methods, and the frequency of patient and non-patient methods in each study were counted. The analysis revealed non-patient centered methods were used 64.8% (79 out of 122) of the time to assess outcomes in his 34 studies (Table C3). And 89% of Beach’s studies (31 of the 34) reported no outcomes related to patient adherence.

While this paper does not directly address a cost analysis of these programs, it appears that it costs less for training programs to use non-patient centered self-assessments than to develop more comprehensive patient-centered assessment tools, such as mixed methods, than attempt to address the issue from multiple viewpoints (Brach & Fraser, 2000). Being truly culturally competent and receptive to a patient’s values require the framework to be bimodal, and patient centered outcomes are needed to measure the quality of that dynamic and other health outcomes. As Truong et al. (2014) stated, “Moving beyond self-assessment is a necessary step towards developing a stronger evidence base...to improve patient/client health outcomes.”

To obtain better patient relevant outcomes, cultural competency training might track a patient’s progress along a 12-month period, or help providers adopt new cultural competency skills within their workplace. For example: a health care provider sharing experiences with their peers has been shown to develop a deeper understanding for patients and their needs (Tanner, 2006). Additionally, cultural competency programs can strive to implement a better mix of patient-centered values and outcomes in conjunction with non-patient centered approaches. These suggestions may enable physicians to promote better health outcomes in patients and their families (Betancourt & Green, 2010; Paez et al., 2009; Schouten & Meeuwesen, 2006; van Ryn & Burke, 2000). Using the ideas of mixed methods (Creswell, 2003), Horvat et al.’s (2014) holistic approach and Truong et al.’s (2014) multi-dimensional view of cultural competence interventions, we identified the following four important characteristics to measure the efficacy of pre-licensure cultural competency programs to improve health outcomes:

1. Non-patient centered: Fact-based knowing.
2. Non-patient centered: Self-Assessments.
3. Patient-centered assessments (clinical outcomes).
4. Healthcare resource utilization (and clinical outcomes).

We believe that adopting these four perspectives address the need for cultural competency programs to consider the interplay of individual and organizational relationships, enable healthcare professionals to work effectively and multi-dimensionally in cross-cultural environments, and to take into consideration the concerns of a provider (non-patient centered: facts and self-assessments), patient (patient centered), and payer

(healthcare resource utilization). Non-patient centered characteristics emphasize that clinicians need to learn the correct medical terminology, culturally relevant knowledge and communication skills to interact competently with patients from different socio-cultural backgrounds. Some research has highlighted that increased knowledge and awareness of different communities can positively impact patient-related outcomes (Brach & Fraser, 2000; Renzaho et al., 2013). This review has confirmed this result as a strength for most cultural competency training programs.

Patient centered characteristics stress the necessity of measuring robust patient health outcomes. Few programs have done significant work to address issues related to the impact of pre-licensure cultural competency training on quantitative patient health status. A recent focus on disease specific outcomes as blood pressure goals, HgbA1c levels, glycemic control, and LDL levels has emerged in the context of cultural competency training (Hawthorne, Robles, Cannings, & Edward, 2008; Whittemore, 2007; Zeh, Sandhu, Cannaby, & Sturt, 2012). These are direct patient centered outcomes and it will be informative to see how and if these parameters change in the context of cultural competency training. Notwithstanding, most programs are weak in measuring clinically relevant patient outcomes as a consequence of cultural competency training.

Healthcare resource utilization acknowledges the financial costs associated with healthcare delivery, and how cultural competency training may affect cost-effectiveness in regard to physician and patient outcomes. Cultural competency training could potentially reduce readmission rates and decrease hospital expenditures if payors can link better patient outcomes to more rigorous cultural competency training. A cost-benefit analysis can accurately compare one cultural competency program with another, such that one has a better chance to select the most cost-effective training in terms of cost and daily average life years saved for patients. No such analysis exists to date to our knowledge. However, a few studies have reported that a commitment amongst an organization's leadership for allocated cultural competency resources may influence a provider's appetite to work with more culturally diverse staff (Paez, Allen, Carson, & Cooper, 2008; Srivastava, 2008). Along with patient-centered characteristics, we believe these two areas reveal the weaknesses of most pre-licensure cultural competency training programs in today's continuing medical education curricula. More quantitative and patient-centered assessments need to be developed, while the financial costs should be addressed more rigorously in relation to the type of health outcomes and measurements offered.

By adopting the perspective that we have recommended above for cultural competency training, we believe that providers can develop better clinical knowledge and reasoning while improving patient outcomes. While we have focused on studies pertinent to our experience in the United States, we believe these recommendations to be relevant for clinical personnel and their patients world-wide; such as the European doctor providing medical care to refugees or the global health professionals who offer Ebola vaccines to villages in Central Africa. As the world becomes more globalized, health care professionals will encounter more and more individuals from social groups with different beliefs and medical perceptions. Our findings reveal the need to change the current state of cultural competency training to not only improve outcomes for patients and providers in the United States but also globally.

