

**SAS® with CLAS:  
Assessing Adherence to Federal Standards for Culturally and Linguistically  
Appropriate Services**

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**Abstract**

This paper shows how Base SAS® 9 was used to conduct a gap analysis on how several health care facilities are doing on adhering to the 14 federal standards for Culturally and Linguistically Appropriate Services (CLAS). In the summer of 2009, these facilities were asked to have staff complete an online assessment in order to evaluate how well they were meeting these standards. SAS® was used to analyze responses, and export scores and recommendation for improvement into a MS Excel report. In the summer of 2010, these same facilities, after completing several educational opportunities, are again completing the online assessment in order to evaluate how well they are meeting these standards after implementing various interventions. SAS® is again being used to analyze responses, export scores and recommendations for improvement. SAS® is also being used to evaluate whether or not there were statistically significant improvements between the pre-CLAS assessment and the post-CLAS assessment. Only basic SAS® skill levels are required of the audience.

Since this abstract was submitted, the post-CLAS assessment and comparative analysis were completed, so this paper also will report those results.

**Introduction**

Cultural competence in health care describes systems and policies that create an environment to provide the best possible care to patients with diverse values and beliefs, as well as people with limited English proficiency and low literacy skills. Culture is influenced by many factors—language, age, gender, sexual orientation, place of birth, and length of residency in a country, as well as education, income, disability, and individual experiences.

Cultural competence is a main ingredient in eliminating disparities in health care. It creates a means for patients and doctors to come together and talk about health concerns without cultural differences hindering the conversation. Health care services that are respectful of and responsive to the health beliefs, practices, and cultural and linguistic needs of diverse patients can help bring about positive health outcomes.

In 2001, the United States Department of Health and Human Services, Office of Minority Health (OMH), developed the Culturally and Linguistically Appropriate Services Standards—the CLAS Standards—a set of 14 mandates, guidelines, and recommendations to inform, guide, and facilitate organizations in their efforts to improve culturally and linguistically appropriate health services.

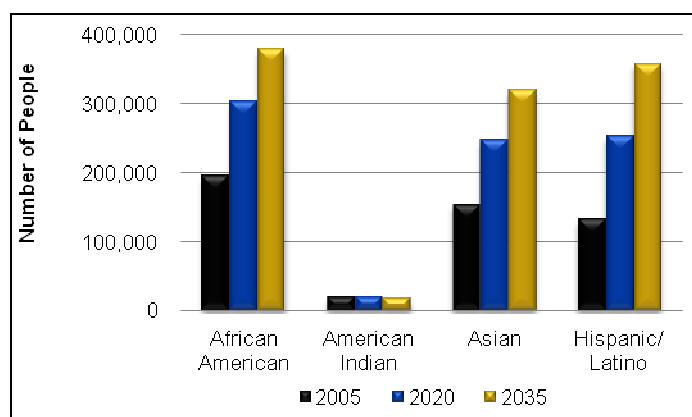
Stratis Health, with the support of UCare, created a CLAS Assessment to assess how well facilities adhere to the 14 standards. Through involvement in a project called the Culture Care Connection Initiative, several clinics completed a pre-CLAS assessment in summer 2009, participated in several education opportunities, and then completed a post-CLAS assessment in summer 2010. The methodology and results of this initiative will be explained below.

**Minnesota's Diverse Population**

Because of changing demographics in Minnesota and the nation it is crucial for health care providers to recognize and accommodate cultural differences. Minnesota now includes the largest Somali and Liberian populations in the United States. Minnesota's Hmong population is second only to California, and St. Paul has the largest urban population of Hmong in the world.

Between 2005 and 2035, the Hispanic population in the Twin Cities is projected to nearly triple, and African American and Asian populations are projected to double. The US Census Bureau predicts that within the next 50 years, nearly one-half of the nation's population will be from nonwhite cultures.

**Figure 1: Projected Populations of Color - Twin Cities 2005-2035**



As Minnesota's population becomes more diverse, health care providers are seeing a patient population that may not speak English, may not be familiar with Western medical customs, and may be distrustful of how health care is delivered in the United States.

Evidence shows that despite improvement in overall health for the majority of Americans, disparity in the quality of care continues to affect minority populations disproportionately. In Minnesota, health care statistics for populations of color do not compare favorably with those of the white population, even though Minnesota is consistently ranked as one of the healthiest states in the nation.

To help understand how to better serve their changing patient populations, health care providers in Minnesota and other states might benefit from actionable training and resources on cultural competence.

The growing population of racial and ethnic communities and linguistic groups, each with its own cultural traits and health profiles, presents a challenge to health care delivery in this country. Providers and patients each bring their individual learned patterns of language and culture to the health care experience, which must be transcended to achieve equal access and quality health care.

Cross-cultural medical encounters can be puzzling for physicians who don't properly understand the behaviors of their patients. For example, Vietnamese people may not ask providers questions or voice concerns because they value politeness and respect for authority. They may smile easily and often, regardless of underlying emotions. If they disagree or do not understand, they may simply listen and answer yes, and then not comply with recommendations or return for further care.

