

CCNM Two-Year Evaluation Report  
March 16, 2007 to March 16, 2009

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## Overview

In recent years, overall health has improved for most Americans. However, racial and ethnic disparities in health continue to persist, and minorities experience unequal burdens of disease and death. The National Healthcare Disparities Report produced by the Agency for Healthcare Research and Quality (AHRQ) has shown that few changes have been made to the disparities in quality and access to care for minority groups and poor populations. The report states that these disparities have not been reduced since the release of their first report in 2003 (AHRQ, 2007). Some of the potential reasons associated with these include institutional or provider bias, language barriers, limited health literacy, and patient/provider miscommunications (Institute of Medicine, 2002). Cultural and language differences may engender misunderstanding, a lack of compliance, or other factors that negatively influence clinical situations and impact patient health outcomes.

Nearly every patient's health care experience includes interaction with a registered nurse (Joint Commission, 2002). Nurses spend more time in direct patient care than any other type of health professional and, as such, are in a unique position to improve the quality of care delivered to patients at risk for health disparities. The need for nurses to be prepared to effectively treat racial and ethnic minorities becomes more crucial as our nation becomes more diverse (Salimbene, 1999).

In 2004, the Office of Minority Health (OMH) at the U.S. Department of Health and Human Services initiated the development of the Culturally Competent Nursing Modules (CCNMs) in order to help nurses develop cultural and linguistic competencies required to improve the quality of care for ethnically diverse communities. The CCNMs are grounded in the *National Standards for Culturally and Linguistically Appropriate Services in Health Care* (CLAS) and the most recent research in the field of cultural competence education. The curriculum underwent a rigorous development process which included: a needs-assessment phase comprised of focus groups and development of an Environmental Scan; ongoing input from a National Project Advisory Committee; a Consensus-Building process; and pilot and field testing of draft curricula throughout the country with practicing nurses as well as nurses in academic settings. The CCNMs were released to the nursing community on the World Wide Web on March 16, 2007.

OMH commissioned the development of the CCNMs as a tool to assist nurses with the cultural and linguistic competencies required to improve the quality of care for minority, immigrant, and ethnically diverse communities. The curriculum is grounded in the principles of the CLAS Standards and is structured around their three themes.

Curriculum Course 1, *Delivering Culturally Competent Nursing Care*, provides nurses with the principles of cultural competency, a self-assessment tool to address potential gaps in cultural competency learning, and tools and strategies for increasing cultural awareness during a clinical encounter, as well as skills for delivering patient-centered care.

Curriculum Course 2, *Language Access Services*, offers an overview of language access services, provides tools and strategies for effective communication between a nurse and a patient, and demonstrates the rationale for health literacy.

Curriculum Course 3, *Supporting and Advocating for Culturally Competent Health Care Organizations*, articulates the need for nurses to play the role of advocates for cultural competency within their organizations and provides tools and strategies for integrating this education into their environment.

This report is a two-year evaluation of the Culturally Competent Nursing Modules' impact on nurses' knowledge, skills, and abilities in the provision of culturally competent health care. As discussed in the CCNM Evaluation Plan, submitted October 12, 2007, the literature reveals a gap in the evaluation of cultural competence education and its effects on changing providers' behavior and patient health outcomes (Brach and Fraser, 2000; Casebeer et al., 2003; Grant & Letzring, 2003). As Campbell-Heider and colleagues argue, despite wide-spread cultural competency education initiatives, "there are no documented outcomes of cultural competence in graduates of these programs" (Campbell-Heider et al. 2006). Literature also points out the lack of appropriate instruments to measure cultural competence in nursing schools and health care organizations (Grant & Letzring, 2003).

This Two-Year Evaluation Report addresses this gap in research related to the effectiveness of cultural competency training. To do so, it uses a four-theme evaluation model developed by Kirkpatrick and Kirkpatrick that has been extensively used in the Federal government (e.g., Department of Defense and Defense Acquisition University, Department of State and Foreign Service Institute), educational institutions, and private industry for evaluating the effectiveness of workplace education programs and technology-based training (Kirkpatrick & Kirkpatrick, 2006). This model has been used in and is relevant for evaluating continuing medical education programs (Rossett & McDonald, 2006). It has also been used for organizing research questions, methods, strategies, and activities in order to assess the effectiveness of online learning for health care professionals (Pullen, 2006).

This Two-Year Evaluation Report organizes data and methodologies into the analysis of four themes which focus on the following research questions:

Does completion of the curriculum result in a nurse's:

- (1) satisfaction with the type of training provided within the CCNM?
- (2) increase in knowledge regarding cultural competency?
- (3) change in behavior as a result of the training?
- (4) working towards changing their practices and health care organizations to reflect the knowledge gained with the CCNM training?

Each evaluation theme provides a foundation for more in-depth analysis of curriculum impact on nursing practices. The diagram below illustrates specific objectives, research

questions, data sources, data collection instruments, and research methodologies relating to each theme used in the CCNM evaluation. Please spell-out KSAs –Theme 3-Behavior.

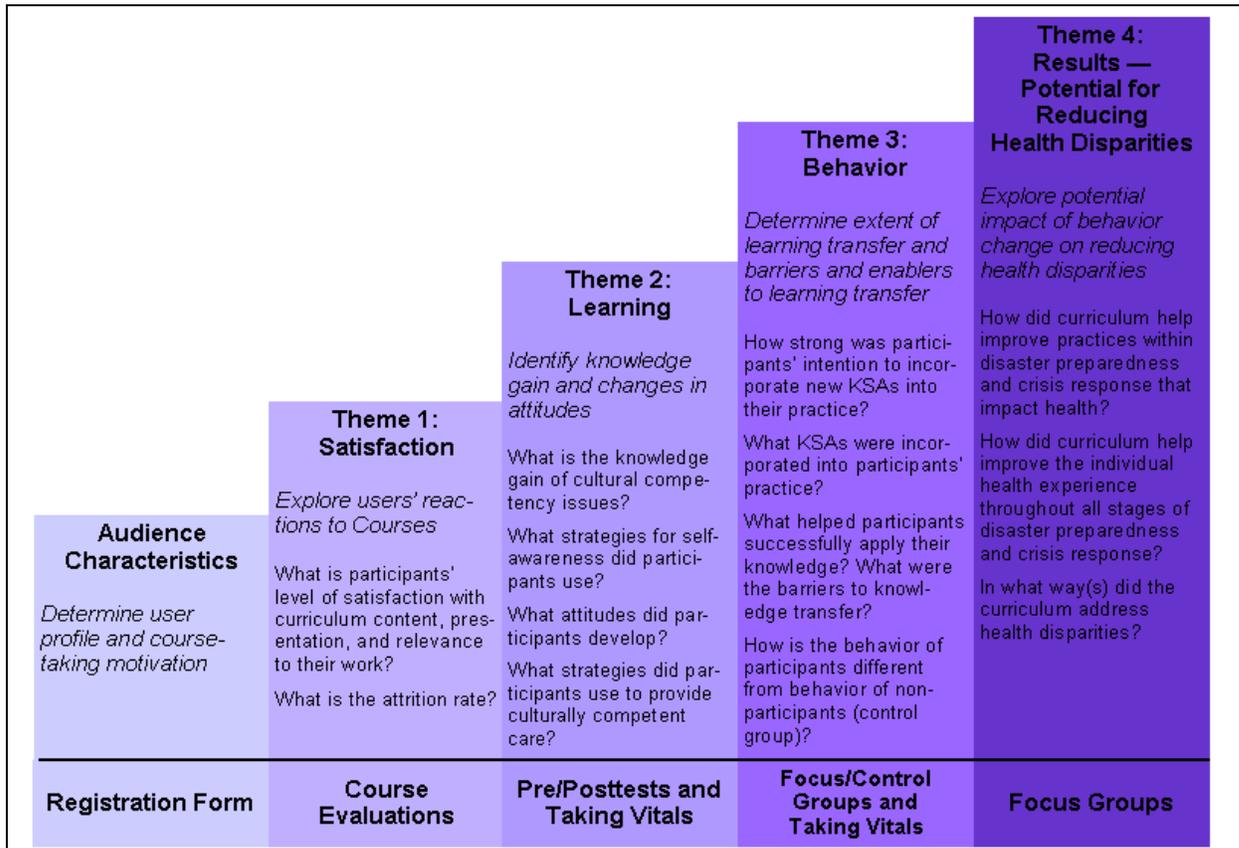


Figure 1: CCNM Evaluation Conceptual Framework

The data presented here represents a first step in the evaluation of the CCNM education program. In the future, explorations of patient-reported data and/or indicators for health outcomes may contribute to a more robust comparative effectiveness study of the impact on the training in the reduction of health disparities in clinical care.

The purpose of the curriculum is to help nurses develop the competencies required to improve the quality of care for ethnically diverse communities.

The curriculum has the following learning objectives:

- Define issues related to cultural competency in nursing practice;
- Identify strategies to promote self-awareness about attitudes, beliefs, biases, and behaviors that may influence the nursing care they provide;
- Devise strategies to enhance skills in the provision of culturally competent nursing care; and
- Demonstrate the advantage of the adoption of the CLAS standards as appropriate in their nursing practice.

The CCNMs were developed between 2004 and 2007. Similar to the Cultural Competency Curriculum Modules (CCCMs) for physicians, the development of this training program underwent a rigorously defined protocol that evolved through several stages. The first step included a review of literature related to cultural competence and an analysis of theories, research, and instructional strategies to be employed in the curriculum modules.

As with the CCCMs, a National Project Advisory Committee (NPAC) was convened to serve in an advisory capacity during the curriculum development process. The NPAC members provided guidance throughout the entire development stage of the project. A Consensus Building meeting was held to establish priorities for the Culturally Competent Nursing Modules. It was important for the credibility and comprehensiveness of the curriculum that the perspectives, concerns, and knowledge of various stakeholder groups were reflected in how the modules were developed, presented, and written. Concept papers focusing on the three themes of the CLAS Standards facilitated discussion at the Consensus Building meeting and helped to identify potential focus areas for the design of the modules.

During their development, the Culturally Competent Nursing Modules underwent three phases of focus group testing by nurses across the United States. In April 2004 through May 2004, a series of six needs assessment focus groups were conducted with 50 practicing nurses in five geographically and culturally diverse locations across the U.S. An initial draft of the curriculum and a series of video vignettes were developed based on the feedback received during these needs assessment groups, as well as other sources. The initial paper draft of the curriculum and a first cut of the video vignettes were then pilot tested in 2005 through a series of seven focus groups in eleven sites across the country. Over 70 nurses participated in the pilot testing focus groups. Changes were made to the text-based curriculum and the vignettes based on feedback from pilot testing focus group participants and NPAC members, and a web-based version of the curriculum was then developed. NPAC members reviewed and provided feedback on the online curriculum prior to conducting the final set of focus groups used during the curriculum development process: the field testing focus groups. For field testing, seven focus groups were conducted with 69 nurses throughout the country between August 17, 2006 and October 10, 2006.

For all focus groups, participants were screened using a structured protocol to ensure that the appropriate mix of gender, race, diversity, and years of experience were properly represented. In order to ensure that feedback was balanced and would result in a curriculum that was adaptable to a diverse audience of nurses, pilot test and field test sites were geographically distributed throughout the nation and included sites in rural, urban, and suburban areas. Per the directive of OMH, at least one site during both the pilot and field testing phases was to be conducted with nursing students enrolled in an academic institution.

The CCNMs were revised following field testing, and were submitted for accreditation and award of continuing education credits. The CCNM e-learning program was launched on the [www.thinkculturalhealth.org](http://www.thinkculturalhealth.org) Web site on March 16, 2007.

The CCNMs are a web-based curriculum organized by the three themes of the CLAS Standards. Each theme represents a single course, which is then further divided into six distinct modules. Each course begins with a pretest intended to measure nurses' existing knowledge of relevant concepts, identify knowledge gaps, and focus their attention on specific concepts discussed in this module.

Similar to the CCCMs, each course is organized around video-enabled case studies that illustrate the concepts covered in the course materials and allows for participant feedback and self-assessment. The use of video enhances the instructional message and boosts the learner's attention on the concepts covered in the module, as well as the non-verbal communication cues necessary for effective communication.

Module case studies are based on interactions between nurses and a diverse group of patients, including an elderly African-American woman, a Native American youth, [a Hispanic American male](#), individuals of Asian descent, and a Muslim couple. Each of the scenarios presented reflect real-life situations that nurses encounter daily, such as language barriers and the need for appropriate interpretation services, or cultural issues of gender concordance in patient care.

After viewing each case study, nurses answer self-exploration questions designed to stimulate in-depth reflection of their feelings related to the learning content. The questions also encourage relating the case study to their own experiences involving cultural competency concepts. All self-exploration questions were developed by an instructional designer and reviewed by the cultural competency experts, educators, and nurses involved in the NPAC. They were also piloted and field tested across the country during the curriculum development process.

After completing self-exploration questions, participants review instructional content and have an opportunity to transfer their knowledge to solving problems related to their own clinical experiences. They can also compare their own insights to those submitted by their peers. A posttest consisting of ten multiple choice questions concludes each course. The items included on the posttest were sampled from the pretest, and were developed by an instructional designer. Additionally, the test questions were reviewed and validated by the NPAC and the accrediting agency that certifies the program for continuing education credit.

Because the CCNMs are a free web-based curriculum, no geographical or institutional barriers prevent nurses from taking this course. Access to the internet is required to participate in the curriculum. All participants must complete the online registration and pre- and post-testing sections of the curriculum to receive their accreditation certificate.

# Methods

## Overview

The purpose of this concurrent mixed-methods study is to explore the impact of the Culturally Competent Nursing Modules (CCNM) on nurses' knowledge, attitudes, and skills (KSAs) in providing culturally competent care by utilizing both quantitative and qualitative data. In concurrent procedures, quantitative and qualitative data are collected at the same time, and both forms of data are integrated into the interpretation of overall results. A concurrent methodology was chosen to ensure consistency in the evaluation of both the CCNMs and the Cultural Competency Curriculum Modules (CCCMs). Additionally, because the CCNM program remained available to users during the full period of evaluation, data was captured from a large sample over time and nurses were recruited over that same time span.

In this study, a control group analysis was used to examine changes between before- and after-curriculum knowledge of cultural competency. Control groups, or groups of learners who have not experienced a specific educational activity, are widely used in the evaluation process in order to assess the effectiveness of educational activities. The control group was used to compare CCNM participants' behavior and attitudes to the baseline behavior and attitudes of nurses who have not been exposed to the entire curriculum. In this manner, the control group results are indicative of what changes occurred in nurses' attitudes and behavior as a result of curriculum participation, as well as the magnitude of their effect as compared to the control group.

The use of a control group further provides an understanding of how cultural competency concepts and strategies presented in the curriculum affect nursing practices, and what barriers and enablers exist to the successful application of knowledge related to cultural competency and nursing practices. The control group also provides OMH with data on the effectiveness of its efforts in promoting cultural competency skills among health care providers and providing a means for diminishing health care disparities.

The data collection instruments for control group participants were a "stripped-down" Web site with the registration questionnaire, and selected video scripts with transcripts, Stories from the Front Line, and Pulse Point questions. Content that was deemed either not useful or relevant to the control group was removed (i.e., the "Course Material" area, which is useful on the current site, but not relevant for the control group as the content they viewed was abbreviated). Additional data was collected through a survey containing questions related to participants' cultural competence practices. Control group participants provided information only through the Web site and did not participate in focus groups.

In the two years following the CCNM accreditation and launch, 14,205 participants registered for the curriculum. Of this total, 11,327 were nurses, and 50.5% completed at least one curriculum theme. Program registration data indicate that nurses practice in a

variety of settings, including: hospitals, nursing homes, physician offices, clinics, and community health centers.