This study has several limitations. The first limitation is the sample sizes from Tables A1 and B2. Our search strategy may not have identified the full range of training



programs in cultural competency. And we have focused on studies that reflect the experience in the United States. This may hinder the study from accurately representing the entire spectrum of cultural competency services offered on the internet. Secondly, we only identified a limited subset of articles that reported outcomes of cultural competency training programs resulting in selection bias. Many publications have reported on cultural competency training methods and effectiveness. But few have reported on outcomes and measurements.

Thirdly, we have not tested how useful our four perspectives are in objectively measuring cultural competence training outcomes. Fourthly, some literature, such as Drevdahl et. al (2008), has criticized the oversimplified and undertheorized framework of cultural competence. We concede that the current framework for cultural competency is directed towards proving that current interventions work when they probably do not. However, we believe that our proposed model is directed towards fixing the current framework by advocating for more quantitative and/or non-self-reporting metrics and by promoting bi-modal dialogue between healthcare providers and patients, which Tanner (2006) suggests to be meaningful for all stakeholders.

### **Conclusion**

To better measure a cultural competency training program's true impact on patient outcomes, cultural competency resources need to refocus their assessments on more complex patient-centered tools, state explicit costs for their services, and involve the entire patient and healthcare professional community to identify better cultural competency metrics. These changes will enable the deeper clinical knowledge for the provider, which will result in better patient outcomes.

### **Author Notes**

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**Appendix A**

Table 1: Cultural Competency Educational Programs and Tools

<b>Programs/Resources</b>	<b>URL</b>	<b>Free</b>	<b>Source</b>
<b>American Academy of Family Physicians</b>	<a href="http://www.aafp.org/patient-care/social-determinants-of-health/cultural-proficiency.html">http://www.aafp.org/patient-care/social-determinants-of-health/cultural-proficiency.html</a>	Yes	Grey Literature
<b>C-CAT</b>	<a href="http://www.ucdenver.edu/academics/colleges/medicalschoo/centers/BioethicsHumanities/academicactivities/Pages/C-CAT-Surveys.aspx">http://www.ucdenver.edu/academics/colleges/medicalschoo/centers/BioethicsHumanities/academicactivities/Pages/C-CAT-Surveys.aspx</a>	Yes	Grey Literature
<b>Core Concepts in Cultural Competence</b>	<a href="http://support.mchtraining.net/national_ccce/index.html">http://support.mchtraining.net/national_ccce/index.html</a>	Yes	Grey Literature
<b>Critical Measures</b>	<a href="http://www.cmelearning.com/assessments/provider-cultural-and-linguistic-competence-assessment/">http://www.cmelearning.com/assessments/provider-cultural-and-linguistic-competence-assessment/</a>	No	Peer-Review
<b>CSU at San Marcos</b>	<a href="https://www.csusm.edu/teachingandlearning/cultural-intelligence.html">https://www.csusm.edu/teachingandlearning/cultural-intelligence.html</a>	No	Grey Literature
<b>CultureVision</b>	<a href="http://crculturerevision.com/">http://crculturerevision.com/</a>	No	Grey Literature
<b>Fanlight Productions</b>	<a href="http://www.fanlight.com/catalog/films/361_coe.php">http://www.fanlight.com/catalog/films/361_coe.php</a>	No	Grey Literature

<b>Health Resources and Services Administration</b>	<a href="http://www.hrsa.gov/culturalcompetence/index.html">http://www.hrsa.gov/culturalcompetence/index.html</a>	Yes	Peer-Review
<b>MCH Training Network</b>	<a href="http://leadership.mchtraining.net/?page_id=126">http://leadership.mchtraining.net/?page_id=126</a>	Yes	Grey Literature
<b>MedScape</b>	<a href="http://search.medscape.com/search/?q=cultural%20competence&amp;plr=edu">http://search.medscape.com/search/?q=cultural%20competence&amp;plr=edu</a>	Yes	Peer-Review
<b>National Center for Cultural Competence</b>	<a href="http://nccc.georgetown.edu/distance.html">http://nccc.georgetown.edu/distance.html</a>	Yes	Peer-Review
<b>Quality Interactions</b>	<a href="http://www.qualityinteractions.com/">http://www.qualityinteractions.com/</a>	No	Peer-Review
<b>Think Cultural Health</b>	<a href="https://cccm.thinkculturalhealth.hhs.gov/">https://cccm.thinkculturalhealth.hhs.gov/</a>	Yes	Peer-Review
<b>Virtual Lecture Hall</b>	<a href="https://www.vlh.com/shared/courses/course_info.cfm?courseno=155">https://www.vlh.com/shared/courses/course_info.cfm?courseno=155</a>	No	Peer-Review
<b>X-Culture</b>	<a href="http://xculture.org/cultural-competency-programs/about-cultural-competency/">http://xculture.org/cultural-competency-programs/about-cultural-competency/</a>	No	Grey Literature