Understanding a population's history and general characteristics can prepare providers to ask questions that lead to greater discovery. Somali refugees often suffer from unexpressed depression, anxiety, and post-traumatic stress as a result of torture, loss of family members, and separation from family. Providers may have to delve deeper and spend more time with these patients to better understand their cultural characteristics and backgrounds in order to make the correct diagnosis, provide the best treatment, and make sure the patient truly understands the diagnosis and treatment.

### **CLAS Standards**

The 14 CLAS standards serve as guiding principles to help correct inequities and ensure that facilities provide accessible, appropriate care to their diverse patient populations. The standards were developed to be inclusive of all cultures. However, they are especially designed to address the needs of racial, ethnic, and linguistic population groups that experience unequal access to health services. Ultimately, the aim of the standards is to contribute to the elimination of racial and ethnic health disparities and to improve the health of all Americans.

The 14 standards are organized by themes: Culturally Competent Care (Standards 1-3), Language Access Services (Standards 4-7), and Organizational Supports for Cultural Competence (Standards 8-14). Standards 1-7 address interventions that have the most direct impact on clinical care. Standards 8-14 address organizational structures, policies, and processes that support the implementation of the first seven standards.

The 14 standards can also be divided into three categories of varying stringency: mandates, guidelines, and recommendations as follows:

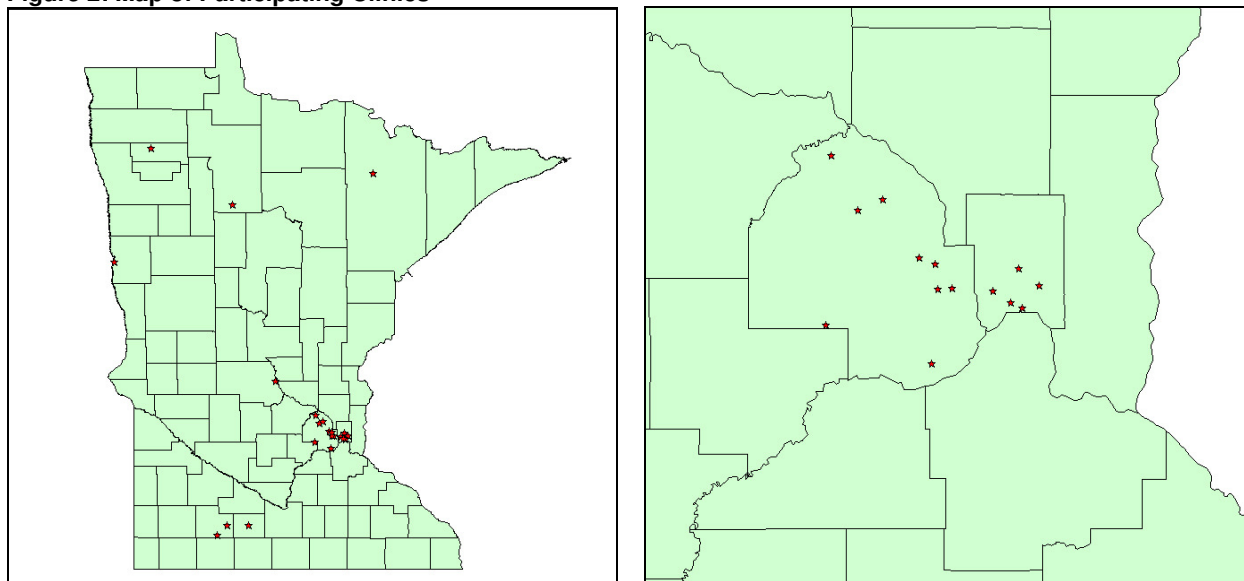
- *CLAS mandates* are recurrent federal requirements for all recipients of federal funds (Standards 4, 5, 6, and 7).
- *CLAS guidelines* are activities recommended by OMH for adoption as mandates by federal, state, and national accrediting agencies (Standards 1, 2, 3, 8, 9, 10, 11, 12, and 13).
- *CLAS recommendation* is suggested by OMH for voluntary adoption by health care organizations (Standard 14).

The CLAS standards are primarily directed at health care organizations; however, individual providers are also encouraged to use them to make their practices more culturally and linguistically accessible. The principles and activities of CLAS should be integrated throughout an organization and undertaken in partnership with the communities being served.