According to findings from the March 2004 National Sample Survey of Registered Nurses conducted by the United States Department of Health and Human Services' Health Resources and Services Administration, over 81.8% of the nursing population is White (HRSA, 2006). To date, participation in the CCNM curriculum resembles the national averages (Table 1), with racial/ethnic groups participating in similar ratios. The study sample and the control group also break down along many of the same ratios as the national percentages.

Table 1: Registered Nurse Population by Race/Ethnicity

Registered Nurse Population by Race/Ethnicity		
White (non-Hispanic)	2,380,529	81.8%
Black (non-Hispanic)	122,495	4.2%
Asian (non-Hispanic)	84,383	2.9%
Native Hawaiian/Pacific Islander (non-Hispanic)	5,594	0.2%
American Indian/Alaskan Native (non-Hispanic)	9,453	0.3%
Hispanic/Latino (any race)	48,009	1.7%
Two or more races (non-Hispanic)	41,244	1.4%
Not known	217,651	7.5%

Participants by Race/Ethnicity for CCNM Curriculum Overall		
White	9867	75%
Black	1510	11%
Asian	651	5%
Native Hawaiian/Pacific Islander	92	1%
American Indian/Alaskan Native	183	1%
Hispanic/Latino (any race)	717	5%
Other	256	2%

Participants by Race/Ethnicity for Control Group		
White	27	79%
Black	5	15%
Asian	1	3%
Native Hawaiian/Pacific Islander	0	0%
American Indian/Alaskan Native	0	0%
Hispanic/Latino (any race)	1	3%
Other	0	0%

Data sources for this evaluation are both quantitative and qualitative, and include: pre- and posttest scores captured by the program database, responses to open-ended self-exploration questions about case study scenarios, qualitative data from focus groups, results from a questionnaire distributed to focus group participants, and pre- and posttest scores from the control group.

The initial design of the evaluation was to compare 60 control group participants to a random sample of 60 nurses chosen from the CCNM participant database. At the conclusion of the control group, only 27 nurses registered and participated. To ensure a consistent methodology, and to provide the greatest level of robustness with respect to the comparison between a control and a participant group, three random and independent groups of 27 nurses each were chosen from the CCNM participant database and used for comparisons to the control group baseline sample. An array of non-parametric statistical models was chosen to provide analysis that most closely resembled the entire population of nurses.

## ***Quantitative Methods***

Quantitative exploratory analysis using the control group and regular participant data included non-parametric methods such as the Wilcoxon Signed-Rank Test, Spearman's Rank Correlation Coefficient, and the Kruskal-Wallis One-Way Analysis of Variance. The analysis examined data to determine if the CCNM curriculum had a significant result on:

- Nurses' knowledge gain related to cultural competence;
- Changes in nurses' behavior as a result of participating in the curriculum; and
- Nurses' perceptions about the impact of the curriculum on providing culturally appropriate services, improving patient outcomes, and reducing health disparities.

Non-parametric methods are widely used for studying populations that take on a ranked order. The utilization of these methods is necessary when data has a ranking but no clear numerical interpretation, such as when assessing preferences in terms of levels of measurement for data on an least an ordinal scale.

The use of pre- and posttest questions in both the control and participant groups provide a window of insight into the knowledge and use of cultural competence in nurses' practice. However, it is difficult to directly assess that an individual who scores substantially higher on a pretest within the participant group has *significantly* more knowledge in this area than someone who scored lower. If an individual scores a 100 on either a pretest or posttest, it does not imply that they have twice the knowledge in cultural competency than someone who scores a 50. It does indicate that the individual who scores higher may have more experience, training, or knowledge in cultural competency, but to draw a definitive conclusion fails to take into account the following assumptions:

1. Does a score on a pretest indicate an individual's awareness of cultural competency, or does it simply address an individual's awareness of concepts, laws/regulations, and/or the CLAS standards without the correlation to cultural competency being directly stated or implied?
2. Does a score on a posttest indicate a change in knowledge and attitudes of nurses as a result of the CCNM curriculum?

3. Is there a correlation between the CCNM training and a significant improvement in practice and patient outcomes?

The numerical data captured in both the pre- and posttest provides a method to evaluate along a scale the differences in knowledge between individuals. However, the lack of understanding the quantitative difference between testing scores does not lead to any definitive conclusions. Therefore, the simplest way of evaluating the effectiveness of the CCCN training is to rank each of the scores from both the control and participant groups, and follow a series of non-parametric methods to understand both the correlation and the significance of the training on the individuals who have taken the course in its entirety. To create a robust methodology that allows for the most conclusive results, the random sample from the participants group included individuals who completed the entire CCNM curriculum.

As stated above, the statistical methods used for the CCNM evaluation included the Wilcoxon Signed-Rank Test, Spearman's Rank Correlation Coefficient, and the Kruskal-Wallis One-Way Analysis of Variance, which are discussed in further detail below.

### **Wilcoxon Signed-Rank Test**

This is a non-parametric statistical hypothesis test for the case of two related samples. It is generally used as an alternative to the paired Student's t-test when the population cannot be assumed to be normally distributed. It is often used to test the difference between two distinct scores of data collected before and after an experiment. In this case, the experiment is the CCNM curriculum (the one utilized in either one of the participant groups or the control group) and the effect it had on pre- and posttest scores.

### **Spearman's Rank Correlation Coefficient**

This is a non-parametric measure of correlation which assesses the strength of the relationship between two variables. It does not attempt to make any other assumptions about the particular nature of the relationship between the variables, such as direct causality. In this instance, the evaluation focuses on the relationship between the CCNM curriculum and pre- and posttest scores. It is then possible to infer the effect of the training (both from the participant and control) group on overall knowledge. However, in no manner can Spearman's be used to determine whether the CCNM training definitively caused an increase in cultural competency knowledge or a positive effect in health outcomes.

### **Kruskal-Wallis One Way Analysis of Variance**

This is a non-parametric method for testing the equality of population medians among groups. It is very similar to an analysis of variance, but like other methods of this nature,

it ranks the data by group. This examines the variance between each pre- and posttest conducted for both the participant group and the control group. It also compares the variance within each subgroup as well to provide a basis to evaluate a change in knowledge and attitudes as a result of the CCNM training.

To provide accurate and justifiable conclusions about the impact of the CCNM training, it is best to conduct a double-blind control group experiment. To this end, the random samples chosen for the participant group and the control group were done on the basis of participation. Unlike with the CCCM evaluation where White nurses were compared with those in the minority categories, for this evaluation, no attention was given to the racial/ethnic breakout. This was done for three reasons. First, an experimental design that does not constrain itself amongst any predefined criteria provides the most robust method of determining the overall effectiveness of the curriculum. The objectives of the evaluation were to assess the overall effect on nurses' knowledge, beliefs, and practice habits, and not to stratify those amongst racial/ethnic categories. Second, while evidence exists to demonstrate patient-provider concordance with respect to cultural competency is generally associated with higher satisfaction and partnership with physicians (Stevens, Shi, and Cooper, 2003), no evidence exists that clearly and unambiguously states that nurses not affiliated with a minority category are less cognizant of the cultural impacts of care provided to their patients. To integrate this assumption into the analysis would be highly speculative and would potentially provide misleading results. Finally, the utilization of a control group for the analysis provides a methodology in which the overall effect and significance of the training amongst nurses can be determined without the breakout into any distinct category.

Since the control group was used as the primary data set for comparison amongst the participants groups, the evaluation of the pre- and posttest scores was done along three separate and distinct categories:

- Control Group and Participant Group for Course 1
- Control Group and Participant Group for Course 2
- Control Group and Participant Group for Course 3

Twenty seven individuals (n=27) participated in and completed the control group curriculum. An equal number of nurses who had completed the entire site and had pre- and posttest scores recorded were randomly chosen for three participant groups (called Participant Group A, Participant Group B, and Participant Group C).

The hypotheses for each statistical method employed takes on the general form of:

$$H_0 : \mu A = \mu B$$

$$H_A : \mu A \neq \mu B$$

Where:

The subscripts A and B represent the before-and after-participation conditions.

$H_0$  refers to the null hypothesis, or a hypothesis of no difference. This indicates that there is no significant relationship between the independent variable (curriculum participation) and the dependent variable (change in cultural competency knowledge), as measured by pre- and posttest scores.  $H_A$  is the alternative hypothesis, which must be considered if the null is rejected. The alternative hypothesis suggests that the entire CCNM curriculum has a positive effect on the knowledge, attitudes, and skills of nurses. This is compared to the limited curriculum and inherent knowledge of nurses who participated in the control group site.

Again, it should be noted that this evaluation report provides one static control group and three random independent participant groups. Rather than identify a singular grand mean for one group to evaluate against the control, three separate groups were broken out to assess the impact of the curriculum individually in order to gain a greater assessment of the overall impact of the entire training program. In this manner, the true effectiveness of the program, in addition to potential weaknesses, are more easily identified. Furthermore, the variance in score amongst each group can then be correlated against the control group to assess the knowledge and attitude shifts in nurses within each course as well as the entire curriculum. Knowledge maintenance over time is still not a component of this training and thus the information gained through the curriculum is essentially stratified amongst each course. However, given the objectives of the training, it is possible to utilize different statistical methods that correspond to each objective outlined in the CCNM evaluation plan. No information through trend analysis is lost, as the control group provides the baseline for all comparisons to be made against. The scores are not being compared amongst themselves; rather the analysis is made using a foundation for evaluation. This still provides an overview of any statistically significant differences between inherent knowledge on the pretest score and the knowledge exhibited independently across pre- and posttests from three distinct samples. The use of a control group still provides protection against elevated Type I (alpha) error because of the independent nature of the three participant groups.

Similar to the CCCM evaluation, each of these tests is well-powered as small mean differences are still detectable. Inferences on the basis of each test were supplemented by estimating the effect sizes using simple mean differences between the pre- and posttests. Those effects were compared against the control group to provide a simple metric for evaluation. There was little need to calculate standardized mean gains, as the rank-order nature of a non-parametric method posits a difference between the higher and lower end scores against a baseline. It is then possible to evaluate the effect of the curriculum against the control group to determine its effectiveness in educating nurses in cultural competency practices. Furthermore, pre- and posttest scores from other curriculums can be rank-ordered and compared to the CCNM scores to compare impacts.

## **Qualitative Methods**

Focus group results represented the qualitative data used in this evaluation. Seven focus groups were conducted between July 14, 2008 and February 17, 2009 using a standard Moderator's Guide. Focus groups were conducted in the following locations: Baltimore, Maryland; Miami, Florida; Houston, Texas; Oklahoma City, Oklahoma; San Francisco, California; Los Angeles, California; and San Antonio, Texas. The site in San Antonio was an academic site.

A thematic analysis based in inductive reasoning was used as the foundation for the qualitative analysis. The results of the seven evaluation focus groups were transcribed verbatim, and an open-coding scheme (Appendix B) was developed based on the patterns that emerged in the participants' comments. To create the coding scheme, two reviewers agreed on the dominant themes of the data following initial readings of the transcripts. Code definitions and inclusion/exclusion criteria were developed. Discrepancies in the coding among the two reviewers were resolved through discussion, using a process of constant comparison. Once coded, reports from individual focus groups were reviewed and relevant findings were mapped to the evaluation objectives. Focus group remarks pertaining to perceived program impact were also highlighted even if they did not map directly onto an evaluation objective. Relevant findings were grouped by objective (or theme) and then assessed for patterns and range of responses within the objectives.

## **Results**

### ***Objective 1: Explore the extent to which nurses were satisfied with the CCNM learning experience***

This theme was used to assess the level of participant satisfaction with their learning experiences, as well as the effectiveness of the instructional strategies, and content organization. Future enhancements to content presentation and instructional strategies may occur, since the CCNM is a "living" curriculum and not static in design.

Quantitative results demonstrate that the nurses scored higher on CCNM posttests than on pretests, in both the participants and control groups, and that the difference is statistically significant. The significance for both groups and the high rate of variation in each sample could be attributed to the small sample size. However, the analysis does suggest the curriculum participation, even in an abbreviated version, tends to result in knowledge gains, which infers satisfaction with the learning experience.

In Table 2, the scores for the control group and the three independent participant groups for each of the three courses are displayed.

Table 2: Central Distribution Scores for Control/Participants Groups Across the Three CCNM Courses  
**Course 1**

Control Group			Participant Group A			Participant Group B			Participant Group C		
	<i>Pre</i>	<i>Post</i>		<i>Pre</i>	<i>Post</i>		<i>Pre</i>	<i>Post</i>		<i>Pre</i>	<i>Post</i>
Max	90	100	Max	100	100	Max	100	100	Max	100	100
Min	30	30	Min	30	70	Min	30	70	Min	20	40
Mean	50.74	78.89	Mean	62.59	92.22	Mean	56.67	90.74	Mean	54.07	90.37
Median	50	80	Median	60	100	Median	50	90	Median	50	100
Std Dev	13.28	18.67	Std Dev	16.31	10.50	Std Dev	17.10	10.72	Std Dev	18.66	14.27

**Course 2**

Control Group			Participant Group A			Participant Group B			Participant Group C		
	<i>Pre</i>	<i>Post</i>		<i>Pre</i>	<i>Post</i>		<i>Pre</i>	<i>Post</i>		<i>Pre</i>	<i>Post</i>
Max	90	100	Max	80	100	Max	90	100	Max	90	100
Min	10	30	Min	10	80	Min	30	80	Min	30	70
Mean	41.48	84.81	Mean	50.37	95.56	Mean	56.30	94.44	Mean	55.93	94.81
Median	40	90	Median	50	100	Median	50	100	Median	50	100
Std Dev	21.43	16.95	Std Dev	20.47	6.98	Std Dev	19.44	7.516	Std Dev	16.93	8.93

**Course 3**

Control Group			Participant Group A			Participant Group B			Participant Group C		
	<i>Pre</i>	<i>Post</i>		<i>Pre</i>	<i>Post</i>		<i>Pre</i>	<i>Post</i>		<i>Pre</i>	<i>Post</i>
Max	100	100	Max	100	100	Max	100	100	Max	100	100
Min	60	80	Min	10	90	Min	30	90	Min	60	30
Mean	86.67	96.67	Mean	87.41	98.89	Mean	85.56	98.52	Mean	83.70	95.56
Median	90	100	Median	90	100	Median	90	100	Median	90	100
Std Dev	11.09	5.55	Std Dev	20.30	3.20	Std Dev	17.61	3.62	Std Dev	12.14	13.96

The most telling and intuitive figures in this table are those displaying the mean scores for both pre- and posttest for all three courses. Within the first two courses, the average scores for the pretest for the control group are lower than those who participated in the full curriculum. The average posttest scores are also smaller, and the overall gain between both tests among the participants groups is higher than that of the control group. The data indicate that the nurses may have entered the CCNM training with a reasonable understanding of cultural factors in practice, but their understanding and knowledge was broadly increased over the duration of the curriculum. Even with the array of standard deviation scores, the range of scores in all probability did not deviate far from the mean; and the large variance is largely attributable to a small sample size.

Another factor of note is that the pretest scores among both the control and participant groups were relatively low but showed significant increases once the curriculum was completed. However, the initial pretest scores for course three were significantly higher than for courses one and two among both the control and participant groups. This trend in higher pretest courses during the progression of the curriculum indicates both retention and understanding of cultural competency concepts presented in the Introduction module and the first two courses for both the control and participant groups. This infers a general

level of satisfaction with the instructional design and content of the CCNM, as the increase in understanding and comprehension is largely attributable to the course design.

It is also important to reiterate that the sample for each participant group was limited to nurses who completed the curriculum in its entirety. There may be unobservable characteristics between completing and non-completing nurses that make extrapolations of the results to all CCNM participants and the general nursing population tenuous. Completing nurses may have more time, interest, and willingness to learn about cultural competency than their non-completing counterparts. They may therefore be more open to the format and content of the CCNM training program, and may put more effort into this educational activity.