**Appendix B**

Table 2. Comparison of Ten Different Resources for Cultural Competence

Program Name	Teaching Approach	Assessment tools	Target User	Approved by	Measured outcomes	Estimated cost	Analysis Score
Core Concepts in Cultural Competence	- Andragogical - Case studies - Curriculum - Video vignettes	- Quizzes	- Healthcare professional	N/A	-Self-reported - Qualitative - Reflections	Free	3/5
Critical Measures: Cross-Cultural Courses	- Andragogical - Case studies - Consultants - Curriculum - Online/Classroom - Seminars - Tailored	- CLAS Based Organizational - Language Access Audit - Provider Cultural & Linguistic Competence	- Healthcare professional	- CLAS - TJC	- Self-reported - Qualitative	N/A	4/5
CultureVision	- Case studies - Didactic - Exploratory - Factual - Online	- Learning guide - Quizzes	- Physician	- CLAS - NCQA - TJC	- Self-reported - Qualitative - Reflections	\$15 USD per person	3/5
Fanlight Productions	- Curriculum - Didactic - Video	- In-video questions - Study Guides	-Healthcare professionals	N/A	- Self-reported - Qualitative - Reflections	\$248 USD per DVD	3/5
Medscape: Cultural Competence Resources	- Didactic - Exploratory - Online - Video vignettes	- In-video questions - Pre/Post Educ. Assessment	- Physician	N/A	- Reflections	Free	2/5

National Center for Cultural Competence (NCCC)	- Andragogical - Curriculum - Data vignettes - Exploratory - Online - Pedagogical	- Cultural & Linguistic Competency Assessments	- Anyone	- CLAS - NCQA - TJC	-Self-reported - Qualitative - Reflections	Free	3/5
Quality Interactions	- Case studies - Classroom - Consultants - Didactic - Exploratory - Online - Tailored	- Learning guide - Pre/Post Educ. Assessment - QI Compass Assessment™ - Quizzes	-Healthcare professionals	- CCM - CEU	-Self-reported - Qualitative - Reflections	N/A	3/5
Think Cultural Health	- Andragogical - Case studies - Curriculum - Online	- In-video questions - Quizzes	- Physicians	- CLAS - TJC	-Self-reported - Qualitative - Reflections	Free	4/5
Virtual Hall	- Case studies - Curriculum - Didactic - Exploratory - Online	- In-video questions - Quizzes	- Physicians	-ACCME	-Self-reported - Qualitative - Reflections	\$50 USD per person	2/5
X-Culture: Closing the Gap	- Andragogical - Case studies - Classroom - Consultants - Curriculum - Tailored	- Communication Climate Assessment Toolkit (C-CAT)	-Healthcare professionals	- CLAS - TJC	-Self-reported - Qualitative - Reflections	~\$750 USD per person for 5-day training	4/5
Analysis Score	5/10	10/10	9/10	7/10	0/10	N/A	

Abbreviations: Accreditation Council for Continuing Medical Education (ACCME), CCM (Commission for Case Manager), CEU (Continuing Education Unit), CLAS (Culturally and Linguistically Appropriate Services); NCQA (National Committee for Quality Assurance); TJC (The Joint Commission); C-CAT (Communication Climate Assessment Toolkit)

**Appendix C**

Table 3. Frequency of Cultural Competency Methods Used for Certain Ethnicities\*

	<b>Non-patient centered: Fact- based</b>	<b>Non-patient centered: Self- assessment</b>	<b>Non-patient centered: Fact/Self</b>	<b>Patient centered</b>	<b>Total (n, %)</b>
<b>Nonspecific</b>	10	10	9	9	38, (31.1%)
<b>Aboriginal</b>	0	1	1	3	5, (4%)
<b>Asian/Pacific</b>	5	5	6	9	25, (20.5%)
<b>Hispanic</b>	9	4	7	13	33, (27%)
<b>Non-English speaking</b>	0	0	1	1	2, (1.6%)
<b>African American</b>	3	3	5	8	19, (15.6%)
<b>Total (n, %)</b>	27, (22.1%)	23, (18.9%)	29, (23.8%)	43, (35.2%)	122, (100%)

\*Data adopted from the 34 studies in Beach et al. (2005). The curricular methods were categorized into one of four domains: Fact-based included language lessons, drilling and lectures. Self-assessments included case studies/modeling, writing assignments, and brainstorming. Fact and Self included audio lessons, discussions, and culture/language lessons. Patient centered included clinical experience, health activities, patient interviews, and cultural related items. The methods were then matched to the specific culture, and its frequency was counted. Likewise, percentages were provided for all the totals. It was found that 64.8% of all methods implemented (79 of the 122) were non-patient centered.