## Culture Care Connection Initiative

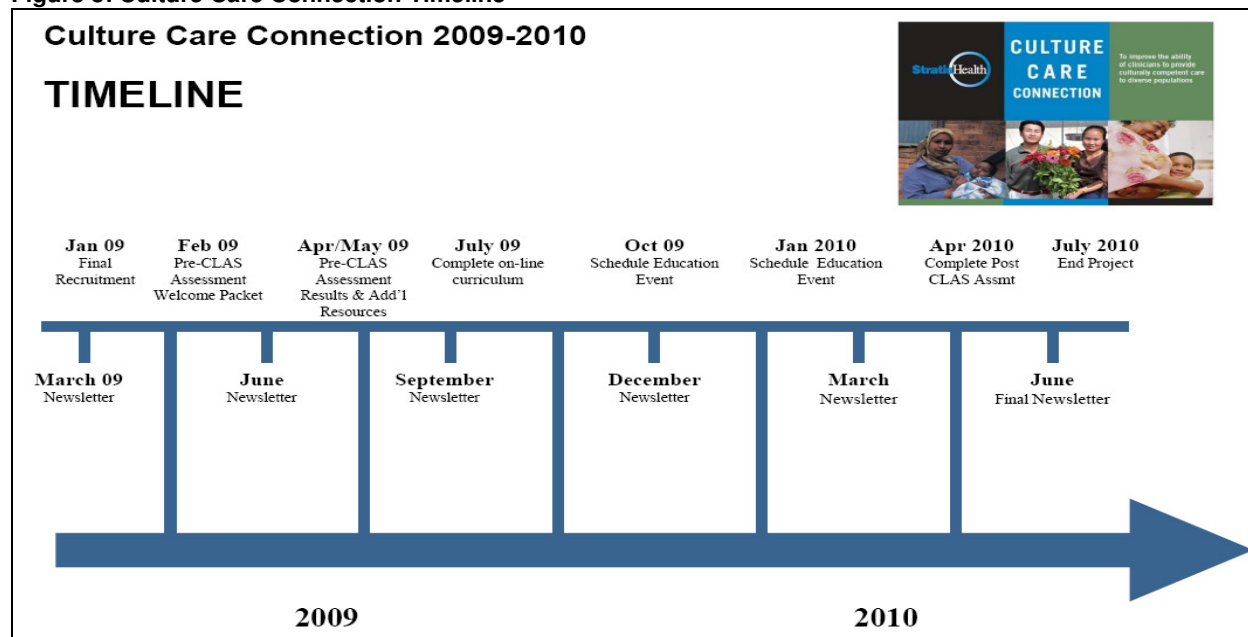
To address health care disparities and promote cultural competence in Minnesota, Stratis Health, with the support of UCare, worked with several adult primary care clinics in a statewide cultural competence initiative that lasted 18 months. Many clinics applied to participate in the initiative. Throughout Minnesota, 23 clinics and a public health facility were chosen to participate. Clinics were chosen if they were located in an area that serves a culturally diverse population or that experienced a significant growth in diverse populations. Selected participants reflect a mix of rural and urban clinics with differing levels of quality improvement and cultural competency experience. For participating in this initiative, each clinic received \$1,000 stipend.

**Figure 2: Map of Participating Clinics**



Participants in the initiative were asked to complete a pre-CLAS assessment at the beginning of the initiative and a post-CLAS assessment at the end. They received quarterly newsletters and had various educational opportunities throughout the initiative.

**Figure 3: Culture Care Connection Timeline**



### Online Pre-CLAS Assessment

Participating clinics were asked to identify at least five staff members to complete the pre-CLAS assessment and designate a deadline for completion (i.e., one to two weeks from receipt of assessment). Any random selection of participants was to include, when possible, clinicians and representatives from nursing, lab, administration, front line staff, etc.

The 66-question assessment was available online, and 22 of the 24 clinics completed this part of the project. The data collected online were exported to Excel and cleaned and prepared for analysis.

**Figure 4: Online Assessment Tool**

The screenshot shows the online assessment tool interface. At the top, there is a header with the "StratHealth CULTURE CARE CONNECTION" logo and tagline. Below the header, the title "Culture Care Connection - CLAS Standards Assessment - ABC Clinic" is displayed. The assessment is divided into sections, with the first section being "1. Culturally Competent Care".

Three questions are visible, each with a radio button for "Strongly Agree", "Agree", "Disagree", "Strongly Disagree", and "Don't Know":

- \*a. Our clinic helps patients get the supports they need (e.g., flexible service schedules, childcare, transportation, etc.) to access health care.
- \*b. Our clinic has pictures, posters, print materials, and toys that reflect the culture and ethnic backgrounds of the patients and families we serve.
- \*c. Our staff routinely asks patients how they prefer staff members to address them (e.g., Mr., Mrs., first name, etc.)

At the bottom of the assessment tool, there are "Previous" and "Next" buttons.

## Pre-CLAS Assessment Gap Analysis

Using SAS® 9, basic programming skills were used to analyze the data and create reports.