Based on the curriculum feedback from the focus groups and questionnaires given to the nurses, the nurses found the program well designed and educational, with particular positive feedback on the diagrams and the modules. Some of comments included:

- *“It was well written and easy to use.”*
- *“The variety of teaching techniques used was very helpful.”*
- *“They gave us tools that we can use. A map to follow.”*
- *“It was very good overall.”*

With respect to Course 1, nurses also enjoyed the graphics, diagrams and models, although a number of complaints focused on the length and repetition of the modules. Some of the comments included:

- *“I was impressed by some of the ways it was presented. Even though it was long, some of the graphics, and the colors and the diagrams, I was like, wow, that’s an awesome design, I’m going to use that. So my notes have the diagrams. It was a very good tool with some of the graphics and that kind of thing.”*
- *“The models help a lot better than the text, and make me understand what I am trying to get out of this course.”*

Course 2 overall was better received than Course 1 because the material was perceived as more practical, but focus group participants still felt the information should be presented in a more concise and engaging manner. The participants expressed their appreciation for tangible information about key topics, such as communication. For example:

- *“This was the most interesting part of the program because it was very practical. I used a lot of these things.”*
- *“Because there were more tangible information and information you could access, it seemed to flow better.”*
- *“I liked that there were lots of choices, there were different models, different ways to do it. You just find what works best for you.”*

The participants felt that Course 3 went by more quickly than the previous two courses. In general, the nurses stressed that, although they liked learning about the organizational

side of cultural competency, they were not in the position – either because of their role or time constraints – to implement the type of changes discussed in the course. For example:

- *“It makes you more aware of how competent your facility is and it’s nice to see we were doing stuff that was in there.”*
- *“An everyday nurse does not have time to do this stuff. It’s nice to think about and it’s wonderful if you have time to do it, and I’d like to be involved in something like that some day, but as an everyday nurse working in some busy department, you don’t have the time to do this.”*

The qualitative analysis also focused on the different components of the CCNM training program, in order to determine the overall effectiveness and acceptance of such items.

The video vignettes were extremely well-received. The participants commented that they strongly reinforced the concepts presented in the course, that they were relevant and realistic, and that they would prefer to have more in the program to break up the heavy text. Suggestions for the videos included: captions, incorporating a decision tree (choose your own ending) format, and showing the “good” way and the “bad” way. A couple of nurses commented that they felt “talked down” to, and that they would have appreciated seeing scenarios which deviated from a White nurse/minority patient dynamic.

Comments included:

- *“I liked the videos. They made it real.”*
- *“It gives your eye something rather than reading, it diverts you. It’s another way to...see and hear [as a form of learning].”*
- *“You have to put things into action. Because just by reading you’re missing a slice out of the whole....by putting it in the vignette, you can use all of your senses in order to understand what it is.”*

Most participants said they enjoyed the From the Front Lines segments because they broke up the reading of chunks of text and made the material more interesting, although several commented that they didn’t appreciate the extra reading they presented. A few nurses also requested that the case studies include potential solutions to the conflict. For example:

- *“The stories really put it in perspective.”*
- *“I think [they] help break it up, it’s less monotonous.”*

The Pulse Points received mixed reactions. Some nurses felt that the self-reflection was a useful tool for the curriculum, while others did not find that it contributed to their learning. Many mentioned that they would like to see example responses from other nurses. Several participants found the questions to be very repetitive. Comments included:

- *“I liked the Pulse Points because it made you stop and think about “what does this mean to me?” and get it straight in my head. [If] I can get it straight enough to write it down, then I’ve got it. It made you think.”*
- *“Even after we answer the question, it would be helpful to get some feedback – were we on the right track?”*
- *“If you take your time on those and really do those focus points I’m sorry it takes a lot of time. It would have been more effective to have questions saying think about what you would have done in this situation. Just questions to think about. Think about points or something.”*

Additionally, many participants found the Fast Fact boxes helpful and applicable to the lessons in the course:

- *“I loved the Fast Facts.”*
- *“They were informative and helpful. I thought they were really good.”*

### ***Objective 2: Explore the extent to which nurses gained more knowledge regarding cultural competency as a result of the CCNM curriculum***

This objective focuses on determining the extent to which the curriculum was able to increase participants’ knowledge of cultural competency and help them develop strategies for providing culturally competent care. In accordance with the CCNM Evaluation Plan, the analysis used data gathered through pre- and posttests for each course of the curriculum, for both the participant and control groups. Given that the curriculum is structured to provide a substantial amount of information within three distinct areas, the decision was made to focus on overall knowledge gain within each course. A question-by-question analysis yielded marginal changes within each pre- and posttest score, and few of them were regarded as significant (i.e., it was difficult to ascertain whether the curriculum had led to a correct answer, or whether they simply guessed the correct answer during the course of a test). However, using the overall scores for each course provided a more accurate assessment of the knowledge gained in cultural competency by each of the participants. The analysis focused on the posttests for both the control and participants groups, and measured the mean difference scores and overall effect size to determine the knowledge gained from the full curriculum as opposed to that taken by the control group, which was significantly abbreviated. The control group data serves as a baseline in this analysis. The results are illustrated in Table 3.

Table 3: Evaluation of Mean Difference and Effect Size of Control Group and Participant Group Posttest Scores

**Participants Group A**

Outcome Measure by Group	Posttest Mean (Control)	Posttest Standard Deviation	Posttest Mean (Participant)	Posttest Standard Deviation	Pooled Standard Deviation	Mean Difference	Effect Size
Course 1	78.89	18.67	92.22	10.50	3.85	13.33	3.46
Course 2	84.81	16.95	95.56	6.98	3.46	10.75	3.10
Course 3	96.67	5.55	98.89	3.20	2.09	2.22	1.06

**Participants Group B**

Outcome Measure by Group	Posttest Mean (Control)	Posttest Standard Deviation	Posttest Mean (Participant)	Posttest Standard Deviation	Pooled Standard Deviation	Mean Difference	Effect Size
Course 1	78.89	18.67	90.74	10.72	3.83	11.85	3.09
Course 2	84.81	16.95	94.44	7.51	3.50	9.63	2.75
Course 3	96.67	5.55	98.51	3.62	2.14	1.84	0.86

**Participants Group C**

Outcome Measure by Group	Posttest Mean (Control)	Posttest Standard Deviation	Posttest Mean (Participant)	Posttest Standard Deviation	Pooled Standard Deviation	Mean Difference	Effect Size
Course 1	78.89	18.67	90.37	14.27	4.06	11.48	2.83
Course 2	84.81	16.95	94.81	8.93	3.60	10.00	2.78
Course 3	96.67	5.55	95.56	13.96	3.12	-1.11	-0.35

The above calculations demonstrate significant and substantial changes in the knowledge gained by participants who took the entire CCNM curriculum as opposed to the control group. This analysis is most pronounced in the evaluation of Courses 1 and 2, where the effect sizes ranged from 2.75 to 3.46. An effect size of that magnitude indicates that those taking the entire curriculum gained more knowledge than 99% of the individuals taking the abbreviated control group training program. For Course 3, the effects were not as sizeable, but still significant in that, at a minimum, participants gained more knowledge at 79% of the individuals taking the control group site. The negative figures observed in Participant Group C for Course 3 are not normal and are most likely attributable to the presence of outliers within the participant data (as suggested by the high standard deviation number).

The Kruskal-Wallis model evaluates the overall scores for each pre- and posttest within both the control and participant groups to determine if the curriculum had any significant effect on the increase in scores. Given that the effect scores show a sizeable increase in knowledge from those taking the entire CCNM curriculum, this statistical test demonstrates whether the effect on participants was significant or purely attributable to chance. The first step was evaluating the significance in the difference between pretest scores. A rejection of the null hypothesis indicates that individuals in both the control and participants groups had, at a minimum, a baseline of cultural competency knowledge demonstrated before each course of the curriculum began. This explains the effect size by

demonstrating a significant baseline to evaluate the overall gain in knowledge. The results of this analysis are demonstrated in Table 4.

Table 4: Results of Kruskal-Wallis Test for Control and Participant Groups Pretest

Categories	Control Group	Participant Group A	Participant Group B	Participant Group C
Test Statistic	48.01	35.93	29.08	34.78
Degrees of Freedom	2	2	2	2
Critical Value	5.99	5.99	5,99	5.99

In each of the cases, the difference in scores between each of the pretests was significant, indicating that each individual had some level of cultural competency knowledge prior to taking the curriculum. Table 5 shows the results of a Kruskal-Wallis analysis for each posttest.

Table 5: Results of Kruskal-Wallis Test for Control and Participant Groups Posttest

Categories	Control Group	Participant Group A	Participant Group B	Participant Group C
Test Statistic	18.65	8.47	10.29	4.66
Degrees of Freedom	2	2	2	2
Critical Value	5.99	5.99	5,99	5.99

For both the Control Group and Participant Groups A and B, a significant difference was found in each of the posttest scores, indicating that the gain in knowledge was attributable to the curriculum, and the sizeable effect gain between the full CCNM program and the abbreviated one was due to the increase in knowledge from the complete CCNM training program. In Participant Group C, the null hypothesis was accepted, indicating any gain in knowledge was attributable to chance; however, this is likely due to the presence of outliers within that sample set.

In conclusion, the use of the CCNM curriculum does lead to an increase in knowledge of cultural competency concepts. The effect sizes and differences between the participant group and the baseline control group is sizeable, largely due to the comprehensiveness and robust quality of the CCNM courses and the way the information is both presented and retained.

The full analysis of the Kruskal-Wallis procedures is found in Appendix A.

***Objective 3: Explore the extent to which nurses changed their behavior as a results of curriculum participation***

The Brach and Fraser (2000) model indicates that cultural competency training can be successful in changing the behavior of health care providers. To achieve behavioral changes, the knowledge, skills, and attitudes acquired during the training must be incorporated in the overall behavior of training participants. This part of the evaluation utilizes both quantitative and qualitative methods to determine the following:

- Was there a significant increase in skills and attitudes as a result of the training?
- What particular behavioral changes did nurses discuss during their focus group discussions?

The Wilcoxon Signed-Rank procedure was used to determine whether the increase in skills and attitudes, as evidenced by the difference between the pre- and posttest scores, is due to the CCNM curriculum. Data from both the control group and the three distinct participant groups was used. The analysis compared each set of pre- and posttest scores from both the control and participant groups and evaluated it against a critical value to determine significance. The results of that analysis are displayed in Table 6.

Table 6: Results of Wilcoxon Procedure for Control and Participant Group Pretests

Categories	Control Group	Participant Group A	Participant Group B	Participant Group C
<b>N</b>	25	25	26	24
<b>SUM Positive</b>	13.5	3.5	2	0
<b>SUM Negative</b>	311.5	321.5	349	276
<b>T value</b>	13.5	3.5	2	0
<b>Critical Value</b>	89	89	98	81

Categories	Control Group	Participant Group A	Participant Group B	Participant Group C
<b>N</b>	26	27	27	26
<b>SUM Positive</b>	0	0	0	0
<b>SUM Negative</b>	351	378	378	351
<b>T value</b>	0	0	0	0
<b>Critical Value</b>	98	107	107	98

Categories	Control Group	Participant Group A	Participant Group B	Participant Group C
<b>N</b>	19	16	16	26
<b>SUM Positive</b>	12	5.5	0	17
<b>SUM Negative</b>	184	130.5	136	193
<b>T value</b>	12	5.5	0	17
<b>Critical Value</b>	46	29	27	52

Note: In Wilcoxon analysis, two scores are compared against each other with the difference being taken between the two. In the event that the two scores are identical, with the end result being a 0, the data is regarded as having no benefit to the analysis and is discarded. These discards are the reason for the variation in N among the groups.

The null hypothesis is rejected in each iteration of the Wilcoxon procedure for both the control and participant groups, indicating that the increase in test scores, and subsequent awareness of new skills and attitudes towards cultural competency, is attributable to the CCNM curriculum. Given the effect sizes established with the previous analysis, the complete training program produces sizeable awareness of skills and attitudes as compared with the abbreviated program used by the control group.

The full analysis of the Wilcoxon procedures is found in Appendix A.

Within the focus group discussion, nurses spoke of the strategies they use to adapt their care for limited English proficient patients and English-speaking patients with low literacy or local colloquialisms. Many mentioned that they demonstrate their message with pictures and gestures, ask the patient to repeat back the message in their own words, try to learn a few key words in the most commonly heard languages, color code patient directions and medications, and use interpreters when available. Several participants said that they have used, or even relied on, patients' children as interpreters, but that they then stressed that the CCNM program taught them that only certified interpreters should be used.

Participants across all focus groups stressed the continued need for cultural competency training at all levels of their organization. The awareness of the skills and attitude shifts to incorporate cultural competency into their organization is helpful for nurses to deal with the day-to-day care of patients. However, for a significant transformation to occur within a health care setting, all providers, administrators, and management need to be made aware of both the necessity and utility of cultural competency as both a concept and as a practice. According to a large number of nurses, a continued lack of sensitivity to different cultures, lack of language access services, and lack of organizational supports are inherent within their organizations. The challenges for change exist for nurses and other health care personnel, as well as for upper-level management. Many participants stated that the curriculum alerted them to the need for an awareness of cultural issues and ways they could make their care and their organization more culturally competent.

One participant noted:

- *“The problem in the organization is the willingness to just do it. People assume they are culturally competent because they don't think they stereotype, but folks are not self-aware. They do not look at themselves and ask if they need to learn more.”*

The analysis demonstrated the effectiveness of the curriculum on enhancing awareness of the issues and providing information on different skills that can be employed in the everyday practice of cultural competency, not simply within the clinical encounter between a nurse and a patient, but also within the organization itself. A large number of participants concurred that the entire CCNM curriculum provided a significant set of skills and demonstrated the need for attitude shifts towards people of different culture.

However, a number of them indicated that there is still much work left to do. As one participant noted:

- *“We can raise awareness. Tell our co-worker, approach a nurse supervisor and mention that we should orient new nurses to the types of patients we get, you know, we don’t mention anything about this sort of thing; maybe get a pamphlet in the orientation packet or have a [sic] culture day.”*

#### **Objective 4: Explore, to the extent possible, the overall effects of the curriculum on changing health care practices**

The analysis relating to this objective is designed to help determine the larger effects of the CCNM curriculum on provider organizations and existing health disparities through exploring nurses’ perceptions about the impact of the CCNMs on reducing health disparities. It should be noted that this analysis is speculative, in that establishing a direct correlation between an increase in cultural competency knowledge and an improvement in health outcomes and/or practices is difficult to ascertain. A positive effect on health outcomes is only possible through a comparative effectiveness study focusing on specific clinical measures from a medical record. Those measures must be evaluated using data from the nurse providing care before and after the CCNM training was completed.

The use of such data would be difficult to obtain without patient consent, and isolating data around patients with the same nurses throughout numerous encounters would also be difficult. While some evaluation can be done to determine if health care practices have changed, the effect of those initiatives on patient care cannot be determined in this study. However, both quantitative and qualitative analysis can indicate the correlation between the CCNM training and an increase in knowledge, skills, and abilities related to cultural competency. A positive correlation indicates that an increase in these attributes was related to curriculum participation.

An analysis and examination of the qualitative results help provide insight into whether the health care settings and practices that nurses work in may adopt the concepts presented within the curriculum to expand the practice of culturally competent behaviors in clinical care. The overarching goal of that paradigm change is the reduction of health disparities and the improvement in patient outcomes. It should be noted that this analysis does not indicate that an increase in knowledge, skills, and abilities due to curriculum participation will cause a change in practice; rather, the analysis indicates that those participants who have completed the curriculum have the knowledge, skills, and abilities to instigate change and awareness both within themselves and their health care practices.

The Spearman coefficient can determine what relationship, if any, exists between the curriculum and an increase in knowledge, skills, and abilities in cultural competency. For each course, pre- and posttest scores for the control group were evaluated against pre- and posttest scores among each of the participant groups. A high correlation number would indicate a strong relationship between the scores between the control and

participant groups; subsequently, a lower correlation number indicates a limited relationship between the two groups. Given that the effect size of the CCNM curriculum for the participant group was significantly higher than that of the control group, it is desirable for a low correlation number because that becomes indicative that the knowledge gained by the participants is significantly different than those in the control group. This is due to there being a minimal relationship between the scores from the participant and control groups. If those taking the full curriculum are retaining more information and scoring better than 99% of all other participants who do not take the entire program, then the CCNM training program must have a significant effect on increasing the knowledge, skills and abilities of the participants, which provides the means and abilities to create change within their health care practices. The only statistical method of demonstrating this is a correlation analysis, which indicates that the scores from each group are not related to one another. The results of this analysis are displayed in Table 7.

Table 7: Spearman Coefficients for Pre- and Posttest of Each Course Amongst Control and Participant Groups

Type of Test	Participant Group A	Participant Group B	Participant Group C
Pretest Course 1	.04	.07	.34
Posttest Course 1	.06	.32	.04
Pretest Course 2	.31	.37	.11
Posttest Course 2	.03	.24	.15
Pretest Course 3	.25	.02	.02
Posttest Course 3	.44	.47	.54

The analysis above demonstrates that there is a limited relationship between the control group scores and those of each participant group. This difference serves to validate the significant effect size of the CCNM curriculum versus the control group, and also provides some insight into the level of knowledge, skills, and abilities gained within the full training program as compared to the one used by the control group.

The feedback from the focus groups show that participants overwhelmingly indicated that the CCNM program raised their self-awareness about cultural issues and provided specific ways to make their care more culturally competent. A number of nurses indicated that they no longer use family members as interpreters; are more accommodating to culturally related dietary needs; and show more patience with, and a bigger effort to overcome, a cultural or linguistic barrier. One nurse noted:

- *“It has made a difference for me as an individual, and that’s the way it starts. This is information, and you need to educate yourself. It changed me.”*

Several nurses said they would like to take steps toward making their entire organization more culturally competent.

- *“I recognized where our facility lacks, and had to step back to say, why is that? I don’t have the answers yet, but it made me feel like as an organization, this may be something you want to do. It made me feel more confident about opening that door and saying we could do better.”*

With respect to organizational supports, comments from a large number of nurses indicated that the supports within their health care systems were culturally competent to some extent, but not sufficiently. They noted that organizations are beginning to mandate the use of certified interpreters or the Language Line, the collection of language information as part of their patient admissions, and yearly training in cultural competency. However, nurses stressed that their organizations do not put forth much effort beyond that to offer fully culturally competent care. They noted that the law has driven what limited culturally competent changes their organization has seen and that the top level management itself is not receptive to implementing further changes. One nurse noted:

- *“Nurses can talk all they want, but the buck stops at the administration and the doctors. If they don’t see it as something that is important, you won’t get anywhere.”*

The most frequently cited resources available were translated documents, especially in Spanish, and interpreters (by telephone or in person). While many nurses indicated that they have access to a telephonic language service that provides hundreds of languages, many also said they only have access to Spanish interpreters. Participants also noted that they sometimes resort to the Internet to find quick translations or common phrases and they sometime use gestures and simple pictures to convey a message. A few nurses commented that they have a culture day, a cultural newspaper, or a “cheat sheet” of common cultural practices.

Overall, a significant number of nurses talked about the need to incorporate changes to their health care practice to reflect what they learned in the curriculum and the need to continue the education beyond this training. The analysis indicates that the material within the curriculum is sufficient enough to increase a nurse’s knowledge, skills, and abilities to create change, but that the entire organization must reflect a commitment to a paradigm shift within their health practice and within each clinical encounter. As one nurse succinctly stated:

- *“When you look at the health care system, it almost always falls to the nurse to identify these things, to identify cultural change difference and illiteracy. It’s not something the doctors are going to school for or the front desk staff; it really falls on the nurses to recognize that.”*

## ***Emerging Theme: The impact of the CCNM curriculum on self-awareness related to cultural competency***

An analysis of the complete focus group results rendered a common emergent theme that was very similar to one also noted during the CCCM evaluation: the impact of the modules on enhancing self-awareness of concepts related to cultural competency. A significant number of participants, approximately 90% of those interviewed, related the concepts brought forth in the CCNM curriculum to their own experiences, and used self-identifying terms related to self-awareness in how they defined and understood cultural competency. They also frequently discussed their own situations and how the courses enhanced and affected their own self-awareness. These results are consistent with those of the CCCM evaluation and of the published literature that cites awareness as a critical component of cultural competency development (Camphinha-Bacote, 2003; Cross et al., 1989).

In addition to the focus group results, the Wilcoxon method was used to compare the results of the pre- and posttests from one course to another. For example, the results of individuals taking the posttests from Course 1 were compared to the results from the posttest for Course 2 to see if there was any statistically significant difference. Any difference would indicate that the level of knowledge retention and subsequent self-awareness of cultural competency issues was changing from course to course. However, at no point did any of the evaluation demonstrate any significant changes.

Examples of remarks pertaining to self-awareness include:

- *“It [the CCNM] creates awareness when everybody is working in pretty diverse populations. I think when you spend this much time learning about cultural competency it raises your whole awareness, paying attention, spending a little extra time.”*
- *“[The] biggest thing I got is self-awareness. Look at yourself and see where you are coming from when dealing with patients. I don’t think it taught me any facts or skills about the different cultures. It taught me that I need to know to learn it.”*
- *“Using this will help me better care for my patients and respect their culture and values, to do complementary and alternative care.”*

The actual impact of this self-awareness on the daily interactions nurses have with their patients will depend on the incorporation of it into actual behavior modifications. The analysis demonstrating consistent knowledge retention of both the concepts and tools to increase the understanding of cultural competency and to integrate it into actual practice indicates the possibility does exist.

## **Discussion**

This evaluation offers both a quantitative and qualitative attempt to assess the impact of the CCNMs on nurses' knowledge, skills, and abilities related to the use of culturally competent methods in a clinical encounter. Given the nature of the data set (pre- and posttest scores) and the myriad of concepts discussed in the program, a significant part of this analysis is exploratory. However, the results are driven by structured statistical analysis, which yields suggestive findings about the impact of this program. In essence, the conclusions indicate that the CCNM curriculum is successful in increasing the knowledge and awareness of cultural competency; provides a set of skills and other tools to enhance the role of cultural competency within a clinical encounter between a nurse and a patient; provides methods and examples to change attitudes amongst nurses dealing with patients within different racial/ethnic categories; and that the curriculum has the potential for changing health care practice settings and health outcomes. The data presented in this evaluation was calculated from the actual data within each one of the sample sets. Any negative results or comments were included in the report to present the most accurate assessment of the curriculum. This evaluation was no different from the CCCM in that there were limitations and constraints to the approach which are discussed further in this section.

### ***Quantitative Results***

A significant amount of quantitative data and analysis was used for this evaluation. As proposed in the CCNM Evaluation Plan, submitted October 12, 2007, a control group was used here to examine the actual effect of the CCNM curriculum on the knowledge, skills and abilities of nurses. Additionally, the use of non-parametric models allowed for a focus on the significance of the increase in test scores as a result of the curriculum, the significance of the difference in scores between the control and participants groups, and whether there was a strong or weak correlation between the control and participants scores within each course. All of this analysis added credibility to any effect size calculated and served as a basis for understanding the magnitude of the knowledge and skills gained after taking the entire training program.

In general, participation in the entire CCNM curriculum is consistent with meaningful and significant score increases on the pre- and posttests. In comparison to the control group, these increases are substantial and the effect sizes are pronounced.

### ***Qualitative Results***

Cumulative results from the focus groups indicated that participation in the curriculum had a positive impact on the behavior of nurses in their interactions with patients. Nurses stated that as a result of taking the curriculum, they were more sensitive to and understanding of cultural differences, and focused more on a patient-centered approach.

Additionally, they added that they learned new methods for increasing organizational awareness of cultural competency, and potential ways of incorporating that into their practice.

There was also evidence suggesting that the curriculum helps stimulate greater understanding and empathy for differing patient types who experience barriers to care as a result of a lack of understanding of cultural norms or behaviors. The extent to which that understanding leads to behavioral and organizational modifications could potentially lead to an increase in more effective and higher quality care.

There was substantial evidence that participation in the entire curriculum results in increased self-awareness of culturally competency concepts. This is significant in its ultimate impact on patient care and the potential to transform health care organizations and produce positive and high-quality health outcomes.

### ***Evaluation Limitation and Constraints***

A limitation of this evaluation is the reliance on nurses' self-reported data. The use of self-reported data and its limitations for the purposes of this evaluation is consistent with the limitations for the Two-Year Evaluation of the CCCM. Participants do indicate behavioral and attitudinal changes because of the completion of the CCNM curriculum, but it is unclear as to the degree of that change, and whether it is being overstated or not. It is possible that nurses participating in the focus groups overemphasize the impact of the program in a group setting because of the presence of the moderator and/or colleagues of different racial/ethnic groups. Research has shown that nurse self-assessment is often incongruent with external assessment (Claridge et al, 2003; Davis et al, 2006).

Although analyzing the participant data against a baseline established by the control group did show the overall effect of the CCNM curriculum amongst participants, there is still some ambiguity in the process. Namely, it is still unknown whether the knowledge tests capture the extent to which nurses will incorporate cultural competency concepts into their clinical environment. While the tests do assess whether nurses have learned pieces of information as a result of completing each course within the curriculum, it does not accurately reflect the degree to which these concepts have been integrated into either their health care setting or their behavior. Additionally, it is almost impossible to evaluate the effect of the CCNM curriculum on patient outcomes without data abstracted directly from a medical record. Direct data collection methods such as patient satisfaction surveys or observation may mitigate this limitation.

An alternative method to the pre- and posttest scores approach would be to provide nurses with case studies to examine prior to taking the curriculum. An evaluation of their approach before and after the taking the training program might provide better insight into the kinds of behavior modifications that correlate with an increase in cultural awareness. Additionally, the use of patient satisfaction surveys may provide insight into patients' satisfaction with the nurses and their perception of a nurse's cultural

competency. The use of a control group in this model could be compared to the data gained from the surveys to determine if any significant differences in attitudes and/or behavior can be detected.

These alternative methods do pose certain constraints, particularly around the issues of cost and patient privacy. A comparative effectiveness study using a control and participant group to evaluate the impact of the CCNM training on quality of care might be an approach to consider. The methodology used in this evaluation, which was similar to that of the CCCM evaluation, but including a control group, was an effective initial approach to determine the overall effectiveness of the curriculum. The results indicate and justify that more involved analysis is needed to understand the connection between this training and improved health outcomes, reduction of disparities in health care, and changes in practice behavior for both nurses and health care organizations.

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## Appendix A: Tables

## Section A: Kruskal-Wallis

Table 1-A: Kruskal-Wallis Comparison of Control Group Pretest

User ID	Course 1 Pretest Scores	Course 2 Pretest Scores	Course 3 Pretest Scores
1	60	60	100
2	50	60	100
3	60	50	90
4	40	30	90
5	60	40	90
6	70	30	100
7	50	60	80
8	40	30	70
9	70	50	100
10	30	60	80
11	40	20	90
12	50	70	80
13	30	70	100
14	60	20	80
15	40	40	90
17	50	30	80
18	40	20	60
20	50	20	90
21	40	90	90
23	50	30	90
25	60	50	70
26	40	20	70
28	50	20	90
29	90	80	100
30	40	10	100
31	60	40	80
32	50	20	80
			Adjusted H Value: 48.056
			Critical H Value (from table): 5.991
			Degrees of Freedom: 2
			P Value: 3.67E-11

**Table 2-A: Kruskal-Wallis Comparison of Control Group Posttest**

User ID	Course 1 Posttest Scores	Course 2 Posttest Scores	Course 3 Posttest Scores
1	30	70	100
2	70	90	90
3	80	70	100
4	90	90	100
5	80	60	90
6	90	100	100
7	100	70	100
8	50	100	100
9	70	100	100
10	90	100	100
11	90	70	100
12	70	80	90
13	50	100	100
14	100	80	100
15	70	100	100
17	100	100	100
18	100	100	100
20	80	90	90
21	100	90	100
23	60	100	100
25	80	70	80
26	70	100	100
28	80	80	90
29	90	90	100
30	50	30	90
31	90	90	90
32	100	70	100
<b>Adjusted H Value:</b>			<b>18.651</b>
<b>Critical H Value (from table):</b>			<b>5.991</b>
<b>Degrees of Freedom:</b>			<b>2</b>
<b>P Value:</b>			<b>0.000089</b>

**Table 3-A: Kruskal-Wallis Comparison of Participant Group A Pretest**

User ID	Course 1 Pretest Scores	Course 2 Pretest Scores	Course 3 Pretest Scores
33149	60	30	40
32943	80	40	90
27320	50	30	100
25281	60	10	70
19224	50	80	100
24701	70	50	100
41958	90	70	90
18401	50	40	100
25212	60	70	100
22910	80	50	80
41864	60	80	100
22611	60	40	80
17329	70	40	100
11896	60	70	100
38125	100	40	90
31801	90	80	90
40530	60	20	10
38188	60	60	100
42332	40	20	100
38923	50	60	100
29756	80	60	90
15245	60	60	90
29398	60	50	90
41247	30	20	80
42511	50	50	90
29920	70	80	100
16686	40	60	80
<b>Adjusted H Value:</b>			<b>35.933</b>
<b>Critical H Value (from table):</b>			<b>5.991</b>
<b>Degrees of Freedom:</b>			<b>2</b>
<b>P Value:</b>			<b>1.58E-8</b>

**Table 4-A: Kruskal-Wallis Comparison of Participant Group A Posttest**

User ID	Course 1 Posttest Scores	Course 2 Posttest Scores	Course 3 Posttest Scores
33149	100	100	90
32943	100	100	100
27320	100	100	100
25281	70	100	100
19224	100	90	100
24701	80	80	90
41958	100	90	100
18401	100	100	100
25212	100	100	100
22910	90	90	90
41864	100	100	100
22611	90	100	100
17329	70	100	100
11896	100	100	100
38125	90	80	100
31801	100	90	100
40530	100	100	100
38188	90	80	100
42332	90	100	100
38923	100	100	100
29756	80	90	100
15245	90	90	100
29398	80	100	100
41247	100	100	100
42511	100	100	100
29920	100	100	100
16686	70	100	100
			<b>Adjusted H Value: 8.477</b> <b>Critical H Value (from table): 5.991</b> <b>Degrees of Freedom: 2</b> <b>P Value: 0.014</b>

**Table 5-A: Kruskal-Wallis Comparison of Participant Group B Pretest**

User ID	Course 1 Pretest Scores	Course 2 Pretest Scores	Course 3 Pretest Scores
15852	70	40	80
14906	40	40	90
33453	90	50	40
14033	70	70	100
11969	50	60	100
42144	50	90	90
31917	30	50	100
38116	60	50	90
33178	60	50	100
24716	50	50	60
13065	30	30	80
24564	50	40	80
21959	70	70	90
25251	50	90	100
17278	50	40	100
31358	50	70	80
38488	100	90	100
19658	90	70	100
40395	60	50	90
15155	60	70	90
41809	70	30	80
34881	50	30	90
33447	50	40	80
40021	50	30	30
12752	40	80	90
38696	50	60	80
19797	40	80	100
<b>Adjusted H Value:</b>			<b>29.079</b>
<b>Critical H Value (from table):</b>			<b>5.991</b>
<b>Degrees of Freedom:</b>			<b>2</b>
<b>P Value:</b>			<b>4.85E-7</b>