Code 1: Read data from MS Excel (without SAS®/Access)

```
X "J:\ANALYSTS\Cultural Competency-Clinic\ABC Clinic\Data\WorkingData\ABCClinic20090701.xls";
FILENAME data DDE 'Excel|J:\ANALYSTS\Cultural Competency-Clinic\ABC
Clinic\Data\WorkingData\ABCClinic20090701.xls|ABCClinic!R2C1:R425C71';

PROC FORMAT;
    INVALUE Scale 'Strongly Agree' = 4
                  'Agree' = 3
                  'Disagree' = 2
                  'Strongly Disagree' = 1
                  "Don't Know" = 0;

RUN;

DATA ALL_Data;
    INFILE data notab DLM='09'x DSD MISOVER LRECL=1000000;
    LENGTH Facility $50 Position $60 Position_Other $75 Years_of_Service $20 Race_Ethnicity $30
    Race_Other $75 Gender Comments $255;

    INFORMAT
        Date_Submitted ANYDTDTM22.
        Q1a Scale. Q1b Scale. Q1c Scale. Q1d Scale. Q1e Scale. Q1f Scale. Q1g Scale. Q1h Scale.
        Q1i Scale. Q1j Scale. Q1k Scale. Q1l Scale. Q1m Scale. Q1n Scale. Q1o Scale. Q1p Scale.
        Q1q Scale. Q1r Scale. Q2a Scale. Q2b Scale. Q2c Scale. Q2d Scale. Q2e Scale. Q2f Scale.
        Q2g Scale. Q2h Scale. Q2i Scale. Q2j Scale. Q2k Scale. Q2l Scale. Q2m Scale. Q2n Scale.
        Q2o Scale. Q2p Scale. Q2q Scale. Q2r Scale. Q3a Scale. Q3b Scale. Q3c Scale. Q3d Scale.
        Q3e Scale. Q3f Scale. Q3g Scale. Q3h Scale. Q3i Scale. Q3j Scale. Q3k Scale. Q3l Scale.
        Q3m Scale. Q3n Scale. Q3o Scale. Q3p Scale. Q3q Scale. Q3r Scale. Q3s Scale. Q3t Scale.
        Q3u Scale. Q3v Scale. Q3w Scale. Q3x Scale. Q3y Scale.;
    INPUT Date_Submitted Facility Q1a Q1b Q1c Q1d Q1e Q1f Q1g Q1h Q1i Q1j Q1k Q1l Q1m Q1n Q1o Q1p
    Q1q Q1r Q2a Q2b Q2c Q2d Q2e Q2f Q2g Q2h Q2i Q2j Q2k Q2l Q2m Q2n Q2o Q2p Q2q Q2r Q3a
    Q3b Q3c Q3d Q3e Q3f Q3g Q3h Q3i Q3j Q3k Q3l Q3m Q3n Q3o Q3p Q3q Q3r Q3s Q3t Q3u Q3v
    Q3w Q3x Q3y
    Position Position_Other Years_of_Service Race_Ethnicity Race_Other Age $ Gender $ Comments;

RUN;

Code 2: Calculate scores for each question

PROC FREQ data=ALL_Data;
    TABLE Q1a / OUT=Q1aFreqs;
    TABLE Q1b / OUT=Q1bFreqs;

    ...

    TABLE Q3y / OUT=Q3yFreqs;
    BY Facility;

RUN;

/*Macro would be more efficient*/
PROC TRANSPOSE DATA=Q1aFreqs OUT=Q1aFreqs_Flipped;
    BY Facility;
    ID Q1a;
    VAR Percent;

RUN;

DATA Q1aFreqs_Flipped_Revised;
    SET Q1aFreqs_Flipped;
    Question = 'Q1a';

RUN;
```

```

PROC TRANSPOSE DATA=Q1bFreqs OUT=Q1bFreqs_Flipped;
    BY Facility;
    ID Q1b;
    VAR Percent;
RUN;

DATA Q1bFreqs_Flipped_Revised;
    SET Q1bFreqs_Flipped;
    Question = 'Q1b';
RUN;

...

PROC TRANSPOSE DATA =Q3yFreqs OUT=Q3yFreqs_Flipped;
    BY Facility;
    ID Q3y;
    VAR Percent;
RUN;

DATA Q3yFreqs_Flipped_Revised;
    SET Q3yFreqs_Flipped;
    Question = 'Q3y';
RUN;

DATA ALL_QFreqs (DROP = _name_ _label_ RENAME = (_0=Qdk _1=Qsd _2=Qd _3=Qa _4=Qsa));
    SET Q1aFreqs_Flipped_Revised Q1bFreqs_Flipped_Revised Q1cFreqs_Flipped_Revised
    ...
    Q3yFreqs_Flipped_Revised;
RUN;

/*Table with the response frequencies per question*/
DATA ALL_QFreqs_New;
    SET ALL_QFreqs;
    IF Qdk = . THEN Qdk = 0.0;
    IF Qsd = . THEN Qsd = 0.0;
    IF Qd = . THEN Qd = 0.0;
    IF Qa = . THEN Qa = 0.0;
    IF Qsa = . THEN Qsa = 0.0;
    FORMAT Qdk Qsd Qd Qa Qsa 4.1;
RUN;

/*Exclude Don't Know*/
DATA ALL_Data_Revised;
    SET ALL_Data;
    IF Q1a = 0 THEN Q1a = .;
    IF Q1b = 0 THEN Q1b = .;
    ...
    IF Q3y = 0 THEN Q3y = .;
RUN;

/* Calculate average scores for each question (excluding Don't Knows) for each facility*/
PROC MEANS DATA=ALL_Data_Revised MEAN;
    VAR Q1a Q1b Q1c Q1d Q1e Q1f Q1g Q1h Q1i Q1j Q1k Q1l Q1m Q1n Q1o Q1p Q1q Q1r
    Q2a Q2b Q2c Q2d Q2e Q2f Q2g Q2h Q2i Q2j Q2k Q2l Q2m Q2n Q2o Q2p Q2q Q2r
    q3a Q3b Q3c Q3d Q3e Q3f Q3g Q3h Q3i Q3j Q3k Q3l Q3m Q3n Q3o Q3p Q3q Q3r Q3s Q3t Q3u Q3v
    Q3w Q3x Q3y;
    BY Facility;
    OUTPUT OUT=ALL_Qmeans;
RUN;