**Table 6-A: Kruskal-Wallis Comparison of Participant Group B Posttest**

User ID	Course 1 Posttest Scores	Course 2 Posttest Scores	Course 3 Posttest Scores
15852	80	80	100
14906	80	100	100
33453	80	100	100
14033	90	100	100
11969	90	90	100
42144	100	100	100
31917	100	100	100
38116	80	80	100
33178	100	100	100
24716	100	100	100
13065	70	90	100
24564	90	80	90
21959	100	100	100
25251	100	100	100
17278	100	100	100
31358	70	80	90
38488	100	100	100
19658	100	100	100
40395	100	90	100
15155	90	100	90
41809	100	100	100
34881	70	90	90
33447	100	100	100
40021	90	90	100
12752	90	100	100
38696	80	90	100
19797	100	90	100
			<b>Adjusted H Value: 10.288</b> <b>Critical H Value (from table): 5.991</b> <b>Degrees of Freedom: 2</b> <b>P Value: 0.005835</b>

**Table 7-A: Kruskal-Wallis Comparison of Participant Group C Pretest**

User ID	Course 1 Pretest Scores	Course 2 Pretest Scores	Course 3 Pretest Scores
15005	50	40	90
33538	50	80	80
39158	80	80	90
20097	80	90	90
14801	60	40	100
33145	80	50	60
18118	80	60	100
25132	50	50	90
14868	40	60	90
27722	60	60	80
38791	40	40	80
28302	40	30	80
40758	20	80	100
15525	40	50	60
21604	30	30	90
38592	100	70	90
38915	60	70	90
17442	70	50	90
40009	40	50	60
33004	50	70	90
35736	50	40	80
21609	30	50	70
18473	40	50	70
32788	70	30	70
39742	50	60	80
38682	50	50	90
11331	50	80	100
<b>Adjusted H Value:</b>			<b>34.779</b>
<b>Critical H Value (from table):</b>			<b>5.991</b>
<b>Degrees of Freedom:</b>			<b>2</b>
<b>P Value:</b>			<b>2.80E-8</b>

**Table 8-A: Kruskal-Wallis Comparison of Participant Group C Posttest**

User ID	Course 1 Posttest Scores	Course 2 Posttest Scores	Course 3 Posttest Scores
15005	100	100	90
33538	70	100	100
39158	100	100	100
20097	90	100	100
14801	100	100	100
33145	100	100	100
18118	100	100	100
25132	90	90	100
14868	100	100	100
27722	100	100	100
38791	90	80	100
28302	100	100	100
40758	80	90	100
15525	40	80	30
21604	100	100	100
38592	100	100	100
38915	80	100	100
17442	80	100	90
40009	100	100	100
33004	90	80	100
35736	100	100	80
21609	80	70	90
18473	100	90	100
32788	70	100	100
39742	100	100	100
38682	100	100	100
11331	80	80	100
<b>Adjusted H Value:</b>			<b>4.657</b>
<b>Critical H Value (from table):</b>			<b>5.991</b>
<b>Degrees of Freedom:</b>			<b>2</b>
<b>P Value:</b>			<b>0.097</b>

## Section B: Wilcoxon Signed-Rank

Table 1-B: Control Group Wilcoxon Signed-Rank Test Pre- and Posttest Course 1 Comparison

A	B	C	D	E	G
<u>UserID</u>	<u>Pretest Score C1</u>	<u>Posttest Score C1</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
1	60	30	30	30	13.5
2	50	70	-20	20	7
3	60	80	-20	20	7
4	40	90	-50	50	20
5	60	80	-20	20	7
6	70	90	-20	20	7
7	50	100	-50	50	20
8	40	50	-10	10	2
9	70	70	0	0	--
10	30	90	-60	60	24
11	40	90	-50	50	20
12	50	70	-20	20	7
13	30	50	-20	20	7
14	60	100	-40	40	17
15	40	70	-30	30	13.5
17	50	100	-50	50	20
18	40	100	-60	60	24
20	50	80	-30	30	13.5
21	40	100	-60	60	24
23	50	60	-10	10	2
25	60	80	-20	20	7
26	40	70	-30	30	13.5
28	50	80	-30	30	13.5
29	90	90	0	0	--
30	40	50	-10	10	2
31	60	90	-30	30	13.5
32	50	100	-50	50	20
<b>T-Value: 13.5</b>					
<b>n: 25</b>					
<b>Critical T (from table): 89</b>					

**Table 2-B: Control Group Wilcoxon Signed-Rank Test Pre- and Posttest Course 2 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<b>UserID</b>	<b>Pretest Score C2</b>	<b>Posttest Score C2</b>	<b>Difference (B-C)</b>	<b>Abs Difference  D </b>	<b>Rank</b>
1	60	70	-10	10	2.5
2	60	90	-30	30	9.5
3	50	70	-20	20	6.5
4	30	90	-60	60	17.5
5	40	60	-20	20	6.5
6	30	100	-70	70	22
7	60	70	-10	10	2.5
8	30	100	-70	70	22
9	50	100	-50	50	13.5
10	60	100	-40	40	11
11	20	70	-50	50	13.5
12	70	80	-10	10	2.5
13	70	100	-30	30	9.5
14	20	80	-60	60	17.5
15	40	100	-60	60	17.5
17	30	100	-70	70	22
18	20	100	-80	80	25.5
20	20	90	-70	70	22
21	90	90	0	0	--
23	30	100	-70	70	22
25	50	70	-20	20	6.5
26	20	100	-80	80	25.5
28	20	80	-60	60	17.5
29	80	90	-10	10	2.5
30	10	30	-20	20	6.5
31	40	90	-50	50	13.5
32	20	70	-50	50	13.5

**T-Value: 0**  
**n: 26**  
**Critical T (from table): 98**

**Table 3-B: Control Group Wilcoxon Signed-Rank Test Pre- and Posttest Course 3 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Pretest Score C3</u>	<u>Posttest Score C3</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
1	100	100	0	0	--
2	100	90	10	10	6
3	90	100	-10	10	6
4	90	100	-10	10	6
5	90	90	0	0	--
6	100	100	0	0	--
7	80	100	-20	20	14
8	70	100	-30	30	17.5
9	100	100	0	0	--
10	80	100	-20	20	14
11	90	100	-10	10	6
12	80	90	-10	10	6
13	100	100	0	0	--
14	80	100	-20	20	14
15	90	100	-10	10	6
17	80	100	-20	20	14
18	60	100	-40	40	19
20	90	90	0	0	--
21	90	100	-10	10	6
23	90	100	-10	10	6
25	70	80	-10	10	6
26	70	100	-30	30	17.5
28	90	90	0	0	--
29	100	100	0	0	--
30	100	90	10	10	6
31	80	90	-10	10	6
32	80	100	-20	20	14
<b>T-Value: 12</b>					
<b>n: 19</b>					
<b>Critical T (from table): 46</b>					

**Table 4-B: Control Group Wilcoxon Signed-Rank Test Pretest Course 1 & Course 2 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Pretest Score C1</u>	<u>Pretest Score C2</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
1	60	60	0	0	--
2	50	60	-10	10	4
3	60	50	10	10	4
4	40	30	10	10	4
5	60	40	20	20	12
6	70	30	40	40	23
7	50	60	-10	10	4
8	40	30	10	10	4
9	70	50	20	20	12
10	30	60	-30	30	19
11	40	20	20	20	12
12	50	70	-20	20	12
13	30	70	-40	40	23
14	60	20	40	40	23
15	40	40	0	0	--
17	50	30	20	20	12
18	40	20	20	20	12
20	50	20	30	30	19
21	40	90	-50	50	25
23	50	30	20	20	12
25	60	50	10	10	4
26	40	20	20	20	12
28	50	20	30	30	19
29	90	80	10	10	4
30	40	10	30	30	19
31	60	40	20	20	12
32	50	20	30	30	19
<b>T-Value: 87</b>					
<b>n: 25</b>					
<b>Critical T (from table): 89</b>					

**Table 5-B: Control Group Wilcoxon Signed-Rank Test Pretest Course 2 & Course 3 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Pretest Score C2</u>	<u>Pretest Score C3</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
1	60	100	-40	40	9.5
2	60	100	-40	40	9.5
3	50	90	-40	40	9.5
4	30	90	-60	60	19.5
5	40	90	-50	50	15
6	30	100	-70	70	23.5
7	60	80	-20	20	3.5
8	30	70	-40	40	9.5
9	50	100	-50	50	15
10	60	80	-20	20	3.5
11	20	90	-70	70	23.5
12	70	80	-10	10	1
13	70	100	-30	30	6
14	20	80	-60	60	19.5
15	40	90	-50	50	15
17	30	80	-50	50	15
18	20	60	-40	40	9.5
20	20	90	-70	70	23.5
21	90	90	0	0	--
23	30	90	-60	60	19.5
25	50	70	-20	20	3.5
26	20	70	-50	50	15
28	20	90	-70	70	23.5
29	80	100	-20	20	3.5
30	10	100	-90	90	26
31	40	80	-40	40	9.5
32	20	80	-60	60	19.5
<b>T-Value: 0</b>					
<b>n: 26</b>					
<b>Critical T (from table): 98</b>					

**Table 6-B: Control Group Wilcoxon Signed Rank Test Pretest Course 1 & Course 3 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Pretest Score C1</u>	<u>Pretest Score C3</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
1	60	100	-40	40	17.5
2	50	100	-50	50	22.5
3	60	90	-30	30	10.5
4	40	90	-50	50	22.5
5	60	90	-30	30	10.5
6	70	100	-30	30	10.5
7	50	80	-30	30	10.5
8	40	70	-30	30	10.5
9	70	100	-30	30	10.5
10	30	80	-50	50	22.5
11	40	90	-50	50	22.5
12	50	80	-30	30	10.5
13	30	100	-70	70	27
14	60	80	-20	20	4
15	40	90	-50	50	22.5
17	50	80	-30	30	10.5
18	40	60	-20	20	4
20	50	90	-40	40	17.5
21	40	90	-50	50	22.5
23	50	90	-40	40	17.5
25	60	70	-10	10	1.5
26	40	70	-30	30	10.5
28	50	90	-40	40	17.5
29	90	100	-10	10	1.5
30	40	100	-60	60	26
31	60	80	-20	20	4
32	50	80	-30	30	10.5
<b>T-Value: 0</b>					
<b>n: 27</b>					
<b>Critical T (from table): 107</b>					

**Table 7-B: Control Group Wilcoxon Signed-Rank Test Posttest Course 1 & Course 2 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<b>UserID</b>	<b>Posttest Score C1</b>	<b>Posttest Score C2</b>	<b>Difference (B-C)</b>	<b>Abs Difference  D </b>	<b>Rank</b>
1	30	70	-40	40	18.5
2	70	90	-20	20	10
3	80	70	10	10	4
4	90	90	0	0	--
5	80	60	20	20	10
6	90	100	-10	10	4
7	100	70	30	30	15
8	50	100	-50	50	20.5
9	70	100	-30	30	15
10	90	100	-10	10	4
11	90	70	20	20	10
12	70	80	-10	10	4
13	50	100	-50	50	20.5
14	100	80	20	20	10
15	70	100	-30	30	15
17	100	100	0	0	--
18	100	100	0	0	--
20	80	90	-10	10	4
21	100	90	10	10	4
23	60	100	-40	40	18.5
25	80	70	10	10	4
26	70	100	-30	30	15
28	80	80	0	0	--
29	90	90	0	0	--
30	50	30	20	20	10
31	90	90	0	0	--
32	100	70	30	30	15
<b>T-Value: 82</b>					
<b>n: 21</b>					
<b>Critical T (from table): 58</b>					

**Table 8-B: Control Group Wilcoxon Signed-Rank Test Posttest Course 2 & Course 3 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<b>UserID</b>	<b>Posttest Score C2</b>	<b>Posttest Score C3</b>	<b>Difference (B-C)</b>	<b>Abs Difference  D </b>	<b>Rank</b>
1	70	100	-30	30	10.5
2	90	90	0	0	--
3	70	100	-30	30	10.5
4	90	100	-10	10	3.5
5	60	90	-30	30	10.5
6	100	100	0	0	--
7	70	100	-30	30	10.5
8	100	100	0	0	--
9	100	100	0	0	--
10	100	100	0	0	--
11	70	100	-30	30	10.5
12	80	90	-10	10	3.5
13	100	100	0	0	--
14	80	100	-20	20	7
15	100	100	0	0	--
17	100	100	0	0	--
18	100	100	0	0	--
20	90	90	0	0	--
21	90	100	-10	10	3.5
23	100	100	0	0	--
25	70	80	-10	10	3.5
26	100	100	0	0	--
28	80	90	-10	10	3.5
29	90	100	-10	10	3.5
30	30	90	-60	60	14
31	90	90	0	0	--
32	70	100	-30	30	10.5
<b>T-Value: 0</b>					
<b>n: 14</b>					
<b>Critical T (from table): 21</b>					

**Table 9-B: Control Group Wilcoxon Signed-Rank Test Posttest Course 1 & Course 3 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Posttest Score C1</u>	<u>Posttest Score C3</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
1	30	100	-70	70	19
2	70	90	-20	20	10
3	80	100	-20	20	10
4	90	100	-10	10	4.5
5	80	90	-10	10	4.5
6	90	100	-10	10	4.5
7	100	100	0	0	--
8	50	100	-50	50	17.5
9	70	100	-30	30	13
10	90	100	-10	10	4.5
11	90	100	-10	10	4.5
12	70	90	-20	20	10
13	50	100	-50	50	17.5
14	100	100	0	0	--
15	70	100	-30	30	13
17	100	100	0	0	--
18	100	100	0	0	--
20	80	90	-10	10	4.5
21	100	100	0	0	--
23	60	100	-40	40	15.5
25	80	80	0	0	--
26	70	100	-30	30	13
28	80	90	-10	10	4.5
29	90	100	-10	10	4.5
30	50	90	-40	40	15.5
31	90	90	0	0	--
32	100	100	0	0	--
<b>T-Value: 0</b>					
<b>n: 19</b>					
<b>Critical T (from table): 46</b>					

**Table 10-B: Participant Group A Wilcoxon Signed-Rank Test Pre- and Posttest Course 1 Comparison**

A	B	C	D	E	G
<u>UserID</u>	<u>Pretest Score C1</u>	<u>Posttest Score C1</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
33149	60	100	-40	40	16
32943	80	100	-20	20	7.5
27320	50	100	-50	50	21.5
25281	60	70	-10	10	3.5
19224	50	100	-50	50	21.5
24701	70	80	-10	10	3.5
41958	90	100	-10	10	3.5
18401	50	100	-50	50	21.5
25212	60	100	-40	40	16
22910	80	90	-10	10	3.5
41864	60	100	-40	40	16
22611	60	90	-30	30	11
17329	70	70	0	0	--
11896	60	100	-40	40	16
38125	100	90	10	10	3.5
31801	90	100	-10	10	3.5
40530	60	100	-40	40	16
38188	60	90	-30	30	11
42332	40	90	-50	50	21.5
38923	50	100	-50	50	21.5
29756	80	80	0	0	--
15245	60	90	-30	30	11
29398	60	80	-20	20	7.5
41247	30	100	-70	70	25
42511	50	100	-50	50	21.5
29920	70	100	-30	30	11
16686	40	70	-30	30	11
<b>T-Value: 3.5</b>					
<b>n: 25</b>					
<b>Critical T (from table): 89</b>					

**Table 11-B: Participant Group A Wilcoxon Signed-Rank Test Pre- and Posttest Course 2 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<b>UserID</b>	<b>Pretest Score C2</b>	<b>Posttest Score C2</b>	<b>Difference (B-C)</b>	<b>Abs Difference  D </b>	<b>Rank</b>
33149	30	100	-70	70	22.5
32943	40	100	-60	60	19.5
27320	30	100	-70	70	22.5
25281	10	100	-90	90	27
19224	80	90	-10	10	1.5
24701	50	80	-30	30	9
41958	70	90	-20	20	4.5
18401	40	100	-60	60	19.5
25212	70	100	-30	30	9
22910	50	90	-40	40	13.5
41864	80	100	-20	20	4.5
22611	40	100	-60	60	19.5
17329	40	100	-60	60	19.5
11896	70	100	-30	30	9
38125	40	80	-40	40	13.5
31801	80	90	-10	10	1.5
40530	20	100	-80	80	25
38188	60	80	-20	20	4.5
42332	20	100	-80	80	25
38923	60	100	-40	40	13.5
29756	60	90	-30	30	9
15245	60	90	-30	30	9
29398	50	100	-50	50	16.5
41247	20	100	-80	80	25
42511	50	100	-50	50	16.5
29920	80	100	-20	20	4.5
16686	60	100	-40	40	13.5
<b>T-Value: 0</b>					
<b>n: 27</b>					
<b>Critical T (from table): 107</b>					

**Table 12-B: Participant Group A Wilcoxon Signed-Rank Test Pre- and Posttest Course 3 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Pretest Score C3</u>	<u>Posttest Score C3</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
33149	40	90	-50	50	15
32943	90	100	-10	10	5.5
27320	100	100	0	0	--
25281	70	100	-30	30	14
19224	100	100	0	0	--
24701	100	90	10	10	5.5
41958	90	100	-10	10	5.5
18401	100	100	0	0	--
25212	100	100	0	0	--
22910	80	90	-10	10	5.5
41864	100	100	0	0	--
22611	80	100	-20	20	12
17329	100	100	0	0	--
11896	100	100	0	0	--
38125	90	100	-10	10	5.5
31801	90	100	-10	10	5.5
40530	10	100	-90	90	16
38188	100	100	0	0	--
42332	100	100	0	0	--
38923	100	100	0	0	--
29756	90	100	-10	10	5.5
15245	90	100	-10	10	5.5
29398	90	100	-10	10	5.5
41247	80	100	-20	20	12
42511	90	100	-10	10	5.5
29920	100	100	0	0	--
16686	80	100	-20	20	12
<b>T-Value: 5.5</b>					
<b>n: 16</b>					
<b>Critical T (from table): 29</b>					

**Table 13-B: Participant Group A Wilcoxon Signed-Rank Test Pretest Course 1 & Course 2 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Pretest Score C1</u>	<u>Pretest Score C2</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
33149	60	30	30	30	18.5
32943	80	40	40	40	21.5
27320	50	30	20	20	12.5
25281	60	10	50	50	23
19224	50	80	-30	30	18.5
24701	70	50	20	20	12.5
41958	90	70	20	20	12.5
18401	50	40	10	10	4.5
25212	60	70	-10	10	4.5
22910	80	50	30	30	18.5
41864	60	80	-20	20	12.5
22611	60	40	20	20	12.5
17329	70	40	30	30	18.5
11896	60	70	-10	10	4.5
38125	100	40	60	60	24
31801	90	80	10	10	4.5
40530	60	20	40	40	21.5
38188	60	60	0	0	--
42332	40	20	20	20	12.5
38923	50	60	-10	10	4.5
29756	80	60	20	20	12.5
15245	60	60	0	0	--
29398	60	50	10	10	4.5
41247	30	20	10	10	4.5
42511	50	50	0	0	--
29920	70	80	-10	10	4.5
16686	40	60	-20	20	12.5
<b>T-Value: 61.5</b>					
<b>n: 24</b>					
<b>Critical T (from table): 81</b>					

**Table 14-B: Participant Group A Wilcoxon Signed-Rank Test Pretest Course 2 & Course 3 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Pretest Score C2</u>	<u>Pretest Score C3</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
33149	30	40	-10	10	2
32943	40	90	-50	50	20
27320	30	100	-70	70	26
25281	10	70	-60	60	23.5
19224	80	100	-20	20	6
24701	50	100	-50	50	20
41958	70	90	-20	20	6
18401	40	100	-60	60	23.5
25212	70	100	-30	30	11
22910	50	80	-30	30	11
41864	80	100	-20	20	6
22611	40	80	-40	40	16
17329	40	100	-60	60	23.5
11896	70	100	-30	30	11
38125	40	90	-50	50	20
31801	80	90	-10	10	2
40530	20	10	10	10	2
38188	60	100	-40	40	16
42332	20	100	-80	80	27
38923	60	100	-40	40	16
29756	60	90	-30	30	11
15245	60	90	-30	30	11
29398	50	90	-40	40	16
41247	20	80	-60	60	23.5
42511	50	90	-40	40	16
29920	80	100	-20	20	6
16686	60	80	-20	20	6
<b>T-Value: 2</b>					
<b>n: 27</b>					
<b>Critical T (from table): 107</b>					

**Table 15-B: Participant Group A Wilcoxon Signed Rank Test Pretest Course 1 & Course 3 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Pretest Score C1</u>	<u>Pretest Score C3</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
33149	60	40	20	20	5.5
32943	80	90	-10	10	2.5
27320	50	100	-50	50	20.5
25281	60	70	-10	10	2.5
19224	50	100	-50	50	20.5
24701	70	100	-30	30	9
41958	90	90	0	0	--
18401	50	100	-50	50	20.5
25212	60	100	-40	40	14.5
22910	80	80	0	0	--
41864	60	100	-40	40	14.5
22611	60	80	-20	20	5.5
17329	70	100	-30	30	9
11896	60	100	-40	40	14.5
38125	100	90	10	10	2.5
31801	90	90	0	0	--
40530	60	10	50	50	20.5
38188	60	100	-40	40	14.5
42332	40	100	-60	60	24
38923	50	100	-50	50	20.5
29756	80	90	-10	10	2.5
15245	60	90	-30	30	9
29398	60	90	-30	30	9
41247	30	80	-50	50	20.5
42511	50	90	-40	40	14.5
29920	70	100	-30	30	9
16686	40	80	-40	40	14.5
<b>T-Value: 28.5</b>					
<b>n: 24</b>					
<b>Critical T (from table): 81</b>					

**Table 16-B: Participant Group A Wilcoxon Signed-Rank Test Posttest Course 1 & Course 2 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Posttest Score C1</u>	<u>Posttest Score C2</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
33149	100	100	0	0	--
32943	100	100	0	0	--
27320	100	100	0	0	--
25281	70	100	-30	30	11
19224	100	90	10	10	4.5
24701	80	80	0	0	--
41958	100	90	10	10	4.5
18401	100	100	0	0	--
25212	100	100	0	0	--
22910	90	90	0	0	--
41864	100	100	0	0	--
22611	90	100	-10	10	4.5
17329	70	100	-30	30	11
11896	100	100	0	0	--
38125	90	80	10	10	4.5
31801	100	90	10	10	4.5
40530	100	100	0	0	--
38188	90	80	10	10	4.5
42332	90	100	-10	10	4.5
38923	100	100	0	0	--
29756	80	90	-10	10	4.5
15245	90	90	0	0	--
29398	80	100	-20	20	9
41247	100	100	0	0	--
42511	100	100	0	0	--
29920	100	100	0	0	--
16686	70	100	-30	30	11
<b>T-Value: 22.5</b>					
<b>n: 12</b>					
<b>Critical T (from table): 13</b>					

**Table 17-B: Participant Group A Wilcoxon Signed-Rank Test Posttest Course 2 & Course 3 Comparison**

A	B	C	D	E	G
<u>UserID</u>	<u>Posttest Score C2</u>	<u>Posttest Score C3</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
33149	100	90	10	10	4
32943	100	100	0	0	--
27320	100	100	0	0	--
25281	100	100	0	0	--
19224	90	100	-10	10	4
24701	80	90	-10	10	4
41958	90	100	-10	10	4
18401	100	100	0	0	--
25212	100	100	0	0	--
22910	90	90	0	0	--
41864	100	100	0	0	--
22611	100	100	0	0	--
17329	100	100	0	0	--
11896	100	100	0	0	--
38125	80	100	-20	20	8.5
31801	90	100	-10	10	4
40530	100	100	0	0	--
38188	80	100	-20	20	8.5
42332	100	100	0	0	--
38923	100	100	0	0	--
29756	90	100	-10	10	4
15245	90	100	-10	10	4
29398	100	100	0	0	--
41247	100	100	0	0	--
42511	100	100	0	0	--
29920	100	100	0	0	--
16686	100	100	0	0	--
<b>T-Value: 4</b>					
<b>n: 9</b>					
<b>Critical T (from table): 5</b>					

**Table 18-B: Participant Group A Wilcoxon Signed-Rank Test Posttest Course 1 & Course 3 Comparison**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>G</b>
<u>UserID</u>	<u>Posttest Score C1</u>	<u>Posttest Score C3</u>	<u>Difference (B-C)</u>	<u>Abs Difference  D </u>	<u>Rank</u>
33149	100	90	10	10	4
32943	100	100	0	0	--
27320	100	100	0	0	--
25281	70	100	-30	30	11
19224	100	100	0	0	--
24701	80	90	-10	10	4
41958	100	100	0	0	--
18401	100	100	0	0	--
25212	100	100	0	0	--
22910	90	90	0	0	--
41864	100	100	0	0	--
22611	90	100	-10	10	4
17329	70	100	-30	30	11
11896	100	100	0	0	--
38125	90	100	-10	10	4
31801	100	100	0	0	--
40530	100	100	0	0	--
38188	90	100	-10	10	4
42332	90	100	-10	10	4
38923	100	100	0	0	--
29756	80	100	-20	20	8.5
15245	90	100	-10	10	4
29398	80	100	-20	20	8.5
41247	100	100	0	0	--
42511	100	100	0	0	--
29920	100	100	0	0	--
16686	70	100	-30	30	11
<b>T-Value: 4</b>					
<b>n: 12</b>					
<b>Critical T (from table): 13</b>					

## Section C: Spearman's Correlation Coefficient

Table 1-C: Spearman Correlation Control Group & Participant Group A for Pretest Course 1

<u>Unique Code</u>	<u>Control -- C1 Pretest</u>	<u>Rank Control</u>	<u>Particip – C1 Pretest</u>	<u>Rank Particip</u>	<u>Difference between Ranks</u>	<u>Difference in Ranks Squared</u>
A	60	21.5	60	13.5	8	64
B	50	14.5	80	23	-8.5	72.25
C	60	21.5	50	6	15.5	240.25
D	40	6.5	60	13.5	-7	49
E	60	21.5	50	6	15.5	240.25
F	70	25.5	70	20	5.5	30.25
G	50	14.5	90	25.5	-11	121
H	40	6.5	50	6	0.5	0.25
J	70	25.5	60	13.5	12	144
K	30	1.5	80	23	-21.5	462.25
L	40	6.5	60	13.5	-7	49
M	50	14.5	60	13.5	1	1
N	30	1.5	70	20	-18.5	342.25
O	60	21.5	60	13.5	8	64
P	40	6.5	100	27	-20.5	420.25
Q	50	14.5	90	25.5	-11	121
R	40	6.5	60	13.5	-7	49
S	50	14.5	60	13.5	1	1
T	40	6.5	40	2.5	4	16
U	50	14.5	50	6	8.5	72.25
V	60	21.5	80	23	-1.5	2.25
W	40	6.5	60	13.5	-7	49
X	50	14.5	60	13.8	0.7	0.49
Y	90	27	30	1	26	676
Z	40	6.5	50	6	0.5	0.25
AA	60	21.5	70	20	1.5	2.25
BB	50	14.5	40	2.5	12	144
<b>Rho (r): -0.0481</b> <b>t-value (test for significance): -0.2408</b> <b>Critical T (from table): 2.060</b>						

Table 2-C: Spearman Correlation Control Group & Participant Group A for Posttest Course 1

<u>Unique Code</u>	<u>Control -- C1 Posttest</u>	<u>Rank Control</u>	<u>Particip -- C1 Posttest</u>	<u>Rank Particip</u>	<u>Difference between Ranks</u>	<u>Difference in Ranks Squared</u>
A	30	1	100	20	-19	361
B	70	8	100	20	-12	144
C	80	13	100	20	-7	49
D	90	18.5	70	2	16.5	272.25
E	80	13	100	20	-7	49
F	90	18.5	80	5	13.5	182.25
G	100	24.5	100	20	4.5	20.25
H	50	3	100	20	-17	289
J	70	8	100	20	-12	144
K	90	18.5	90	9.5	9	81
L	90	18.5	100	20	-1.5	2.25
M	70	8	90	9.5	-1.5	2.25
N	50	3	70	2	1	1
O	100	24.5	100	20	4.5	20.25
P	70	8	90	9.5	-1.5	2.25
Q	100	24.5	100	20	4.5	20.25
R	100	24.5	100	20	4.5	20.25
S	80	13	90	9.5	3.5	12.25
T	100	24.5	90	9.5	15	225
U	60	5	100	20	-15	225
V	80	13	80	5	8	64
W	70	8	90	9.5	-1.5	2.25
X	80	13	80	5	8	64
Y	90	18.5	100	20	-1.5	2.25
Z	50	3	100	20	-17	289
AA	90	18.5	100	20	-1.5	2.25
BB	100	24.5	70	2	22.5	506.25
					<b>Rho (r):</b>	<b>0.068</b>
					<b>t-value (test for significance):</b>	<b>0.3407888</b>
					<b>Critical T (from table):</b>	<b>2.060</b>

**Table 3-C: Spearman Correlation Control Group & Participant Group A for Pretest Course 2**

<u>Unique Code</u>	<u>Control – C2 Pretest</u>	<u>Rank Control</u>	<u>Particip – C2 Pretest</u>	<u>Rank Particip</u>	<u>Difference between Ranks</u>	<u>Difference in Ranks Squared</u>
A	60	21.5	30	5.5	16	256
B	60	21.5	40	9	12.5	156.25
C	50	18	30	5.5	12.5	156.25
D	30	11	10	1	10	100
E	40	15	80	25.5	-10.5	110.25
F	30	11	50	13.5	-2.5	6.25
G	60	21.5	70	22	-0.5	0.25
H	30	11	40	9	2	4
J	50	18	70	22	-4	16
K	60	21.5	50	13.5	8	64
L	20	5	80	25.5	-20.5	420.25
M	70	24.5	40	9	15.5	240.25
N	70	24.5	40	9	15.5	240.25
O	20	5	70	22	-17	289
P	40	15	40	9	6	36
Q	30	11	80	25.5	-14.5	210.25
R	20	5	20	3	2	4
S	20	5	60	18	-13	169
T	90	27	20	3	24	576
U	30	11	60	18	-7	49
V	50	18	60	18	0	0
W	20	5	60	18	-13	169
X	20	5	50	13.5	-8.5	72.25
Y	80	26	20	3	23	529
Z	10	1	50	13.5	-12.5	156.25
AA	40	15	80	25.5	-10.5	110.25
BB	20	5	60	18	-13	169
<b>Rho (r): -0.3153</b>						
<b>t-value (test for significance): -1.6612</b>						
<b>Critical T (from table): 2.060</b>						

Table 4-C: Spearman Correlation Control Group & Participant Group A for Posttest Course 2

<u>Unique Code</u>	<u>Control – C2 Posttest</u>	<u>Rank Control</u>	<u>Particip – C2 Posttest</u>	<u>Rank Particip</u>	<u>Difference between Ranks</u>	<u>Difference in Ranks Squared</u>
A	70	5.5	100	18.5	-13	169
B	90	14.5	100	18.5	-4	16
C	70	5.5	100	18.5	-13	169
D	90	14.5	100	18.5	-4	16
E	60	2	90	6.5	-4.5	20.25
F	100	22.5	80	2	20.5	420.25
G	70	5.5	90	6.5	-1	1
H	100	22.5	100	18.5	4	16
J	100	22.5	100	18.5	4	16
K	100	22.5	90	6.5	16	256
L	70	5.5	100	18.5	-13	169
M	80	10	100	18.5	-8.5	72.25
N	100	22.5	100	18.5	4	16
O	80	10	100	18.5	-8.5	72.25
P	100	22.5	80	2	20.5	420.25
Q	100	22.5	90	6.5	16	256
R	100	22.5	100	18.5	4	16
S	90	14.5	80	2	12.5	156.25
T	90	14.5	100	18.5	-4	16
U	100	22.5	100	18.5	4	16
V	70	5.5	90	6.5	-1	1
W	100	22.5	90	6.5	16	256
X	80	10	100	18.5	-8.5	72.25
Y	90	14.5	100	18.5	-4	16
Z	30	1	100	18.5	-17.5	306.25
AA	90	14.5	100	18.5	-4	16
BB	70	5.5	100	18.5	-13	169
					<b>Rho (r):</b>	<b>0.0397</b>
					<b>t-value (test for significance):</b>	<b>0.1987</b>
					<b>Critical T (from table):</b>	<b>2.060</b>