```

```

PROC TRANSPOSE DATA=ALL_Qmeans OUT=ALL_Qmeans_Flipped;
  BY Facility;
  ID _STAT_;
  VAR Q1a Q1b Q1c Q1d Q1e Q1f Q1g Q1h Q1i Q1j Q1k Q1l Q1m Q1n Q1o Q1p Q1q Q1r
  Q2a Q2b Q2c Q2d Q2e Q2f Q2g Q2h Q2i Q2j Q2k Q2l Q2m Q2n Q2o Q2p Q2q Q2r
  Q3a Q3b Q3c Q3d Q3e Q3f Q3g Q3h Q3i Q3j Q3k Q3l Q3m Q3n Q3o Q3p Q3q Q3r Q3s Q3t Q3u Q3v
  Q3w Q3x Q3y;
  WHERE _STAT_ = 'MEAN';
RUN;

/*Met = "Current Clinic Practice", Not Met = "Opportunity For Improvement"*/
DATA ALL_Qmeans_Final (RENAME=(Mean=Qmean));
  SET ALL_Qmeans_Flipped;
  IF mean LT 3.0 THEN QMet = 'Not Met';
  ELSE IF mean GE 3.0 THEN QMet = 'Met';
RUN;

```

Code 3: Calculate scores for each standard

```

DATA ALL_Standards;
  SET ALL_Data_Revised;
  Standard1 = mean(Q1a, Q1b, Q1c, Q1d, Q1e, Q1f);
  Standard2 = mean(Q1g, Q1h, Q1i, Q1j, Q1k, Q1l);
  Standard3 = mean(Q1m, Q1n, Q1o, Q1p, Q1q, Q1r);

  Standard4 = mean(Q2a, Q2b, Q2c, Q2d);
  Standard5 = mean(Q2e, Q2f, Q2g, Q2h);
  Standard6 = mean(Q2i, Q2j, Q2k, Q2l);
  Standard7 = mean(Q2m, Q2n, Q2o, Q2p, Q2q, Q2r);

  Standard8 = mean(Q3a, Q3b, Q3c);
  Standard9 = mean(Q3d, Q3e, Q3f);
  Standard10 = mean(Q3g, Q3h, Q3i, Q3j, Q3k, Q3l, Q3m, Q3n);
  Standard11 = mean(Q3o, Q3p, Q3q, Q3r);
  Standard12 = mean(Q3s, Q3t, Q3u);
  Standard13 = mean(Q3v, Q3w);
  Standard14 = mean(Q3x, Q3y);
RUN;

PROC SORT DATA=ALL_Standards;
  BY Facility;
RUN;

PROC MEANS DATA=ALL_Standards MEAN;
  VAR Standard1 Standard2 Standard3 Standard4 Standard5 Standard6 Standard7
  Standard8 Standard9 Standard10 Standard11 Standard12 Standard13 Standard14;
  BY Facility;
  OUTPUT=ALL_Smeans;
RUN;

PROC TRANSPOSE=ALL_Smeans OUT=ALL_Smeans_Flipped;
  BY Facility;
  ID _STAT_;
  VAR Standard1 Standard2 Standard3 Standard4 Standard5 Standard6 Standard7
  Standard8 Standard9 Standard10 Standard11 Standard12 Standard13 Standard14;
  WHERE _STAT_ = 'MEAN';
RUN;

DATA ALL_Smeans_Final (RENAME=(Mean=Smean));
  SET ALL_Smeans_Flipped;
  FORMAT mean 4.2;
  IF mean LT 3.0 THEN SMet = 'Not Met';
  ELSE IF mean GE 3.0 THEN SMet = 'Met';
RUN;

```

Code 4: Read Recommendation from MS Excel (without SAS®/Access)

```
X "J:\Cult Comp\CLAS Assessment Tools\CLAS_Assessment_GAP Analysis_FINAL 03_09.xls";
FILENAME text DDE 'Excel|J:\Cult Comp\CLAS Assessment Tools\CLAS_Assessment_GAP Analysis_FINAL
03_09.xls]Sheet1!R2C1:R62C6';
```

```
DATA QText;
  INFILE text notab DLM='09'x DSD MISOVER LRECL=100000000;
  LENGTH Theme $50 Standard $10
           Question_Text Gap_Text Recommendation_Text $425;
  INPUT Theme Standard question $ Question_Text Gap_Text Recommendation_Text;
  IF Standard='1' THEN Standard = 'Standard1';
  ELSE IF Standard='2' THEN Standard = 'Standard2';

  ...

  ELSE IF Standard='14' THEN Standard = 'Standard14';
```

RUN;

Code 5: Merge question scores, standard scores, and recommendations

```
PROC SORT DATA=ALL_QFreqs_New;
  BY question;
```

RUN;

```
PROC SORT DATA =ALL_Qmeans_Final (RENAME=(_NAME_=question));
  BY question;
```

RUN;

```
PROC SORT DATA =QText;
  BY question;
```

RUN;

/\*Add question frequencies\*/

```
DATA Qmeans_QText;
  MERGE ALL_QFreqs_New ALL_Qmeans_Final QText;
  BY question;
```

RUN;

```
PROC SORT DATA =ALL_Smeans_Final (RENAME=(_NAME_=standard));
  BY standard;
```

RUN;

```
PROC SORT DATA =Qmeans_QText;
  BY standard;
```

RUN;

```
DATA FINAL;
  MERGE ALL_Smeans_Final Qmeans_QText;
  BY standard;
```

RUN;

```
PROC SORT DATA =FINAL;
  BY facility question;
```

RUN;

/\* If question = "Met" and less than 75% said "Don't Know" then no recommendation text will show\*/

/\* If more that 50% said "Don't Know" then Dont\_Know\_Text field will be yes – used to highlight in report\*/

```
DATA ALL.FINAL;
  SET FINAL;
  IF QMet = 'Met' and Qdk LE 75.0 THEN DO;
    Recommendation_Text = '';
  END;
  IF Qdk GT 50.0 THEN Dont_Know_Text = 'Yes';
```

RUN;



Code 6: Export SAS® data set to Excel for report

```

**Open the Excel Template file;
FILENAME syscmd DDE 'Excel|system';
DATA _null_;
    FILE syscmd;
    PUT '[file-open("J:\ANALYSTS\Cultural Competency-Clinic\All Clinics\Output\CCC Template.xls")]';
    RUN;

FILENAME data DDE "Excel|Data!R2C1:R62C16";

DATA _null_;
    SET ALL.FINAL;
    FILE data notab lrecl=1000000;
    PUT Facility '09'x standard '09'x Smean '09'x SMet '09'x Question '09'x Qmean '09'x QMet '09'x
        Theme '09'x Question_Text '09'x Recommendation_Text '09'x Dont_Know_Text '09'x
        Qsa '09'x Qa '09'x Qd '09'x Qsd '09'x Qdk '09'x;
    RUN;

```

## Pre-CLAS Assessment Results for Individual Clinics

If the score for a specific question indicated it was an “Opportunity for Improvement” and/or if more than 75 percent of the respondents answered “Don’t Know,” a recommendation was included for that question in the SAS® dataset. The results were then exported into the “Data” tab in Excel, and a report was generated for the clinic.

Figure 5: Pre-CLAS Assessment Sample Results for Individual Clinics

ABC Clinic				
2009 PRE-CLAS STANDARDS ASSESSMENT SUMMARY				
Based on the Office of Minority Health CLAS Standards				
Number of Responses=61				
Standard 1:	Score: 2.92			
Standard 1: Health care organizations should ensure that patients/consumers receive from all staff member's effective, understandable, and respectful care that is provided in a manner compatible with their cultural health beliefs and practices and preferred language.				
	Question Response Rates*	Current Clinic Practice	Opportunities for Improvement (Gaps)	Recommended Strategies for Improvement
Our clinic helps patients get the supports they need (e.g., flexible service schedules, childcare, transportation, etc.) to access health care. (Q1a)	Strongly Agree: 30.9 % Agree: 60.5 % Disagree: 6.2 % Strongly Disagree: 1.2 % Don't Know: 1.2 %	X		
Our clinic has pictures, posters, print materials, and toys that reflect the culture and ethnic backgrounds of the patients and families we serve. (Q1b)	Strongly Agree: 39.5 % Agree: 43.2 % Disagree: 12.3 % Strongly Disagree: 1.2 % Don't Know: 3.7 %	X		
Our staff routinely asks patients how they prefer staff members to address them (e.g., Mr., Mrs., first name, etc.) (Q1c)	Strongly Agree: 11.1 % Agree: 28.4 % Disagree: 25.9 % Strongly Disagree: 9.9 % Don't Know: 24.7 %		X	Develop a script for sensitively gathering information about how to properly address patients. If you are a member of a larger system, inquire if there is a script already developed for gathering this information. (Q1c)
Our staff understands cultural health and our patient population's beliefs and practices related to health care and illness, including alternative medicines, foods, and procedures or approaches that may violate cultural or religious traditions. (Q1d)	Strongly Agree: 19.8 % Agree: 40.7 % Disagree: 25.9 % Strongly Disagree: 4.9 %		X	Identify your patient population and determine their traditional religious traditions, common alternative treatments and medicines, diet variations, etc. Incorporate what you have learned into your conversation with patients from this population to determine individual needs. (Q1d)