**Table 5-C: Spearman Correlation Control Group & Participant Group A for Pretest Course 3**

<u>Unique Code</u>	<u>Control – C3 Pretest</u>	<u>Rank Control</u>	<u>Particip – C3 Pretest</u>	<u>Rank Particip</u>	<u>Difference between Ranks</u>	<u>Difference in Ranks Squared</u>
A	100	24	40	2	22	484
B	100	24	90	11.5	12.5	156.25
C	90	16	100	21.5	-5.5	30.25
D	90	16	70	3	13	169
E	90	16	100	21.5	-5.5	30.25
F	100	24	100	21.5	2.5	6.25
G	80	8	90	11.5	-3.5	12.25
H	70	3	100	21.5	-18.5	342.25
J	100	24	100	21.5	2.5	6.25
K	80	8	80	5.5	2.5	6.25
L	90	16	100	21.5	-5.5	30.25
M	80	8	80	5.5	2.5	6.25
N	100	24	100	21.5	2.5	6.25
O	80	8	100	21.5	-13.5	182.25
P	90	16	90	11.5	4.5	20.25
Q	80	8	90	11.5	-3.5	12.25
R	60	1	10	1	0	0
S	90	16	100	21.5	-5.5	30.25
T	90	16	100	21.5	-5.5	30.25
U	90	16	100	21.5	-5.5	30.25
V	70	3	90	11.5	-8.5	72.25
W	70	3	90	11.5	-8.5	72.25
X	90	16	90	11.5	4.5	20.25
Y	100	24	80	5.5	18.5	342.25
Z	100	24	90	11.5	12.5	156.25
AA	80	8	100	21.5	-13.5	182.25
BB	80	8	80	5.5	2.5	6.25
<b>Rho (r): 0.2543</b>						
<b>t-value (test for significance): 1.2682</b>						
<b>Critical T (from table): 2.060</b>						

**Table 6-C: Spearman Correlation Control Group & Participant Group A for Posttest Course 3**

<u>Unique Code</u>	<u>Control – C3 Posttest</u>	<u>Rank Control</u>	<u>Particip – C3 Posttest</u>	<u>Rank Particip</u>	<u>Difference between Ranks</u>	<u>Difference in Ranks Squared</u>
A	100	18	90	2	16	256
B	90	5	100	15.5	-10.5	110.25
C	100	18	100	15.5	2.5	6.25
D	100	18	100	15.5	2.5	6.25
E	90	5	100	15.5	-10.5	110.25
F	100	18	90	2	16	256
G	100	18	100	15.5	2.5	6.25
H	100	18	100	15.5	2.5	6.25
J	100	18	100	15.5	2.5	6.25
K	100	18	90	2	16	256
L	100	18	100	15.5	2.5	6.25
M	90	5	100	15.5	-10.5	110.25
N	100	18	100	15.5	2.5	6.25
O	100	18	100	15.5	2.5	6.25
P	100	18	100	15.5	2.5	6.25
Q	100	18	100	15.5	2.5	6.25
R	100	18	100	15.5	2.5	6.25
S	90	5	100	15.5	-10.5	110.25
T	100	18	100	15.5	2.5	6.25
U	100	18	100	15.5	2.5	6.25
V	80	1	100	15.5	-14.5	210.25
W	100	18	100	15.5	2.5	6.25
X	90	5	100	15.5	-10.5	110.25
Y	100	18	100	15.5	2.5	6.25
Z	90	5	100	15.5	-10.5	110.25
AA	90	5	100	15.5	-10.5	110.25
BB	100	18	100	15.5	2.5	6.25
<b>Rho (r): 0.4353</b>						
<b>t-value (test for significance): 2.4176</b>						
<b>Critical T (from table): 2.060</b>						

## Appendix B: CCNM Evaluation Coding Scheme

Code	Theme		Definition	
1	<b>Duration</b>		How long did it take them to take the course?	
2	<b>Demographics</b>		What is the racial/ethnic makeup of:	
	a	Staff	the people they work with?	
	b	Patients	the people they serve?	
3	<b>Illustration of Need</b>		Statements/anecdotes showing lack of/need for CC, LAS, CLAS	
4	<b>Resources</b>			
	a	Limitations	What don't they have access to?	
	b	What's Available	What do they have access to?	
	c	What's Needed/Wanted	What do they wish they have access to?	
5	<b>Organizational Supports</b>		Policies, Procedures, Institutional Barriers, Community Supports	
6	<b>Impact of CCNM</b>		How have their knowledge, attitudes, and skills changed?	
7	<b>Current Practices</b>		Regarding cultural competency, who interprets, etc.	
8	<b>Curriculum Feedback</b>			
	a	Reactions	General impressions Subtopics: Positive Feedback, Negative Feedback, Suggestions	
		1	Course 1	
		2	Course 2	
		3	Course 3	
	b	Content	Thoughts on specific material in the curriculum	
		1	Course 1	
		2	Course 2	
		3	Course 3	
	c	Audience	Who should take this?	
d	Astute	Site-related comments		
9	<b>Supplementary Materials</b>			
	a	Video Vignettes	Video-related commentary	
	b	Case Studies	Case study related commentary	
	c	Pulse Points	Thoughts on the questions that follow the stories and vignettes	
	d	CLAS Acts/Fast Facts	Thoughts on the CLAS Act and Fast Fact side boxes	
	e	Cultural Insights	Thoughts on the Cultural Insights side boxes	
10	<b>Important to Note/?s</b>		Notable but not code-able	
	a	Quotable Quotes		
	b	Anecdotes		

## Appendix C: CCNM Evaluation Moderator's Guide

<b>Stage Setting</b>
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Introduction: Pre-Housekeeping Activities

Description: The purpose of this module is to prepare participants for the session ahead.

Time: 5 minutes

Theme: Upon successful completion of this module participants will:

- Sign-in/Complete Incentive Paperwork
- Complete name tags & table tents
- Be ready to discuss the Culturally Competent Nursing Curriculum

Logistics:

Consent Forms  
Name tags/Table tents  
Incentive Checks (provided by MRS)  
Small Table Clock for the Moderator  
Pads/Paper/Flipcharts  
Minimum of 12 pens/pencils  
Audio-recording Equipment  
Laptop with cord to take notes; seat for recorder  
Handouts  
Food/Snacks for participants as appropriate

As participants arrive, Metro Research Services/Focus Group Facility staff will show them where to get refreshments, explain the consent form, ask if they have any questions, and have participants sign the consent form. A copy of the consent form will be provided upon participant request.

Once they get their food and come into the meeting room, the Moderator will ask participants to write their name on the name tag/table tent. While they wait for everyone to get settled into their seats, the Moderator will remind them that the session will start promptly; do not wait for late arrivals.)

## Introduction

Discussion Guide: Housekeeping Activities

Description: The purpose of this module is to outline the parameters of the focus group, introduce participants, and identify the themes that will be explored during the session.

Time: 10 minutes

Theme: Upon successful completion of this module participants will:

- Know the name of the moderator, the other participants, and their nursing specialty
- The rules of conduct
- The goals of the focus group

**Moderator:**

- Hello, thank you for being here and for making the time to participate in this group discussion. My name is: \_\_\_\_\_ and I am the Moderator for today's discussion.
- Affiliation—I work for SRA International, Inc., which is a government contract company based out of the Washington, DC area. We are currently supporting an Office of Minority Health/DHHS funded project to evaluate continuing education materials that are part of a nursing e-learning program in cultural competency.
- Before we get started, I would like to go over a few pieces of information and some ground rules with you.
- Ground Rules: Location of bathrooms.
- Cell phone pager/off or vibrate.
- Speak in a voice at least as loud as mine.
- Avoid side conversations. We are interested in all of your ideas, and others in the group may get ideas just from listening to yours.
- This is an open discussion and there are no wrong answers; all of your experiences are important in helping to understand the value of the curriculum.
- We want everyone to participate equally.
- If it seems that some questions are repetitive it is because we need to make certain that all the elements within the curriculum are thoroughly explored.
- Because we have a lot to discuss I may have to move quickly to a new topic. If I do, I don't mean to cut anyone off or prevent someone from voicing their opinion.

- Everything said in this room should stay in this room; please be respectful of each others' opinions.
- Take breaks if needed; however, I ask that only one person leave at a time.
- Disclosures: We are audiotaping today's session to capture all your comments. No one will be identified; no names will be used.
- We will be writing a report for our client at the Office of Minority Health, U.S Department of Health and Human Services. No one's name will be mentioned in the report.
- **ASK:** Ask participants to give their first names, how long they have been a nurse, and their nursing specialty/area that they are currently working in and for how long.
- State why participants are here: **“You are here today so we can get your feedback on the Culturally Competent Nursing Curriculum education program.”**  
**Activities:** Participants give name and nursing specialty
- Our goal is to gather as much information as possible regarding each theme of the Culturally Competent Nursing Curriculum which you recently completed.
- We want to figure out which parts of the curriculum are most valuable and which may need to be changed.
- I'd like to review the Goals for our discussion with you:  
**Note:** Goals could be on a flipchart or written on board if desired. They are listed below. \*\*Moderator may or may not choose to review all of these, but instead can suggest participants take a quick look at them.
  - **To explore the cultural issues that nurses encounter as a part of their daily interactions with patients, colleagues, and the health care environment in which they work.**
  - **To explore the extent to which completion of the CCNM curriculum has influenced your interactions with a diverse set of patients.**
  - **To examine if the curriculum conveys messages needed for nurses to provide culturally and linguistically appropriate care to diverse populations.**
  - **To explore if the curriculum raises awareness and encourages self-reflection regarding culturally and linguistically appropriate care.**
  - **To explore if the completion of the CCNM curriculum has increased utilization of available resources to improve culturally appropriate patient care.**
  - **To examine the overall utility of the CCNM curriculum.**

## Culturally Competent Care

### Discussion Guide Part 1: Culturally Competent Care and Understanding; and Cultural Competency Knowledge

Description: The purpose of this module is to gain insights to the types of patient populations participants care for; the cultural backgrounds of their colleagues; the challenges nurses face working with patients with different cultural backgrounds; their initial knowledge and understanding of culturally competent care; and whether their knowledge of cultural competency increased as a result of completing the CCNM curriculum.

Time: 15 minutes

Theme: Upon successful completion of this module participants will talk through the following activities:

- Describe health disparities as they impact their daily practice of medicine
- Discuss the cultural backgrounds of their colleagues
- Discuss the CLAS standards as they remember them from the CCNM course
- Define terms to reflect increased knowledge of culturally competent care models, principles, theories and CLAS standards.

Moderator:

1. **SAY:** Tell me about the patients you serve.  
**Activities:** Go around the table and allow participants to respond
2. **ASK:** Would you say that the nurses you work with come from a variety of diverse cultural backgrounds? Can you share some of them with me?
3. **ASK:** Do you feel that your colleagues are aware of and responsive to cultural diversity in health care?
4. **ASK:** What types of challenges do you face working with/caring for patients from diverse populations?
5. **ASK:** How do you deal with these challenges?
6. **ASK:** What types of tools and resources do you have in your organization that help you meet these challenges?
7. **ASK:** What does cultural competency mean to you? (**NOTE: Probe for specific examples**)

8. **ASK:** Prior to reviewing the Culturally Competent Nursing Curriculum program how many of you had heard the term “cultural competence?” What about the National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health Care?

- For those of you who have heard this term before, where/how did you learn about cultural competence? Where/how did you learn about the CLAS standards?

**Activities:** Cultural competence is a set of behaviors, attitudes, and skills that enables nurses to work effectively in cross-cultural situations.

Through cultural competence, nurses can help by providing more equitable and quality care to their patients that can, in turn, help reduce disparities for minority populations.

**Probe:** how would you define...

1. Culturally competent care?
2. Language Access Services?
3. Organizational supports?

9. **ASK:** After reviewing this program, do you have a better understanding about cultural competence? (**Probe: What do they understand now that they did not understand before; do they have the same level of understanding that they had prior to completing the sections they completed?**)

10. **ASK:** What are some things you believe nurses can do to provide culturally competent care?

11. **ASK:** As a nurse, do you feel that you have made any changes or tried to be more culturally competent with patients—or have you seen others try to make changes?

**Culturally competent care** is one aspect of overall competence for nurses. It helps to ensure:

- Access to care
- Quality in terms of being patient-centered & safe
- Reduced disparities in terms of access & treatment

### **Language Access**

- Legal requirements in terms of obligations for providers ensuring LAS for patients and business practices.
- Interpersonal communication, interpretation and written language & translated materials.
- Working effectively with an interpreter; triadic interview.

### **Organizational supports**

- Collaborate with minority community members to identify resources and expertise re language, cultural beliefs, demographics

- Partner with community organizations can help educate, re: specific diseases, risk factors, prevention.

## CCNM Course I Review

### Discussion Guide Part 2: CCNM Course I Review

**Description:** The purpose of this module is to gain participants' reactions to the CCNM Course I content, assess their knowledge and recollection of the content, and determine how the information presented in Course I has been used in their practice.

**Time:** 20 minutes

**Theme:** Upon successful completion of this module participants will:

- Discuss their first impressions and what they liked and disliked about Course I
- Review specific information covered in Course I, describe what new information they learned and reflect on what they have applied in their daily practice

#### **Moderator:**

1. **SAY:** Now let's move on to Course I. I am interested in learning more about what you thought about the content and its relevance and application to your daily practice of nursing. I will be asking you general questions about the content in the course. (**NOTE: Write Course I Module headings on the flip chart prior to the group**)

2. **SAY:** As a refresher, the CCNM Course I provides information on:  
**Suggestion:** Have the outline as a handout so you can quickly go through the topic areas.

**Handout:** CLAS Standards

- Module 1: Principles of Cultural Competence
  - Cultural competence definition
  - CLAS Standards 1-3
  - Factors that may affect nurses' ability to provide culturally competent care
- Module 2: The Importance of Self-Awareness
  - The need for self awareness in culturally competent nursing
  - Cultural competence assessment tools
- Module 3: Models for Becoming Culturally Aware  
**Handout: Models**
  - Campinha-Bacote Model
  - Purnell Model
  - Leininger Model (is a link--accessible in the Reference Library)
- Module 4: Understanding Health-Related Experience
  - Distinction between disease and illness
  - Understanding cultural and social factors
- Module 5: Delivering Patient-Centered Care
  - Patient-centeredness

- Using transcultural communication techniques
  - Module 6: Balancing Knowledge-Centered and Skill-Centered Approaches
    - Knowledge-centered approach
    - Skill-centered approach
  - Course I also contained two video vignettes (Vida Zahari and Vu Ngyuen), several Stories from the Front Line and CLAS Acts.
3. **ASK:** What was your first impression of Course I? (**Probe: Both positive and negative responses**)
  4. **ASK:** What three things did you like most about Course I?
  5. **ASK:** Where there any parts that you disliked in Course I?
  6. **ASK:** What did you think of the vignettes presented in Course I?