Based on the results of the assessment, clinics received feedback on how well they are doing in relation to the OMH's national CLAS Standards. The clinics were asked to distribute pre-CLAS assessment results at appropriate staff meetings, planning meetings, board meetings, etc. Stratis Health then provided the clinics with recommendations for strategic planning and staff training. The clinics also received a demographic profile of their service area, quarterly training opportunities, and educational offerings, which included DVD Lunch and Learns

(Somali, Latino, Hmong), pre-recorded webinars, and health literacy training. The clinics also received online curriculum, newsletter, onsite consultation, and other resources.

After the pre-CLAS Assessment, clinics were asked to participate in at least one educational offering but could participate in more. The Clinic Administrator (or other identified staff) was required to complete the free online curriculum at [www.thinkculturalhealth.org](http://www.thinkculturalhealth.org).

Clinics were encouraged to use the report as a guide to help them incorporate best-practices in the areas needing improvement. For each question that indicated opportunity for improvement, a corresponding recommendation addresses the issue (**column E, Recommended Strategies for Improvement**).

To get started, clinics were asked to meet with their staff/leadership to determine which issue they would like to focus on. They were asked to review the materials in their packet of resources from Stratis Health for strategies to assist them. The clinics were also encouraged to call if they had questions about the resources or how to move forward.

### **Pre-CLAS Assessment Results for All Participating Clinics**

The aggregate results of all participating clinics showed that they had already incorporated a variety of best-practices for each Standard (**column C, Current Clinic Practice**) for providing culturally competent services to diverse patients. Best-practices already incorporated include helping patients get the supports they need (e.g., flexible service schedules, childcare, transportation, etc.) to access health care, and displaying pictures, posters, and materials that reflect the culture and ethnic backgrounds of the patients and families they serve, and more.

We found areas where the clinics could focus more attention for improvement (**column D, Opportunities for Improvement**). Examples of those opportunities for improvement include developing a script for sensitively gathering information about how to properly address patients, recruiting board members and staff at all levels that reflect the populations within their service area, and creating staff opportunities to attend training on serving diverse patients such as brown bag lunches, in-services, conferences, etc.

### **Interventions**

One participating clinic involved its entire staff in multicultural education with trainings every three months, including viewing DVDs on Somali and Hispanic/Latino culture, and hosting speakers from Minnesota International Health Volunteers who presented on sexual health and Somali adolescents. The clinic added signs to solicit feedback from clients on their cultural needs, began updating its resources to be culturally appropriate, and established a policy for free interpreter services.

Another clinic concentrated attention on its large American Indian population, by making the clinic more American Indian focused. Staff members also completed the OMH's online curriculum and plan to collect racial demographics through their system wide computerized record system. Reducing disparities in health care delivery begins by identifying populations being served.

In order to involve staff, one clinic distributed the Culture Care Connection newsletter to staff along with a quiz about the articles and then drew for a prize for the winner! Staff members also viewed and discussed a Crossing Cultures video.

A couple of clinics purchased a DVD player so staff could view DVDs on Hispanic/Latino, Somali, and Laotian cultures. They also are updating their records to track which patients require an interpreter, assessing interpreter proficiency, and reiterating the importance of using professional interpreters in the clinic.

Another clinic scheduled more frequent staff meetings with trainings focusing on cultural competency. The clinic also addressed how to better use interpreter services to meet the needs of its non-English speaking patients.

### **Post-CLAS Assessment for Individual Clinics**

At the end of the project, clinics completed a post-CLAS assessment to measure their improvement. The clinics received a summary of the demographics of those participating in the pre-CLAS Assessment. Clinics were asked to get the same or similar staff to complete the post-CLAS Assessment. They completed the same 66-questions assessment in order to measure how far they had come on the journey in cultural competence. Analysis and results were done using the same methods as the pre-CLAS assessment. Stratis Health visited each clinic to share final results and discuss future recommendations. Stratis Health provided additional resources to help clinics move forward on their cultural journey.