**PROBES:**

**PROBE:** Can you clarify any specific sections that you disliked or did not see as “adding to the overall content”?

- a) Did you find the vignettes relevant in helping you understand the cultural issues of the patient?
  - b) Do you feel they added to the Course’s overall content?
  - c) Which of the case studies did you find most helpful and why?
  - d) What, if anything, would make the cases more relevant to your everyday nursing practice?
7. **ASK:** Did the “Fast Facts,” “CLAS Acts,” “Pulse Points,” “Stories from the Front Lines” and “Cultural Insights” sections add to your knowledge of different cultural issues? To your overall learning experience? Did they provide information relevant to Course I?
  8. **ASK:** Is the information something you have used in your daily practice and /or shared with your colleagues? If yes, how so?
    - Have you used the CLAS standards?
    - Self awareness tools?
    - Cultural competence development models?

**ASK: Can you define:**

    - Patient-centeredness
    - Disease vs. illness
    - Knowledge and skilled centered approaches
  9. **ASK:** How do you feel Course I may have equipped you with the awareness, knowledge, and skills to better provide culturally competent care to the diverse patient population you are caring for?

**ASK:** What specific tools did the material provide to help you learn about culturally competent care?

**(Probe: For specifics—CLAS standards, self awareness tools, cultural competence development models, patient-centeredness, disease vs. illness, knowledge and skill- centered approaches, etc.)**

10. **ASK:** What models, tools, concepts, and approaches presented in Course I do you believe were most helpful to you and/or have been applied in your practice?

11. **SAY:** take a minute and think about how your interactions with patients have changed since completing the CCNM course. Can you share any cases where you could have handled an interaction differently?

12. **ASK:** Can anyone describe the ASKED self-assessment model that is mentioned in the course? Can one of you briefly summarize how using the model might impact your interactions with patients?

Note:

The components of the model are:

- Awareness: Are you aware of your biases and the presence of racism?
- Skill: Do you know how to conduct a cultural assessment in a sensitive manner?
- Knowledge: Do you know about different cultures' worldview and the field of bicultural ecology?
- Encounters: How many face-to-face interactions and other encounters have you had with people from cultures different than yours?
- Desire: Do you want to become culturally competent?

**ASK:** What challenges have you encountered in the incorporation of these techniques to your daily nursing practice?

#### **Principles of Patient-Centered Care**

- **Treat everyone with dignity**
- **Share unbiased info w. patients & families**
- **Strengthen patients' sense of control**
- **Collaborate w patients, families & broader community in how office looks & functions**

**Patient centeredness is furthered when:**

- **Patients receive info in own language**
- **Clinicians have awareness of potential communication difficulties**
- **Care is provided taking into account patient's cultural beliefs & practices.**

## CCNM Course II Review

### Discussion Guide Part 3: CCNM Course II Review

**Description:** The purpose of this module is to gain participants' reactions to the CCNM Course II content, assess their knowledge and recollection of the content, and determine how the information presented in Course II has been used in their practice.

**Time:** 20 minutes

**Theme:** Upon successful completion of this module participants will:

- Discuss their first impressions and what they liked and disliked about Course II
- Describe what new information they learned and how it has been applied in their daily practice
- Describe how they identify patients who need special communication techniques
- List the resources they have used to ensure culturally competent care within their practice
- Discuss the relevance of the material to nursing practice

**Moderator:**

1. **SAY:** Now let's move on and talk about Course II. (**NOTE: Write Course II Module headings on the flip chart prior to the group**)
  
2. **SAY:** As a refresher, the CCNM Course II provides information on:  
**Suggestion:** Have the outline as a handout so you can quickly go through the topic areas.
  - Module 1: Overview of Effective Communication Between Patient and Nurse
    - Articulate the importance of effective nurse-patient communications
    - Use the patient explanatory model interview questions to elicit information about health beliefs
  - Module 2: Tools for Effective Communication
    - Articulate the importance of using communication tools in cross cultural encounters
    - Describe and apply three effective communication models
  - Module 3: Overview of Language Access Services
    - List the responsibilities for providing language access services under the CLAS standards
    - Describe the Office of Civil Rights Title VI Guidance
    - Articulate the importance of and when to provide interpreter services, and what type of interpreter services are available
    - Describe types of written or translated materials and identify resources for obtaining them
  - Module 4: When Interpreter Services are Needed

- Articulate the four main roles of an interpreter
  - Define the triadic interview process and its participants
  - Identify best practices of working with interpreters
  - Module 5: Role of Health Literacy in Effective Communication
    - Define health literacy
    - Understand and recognize low literacy behaviors
    - Create strategies for helping patients with low health literacy
    - Describe strategies for adopting the provisions of CLAS standard 7
    - Identify one or more health literacy assessment tools and how they are used
  - Module 6: When Written or Translated Materials Are Needed
    - Describe types of written or translated materials to communicate with LEP patients
    - Define plain language
    - Understand the distinction between interpretation and translation
    - Identify the characteristics of qualified translators
  - Course II also contained three video vignettes (Jose Gomez, Vida Zahari [part 2], and Ida Wilson), several Stories from the Front Line, and CLAS Acts.
3. **ASK:** What was your first impression of Course II? (**Probe: Both positive and negative responses**)
  4. **ASK:** What three things did you like most about the Course?
  5. **ASK:** Where there any parts that you disliked in Course II?
  6. **ASK:** What did you think of the vignettes presented in Course II?

**PROBES:**

- Did you find the vignettes relevant in helping you understand the cultural issues of the patients?
  - Do you feel they added to the Course's overall content?
  - Which of the case studies did you find most helpful and why?
  - What, if anything, would make the cases more relevant to your everyday nursing practice?
7. **ASK:** Did the "Fast Facts," "CLAS Acts," "Pulse Points," "Stories from the Front Lines" and "Cultural Insights" sections add to your knowledge of different cultural issues? To your overall learning experience? Did they provide information relevant to Course II?

**PROBE:** Can you clarify any specific sections that you disliked or did not see as "adding to the overall content"?

8. **SAY:** I would like to focus on communication techniques and strategies or resources you can use to facilitate communicating with patients who may not be able to communicate in the same language or manner that you do.
9. **ASK:** What are the signals that alert you that a patient needs special communication techniques due to language, ethnic or cultural beliefs that are different from your own?
10. **ASK:** What resources can/do you use to make certain you better understand how to communicate with culturally diverse patients?

**PROBE:**

- What tools can/do you or the staff at your organization use to prepare ahead of time for a patient visit with someone who needs language assistance?
  - Which community resources have you used, i.e., community groups/health workers, translated materials, or an interpreter to assist with providing language assistance to your patients?
11. **ASK:** Have you noticed any changes in the way patients are treated in your organization? (elicit both positive and negative responses)
  12. **SAY:** I'd like to discuss the use of language assistance resources: what types are available where you work, and whether the curriculum has changed your thinking on the use of these resources.
  13. **ASK:** Does your organization (hospital, clinic, agency) provide interpreter services for patients? Have they always been provided, or is this a new service? If a new service, what prompted the decision to provide them? Did the CCNM curriculum influence the decision to advocate for including more culturally appropriate communication methods?  
**Examples:** Interpreters, bilingual staff, telephonic interpretation, online translation tools, etc.

## CCNM Course III Review

### Discussion Guide Part 4: CCNM Course III Review

Description: The purpose of this module is to gain participants' reactions to the CCNM Course III content, assess their knowledge and recollection of the content, and determine how the information presented in Course III has been used in their practice.

Time: 20 minutes

Theme: Upon successful completion of this module participants will:

- Discuss their first impression and what they liked and disliked about Course III
- Describe what new information they learned and how it has been applied in their daily nursing practice
- Discuss the relevance of the material to nursing practice

#### Moderator:

1. **SAY:** Now let's move on to talk about Course III. (**NOTE: Write Course III Module headings on the flip chart prior to the group**)
2. **SAY:** As a refresher, the CCNM Course III provides information on:  
**Suggestion:** Have the outline as a handout so you can quickly go through the topic areas.
  - Module 1: Culturally Competent Organizations
    - List characteristics of a culturally competent organization
    - Identify ways that nurses can support organizational cultural competence
  - Module 2: Nurses' Roles as Advocates for Cultural Competence in Organizations
    - Describe how nurses can advocate for cultural competence
    - Identify the skills nurses need to effectively advocate for culturally competent care in their organizations
  - Module 3: Organizational Assessment
    - Explain organizational assessments as a major organizational cultural competence support
    - Identify critical domains of organizational assessments
    - Use an organizational assessment checklist
  - Module 4: Strategic Planning
    - Understand strategic planning and its relationship to developing culturally competent organizations
    - Explain continuous quality improvement and its role in the strategic planning process
    - Describe data collection and its role in the strategic planning process
    - Identify tools for cultural competence data collection
  - Module 5: Training and Education

- Describe recommendations for culturally competent training and education programs
  - Identify the attitudes, knowledge, and skills necessary to develop cultural competence
  - Module 6: Developing Effective Partnerships
    - Understand the importance of developing partnerships to support organizational cultural competence
    - Identify factors that contribute to successful partnerships
    - Describe the role of minority communities in partnerships for improving culturally competent care
  - Course III also contained two video vignettes (Ida Wilson [part 2] and Rob Ocuca), and several Stories from the Front Line.
3. **ASK:** What was your first impression after completing Course III? (**Probe: Both positive and negative responses.**)
  4. **ASK:** What three things did you like most about the Course?
  5. **ASK:** Where there any parts that you disliked in Course III?
  6. **ASK:** What did you think of the vignettes presented in Course III?

**PROBES:**

- Did you find the vignettes relevant in helping you understand the cultural issues of the patients?
  - Do you feel they added to the Course’s overall content?
  - Which of the case studies did you find most helpful and why?
  - What, if anything, would make the cases more relevant to your everyday nursing practice?
7. **ASK:** Did the “Fast Facts,” “CLAS Acts,” “Pulse Points,” “Stories from the Front Lines” and “Cultural Insights” sections add to your knowledge of different cultural issues? To your overall learning experience? Did they provide information relevant to Course III?  
**PROBE:** Can you clarify any specific sections that you disliked or did not see as “adding to the overall content”?
  8. **SAY:** Course III Module 1 addresses characteristics of culturally competent organizations. **ASK:** Can you describe the characteristics?
    - How many of you were aware of these characteristics prior to reviewing this Module?
    - Thinking of these characteristics, how does your current place of employment fare as a culturally competent organization? (**Probe: Specifics**)

9. **SAY:** In Module 2, the nurses' roles as advocates for cultural competence in organizations are discussed. **ASK:** What opportunities do you have to support the use of cultural competence practices in your organization?
10. **ASK:** Having learned about advocating for cultural competency, have you become more involved? If so, how?
11. **SAY:** In Module 3, Organizational Assessment, 8 domains/areas for measuring organizational cultural competence were discussed. (**NOTE: Provide as handout**)
12. **ASK:** Was anyone familiar with these 8 domains/areas before reviewing Module 2? (**Probe: where did they become familiar—something their organization is focusing on?**)  
**ASK:** How has your organization addressed these areas?
11. **SAY:** In Module 4, Strategic Planning is discussed.  
**ASK:** How many of you have been involved in the strategic planning process in your organization? How does your organization incorporate cultural competence initiatives in its strategic planning?
12. **SAY:** In Course III, Module 5 presents recommendations for developing cultural competence training programs.  
**ASK:** What types of cultural competency training is provided by your organization? If it is provided, who participates in the training? Is the training mandatory?
13. **SAY:** We are going to talk a few minutes about Course III Module 6, Developing Effective Partnerships.
14. **ASK:** What are some of the benefits that community partnerships bring to a health care organization?
15. **ASK:** What types of community partnerships does your organization have? Have you been involved in these partnerships? If yes, in what way?  
According to Anderson and colleagues (2003), **a culturally competent health care organization** should have the following characteristics:
- A culturally diverse staff that reflects the community (or communities) served;
  - Providers or interpreters who speak the patients' language(s);
  - Training for providers to better understand the culture and language of the people they serve;

- Signs and written instructions in the patients' language(s) that are consistent with their cultural norms; and

**To advocate for cultural competence**, nurses can:

- Encourage changes in policy, procedures, and infrastructure support that affect the provision of the CLAS standards at their organization;
- Advance policy changes in the larger community, in professional organizations, or at the state and federal levels; and
- Be active members of decision-making bodies and committees that are charged with making organizational and community changes to ensure culturally and linguistically competent services.

To advocate effectively, nurses need a combination of skills. For example, Mallik (1997) suggested that nurses need the following skills:

- Ability to communicate effectively with patients and their families, other health care providers, and staff within the organization;
- Knowledge of the cultural beliefs, practices, patient preferences, competencies, legal parameters, and tasks related to the issue;
- Ability to work collaboratively to promote change.

<p style="text-align: center;"><b>Culturally Competent Nursing Curriculum (CCNM)</b> <b>How has it impacted your practice?</b></p>
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Discussion Guide Part 5: Impact of CCNM

Description: This section will identify the ways that the curriculum has impacted nurses' medical practice.

Time: 20 minutes

Theme: Upon successful completion of this module participants will:

- Discuss the ways completing the CCNM course may have affected how they prepare for a patient visit.
- Be able to list ways completion of the course may have changed their behavior with patients

Moderator:

1. **SAY:** I would like to hear from you if completing the Culturally Competent Nursing Modules has made a difference in your practice of nursing.  
**ASK:** Do you believe that your interactions with patients may have changed based on what you learned after completing this program?
2. **ASK:** How important do you feel it is to incorporate what you learned in the CCNM course into your daily routine?
3. **ASK:** How has taking the CCNM course affected how you prepare for your interactions with patients? (**Probe:** do you do anything differently as a result of what you have learned)
3. **ASK:** What has facilitated the implementation of culturally competent care for you personally? How about within your organization?
4. **ASK:** What has been the major challenge to implementing culturally competent care for you personally? How about within your organization?
5. **ASK:** Does your organization have plans to become involved in community partnerships related to providing culturally competent care?
  - Do you think the section in the CCNM on organizational supports added anything to what you feel you should know about your community your patients live and work in? How can the course be fully integrated into the organization (from top leadership to the bottom as an example)?

**Examples:** Support from others in their organization; organizational policies; access to additional staff or resources; etc.

6. **ASK:** In terms of the use of data about your patient population, do you plan to collect -- or are you collecting -- information about the culture or language of your patients? What value do you see from this? How can you incorporate that information into your nursing care?
7. **ASK:** What changes have you or your organization made (or could you see yourself or your organization making in the future) to provide additional signage, language appropriate resources, staff training or make other changes in the office environment for culturally or linguistically diverse patients?
8. **ASK:** How well did the training program keep your interest? Tell me after viewing the introduction, how interested were you to move on to the remainder of the curriculum?
9. **ASK:** What was the main thing or highlight that most captured your interest?
10. **ASK:** What detracted the most from making the course interesting?
11. **ASK:** What would you like to see more of?
12. **ASK:** How can the course be improved?
13. **ASK:** Did you “click” on any of the additional resources or print anything out for future reference?

## Closing

### Discussion Guide Part 6: Closing Remarks

**Description:** This module gathers some demographic information and concludes the group discussion.

**Time:** 5 minutes

**Theme:** Upon successful completion of this module participants will:

- Discuss who would benefit by taking a cultural competency training program in their organization, and identify any missing topics or questions pertaining to the curriculum that were not asked.

**Moderator:**

1. **SAY:** We are getting ready to wrap-up our group discussion. I have just a few more questions.
  
2. Who in your organization or in the health care field would benefit from taking a course on culturally competent care? (**no names, titles such as doctors, CEO, President, Nursing Supervisors, Nursing Assistants, EMS personnel, Social Workers, etc.**)
  
3. **SAY:** I have certainly learned a great deal from these discussions. Thanks for all your ideas and suggestions. They will help us as we continue to develop the nursing continuing education program on culturally competent care. Before you leave, I would like to find out if there is anything I should have asked you but didn't. (Pause for comments.)
  
4. **SAY:** Thank you again for your participation.

**Offer business card to contact you for further comments/questions.**