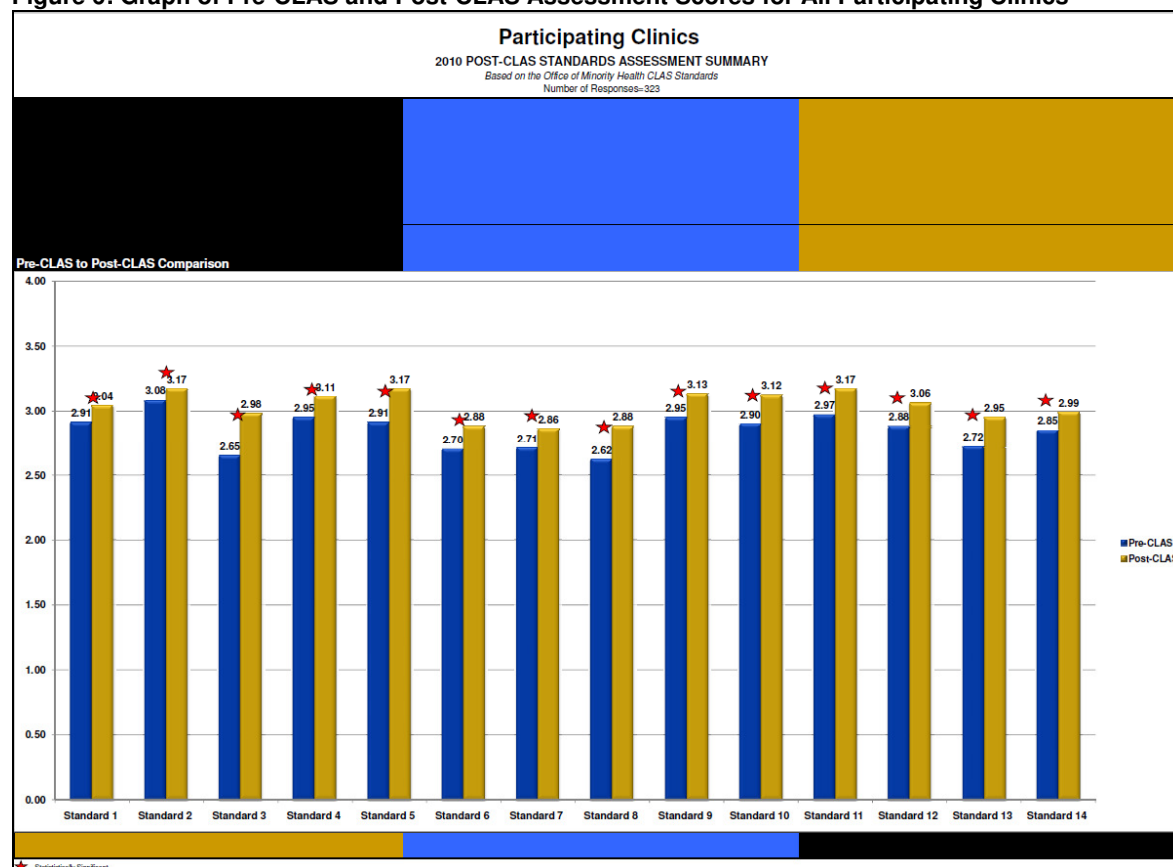
## Pre-to-Post CLAS Assessment Results for All Participating Clinics

Of the 23 clinics originally selected to participate, 18 completed both the pre-CLAS and post-CLAS assessment. All clinics improved on at least 6 standards, while 72.22 percent of the clinics improved on 12 to 14 standards. 55.56 percent of the clinics showed improvement on all 3 of the Culturally Competent Care standards. 61.11 percent of the clinics showed improvement on all four of the Language Access Services standards. 61.11 percent of the clinics showed improvement on all seven of the Organizational Supports standards.

The most improved standard from the pre-CLAS to post-CLAS assessment was Standard 3: *health care organizations should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery*. The pre-CLAS score=2.65; the post-CLAS score=2.98. The relative percent increase for Standard 3 was 12.45 percent.

The results showed statistically significant improvement on all 14 CLAS standards, between baseline and remeasurement, for all participating clinics combined.

**Figure 6: Graph of Pre-CLAS and Post-CLAS Assessment Scores for All Participating Clinics**



## Conclusion

The Culture Care Connection Initiative was a huge success as seen in the improvement from pre-CLAS Assessment to post-CLAS Assessment on all 14 CLAS Standards. Using SAS® with CLAS was an efficient way to create multiple reports for multiple facilities over two measurement periods.

## References

1. Office of Minority Health (OMH), National Standards for Culturally and Linguistically Appropriate Services in Health Care: Final Report, Washington, DC, March 2001.

## Acknowledgements

**Stratis Health** is a nonprofit organization founded in 1971 that leads collaboration and innovation in health care quality and safety, and serves as a trusted expert in facilitating improvement for people and communities.

**UCare** is an independent, nonprofit health plan providing health care and administrative services to more than 147,000 members. UCare partners with health care providers, counties, and community organizations to create and deliver innovative health coverage plans.

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