

# DESIGNING AND IMPLEMENTING A CULTURAL COMPETENCE OSCE: LESSONS LEARNED FROM INTERVIEWS WITH MEDICAL STUDENTS

**Purpose:** Objective structured clinical examinations (OSCEs) use standardized patients (SPs) to teach and evaluate medical students' skills. Few studies describe using OSCEs for cultural competence education, now a Liaison Committee on Medical Education accreditation standard for medical schools. We designed an OSCE station emphasizing cross-cultural communication skills (ccOSCE) and interviewed students to better understand and improve upon this tool.

**Method:** Two investigators conducted semi-structured interviews with 22 second-year Harvard medical students who completed the ccOSCE. Three investigators coded and analyzed the interview transcripts by using qualitative methods to explore students' perspectives on the station and its focus on cultural competence.

**Results:** Themes that emerged pertinent to design and implementation of the station were grouped into four categories: learning goals, logistical issues, faculty feedback, and SPs. Students were positive about the overall experience. They appreciated the practical focus on nonadherence. Some found the learning goals complex, and others felt the format promoted stereotypes. Logistical issues included concerns about marginalizing cross-cultural care by creating a separate station. Faculty feedback was helpful when specific about sociocultural issues students did or did not explore well. Students found SPs realistic but inconsistent in how easily they revealed information.

**Conclusion:** Designing a ccOSCE experience is challenging but feasible. Students' perspectives highlight a tension between presenting cultural competence in a dedicated station (potentially marginalizing the topic and promoting stereotypes) and spreading it across stations (limiting opportunity for focused teaching). Learning goals should be clear, concise, and effectively communicated to faculty and SPs so their feedback can be standardized and specific. (*Ethn Dis.* 2007;17:344-350)

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## BACKGROUND

Teaching medical students to provide high-quality care to every patient in a country as socially and culturally diverse as the United States is challenging and essential. The Liaison Committee on Medical Education recently added cultural competence as a standard for accrediting medical schools.<sup>1</sup> Educators have responded by developing new cross-cultural experiences for students mostly designed to shape attitudes and develop knowledge. Fewer have focused on teaching and evaluating cross-cultural communication skills.

Objective structured clinical examination (OSCE) is considered the reference standard for evaluating skills in areas such as history-taking, general communication, substance abuse, and palliative care.<sup>2-3</sup> It has become a widely used tool in medical education both for teaching and evaluation and is now part of the national board examination.<sup>4-5</sup> Despite much literature on the teaching of cultural competence in general,<sup>6-10</sup> information about using OSCEs for cultural competence evaluation and training is mostly anecdotal with few

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*Despite much literature on the teaching of cultural competence in general,<sup>6-10</sup> information about using OSCEs for cultural competence evaluation and training is mostly anecdotal with few published studies.<sup>11,12</sup>*

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published studies.<sup>11,12</sup> We are aware of no research that describes the perspectives of medical students on such an experience.

We designed a cultural competence OSCE station (ccOSCE) for second-year students at Harvard Medical School (HMS) as part of Patient-Doctor II, a required course on medical interviewing, communication, and clinical examination. We conducted in-depth interviews with students who had recently completed the ccOSCE to collect detailed feedback and reflections about the experience. We felt that standard survey methods would have missed the rich, nuanced responses (both positive and negative) that we anticipated this experience would generate. Our goal was to explore experience of students who participated in the ccOSCE, obtain feedback on the content and implementation of the station, and assess the strengths and challenges of using OSCE to teach cross-cultural care.

## The Cultural Competence OSCE at Harvard Medical School

Toward the end of the year-long Patient-Doctor II course, all second-year students engage in an intensive OSCE experience composed of seven 20-minute stations focusing on history-taking and physical exam skills. In 2003 we (DH, JB, AG, and Margaret Hinrichs) developed a new OSCE station that emphasized cross-cultural communication based on a real case of a 56-year-old Dominican woman with poorly controlled hypertension. We chose this case because it represented a common clinical scenario involving many challenging sociocultural issues but with lessons relevant to patient care in general. Appendix 1 describes the case and the logistics of the station.

The goal of the station is for students to determine the reason for the patient's poor blood pressure control (medication nonadherence) and to explore various sociocultural factors underlying this nonadherence (different understanding of hypertension, reliance on herbal remedies, etc).<sup>13</sup> Students receive several sessions that focus on these issues in the preclinical years; these sessions highlight a patient-based approach to cross-cultural care.<sup>7</sup> This approach deemphasizes culture-specific information, which can lead to stereotypic thinking. Instead it focuses on the types of social and cultural issues that commonly arise in cross-cultural interactions<sup>7,9,13</sup> (eg, language barriers, different health beliefs and communication styles, mistrust, and financial barriers). The station serves as both a teaching experience and an assessment of students cross-cultural history-taking and communication skills. While the OSCE does not directly affect their grade, students perceive it as a "high stakes" examination. The evaluation involves checklists completed by both faculty observers and standardized patients (SPs). The faculty checklist assesses whether or not students asked specified

questions and elicited essential information from a medical and cross-cultural perspective. The SP checklist assesses various aspects of communication and rapport-building (1 to 5 rating).

At the beginning of the station students receive written instructions for the station (Appendix 1). They are not told that this particular station emphasizes cultural competence; however, they do know that cultural competence could be assessed as part of the overall OSCE. We expected students to explore the patient's persistent hypertension, symptoms, and medications and ask questions based on the patient-based approach to culturally competent care. By integrating the medical and cross-cultural issues and not labeling this as a "cultural competence station," we hoped to avoid marginalizing the topic.

We recruited 12 Latina, bilingual SPs to play the role of Mrs. Bonilla. We trained SPs to provide information about sociocultural issues and medication nonadherence when students asked appropriate, open-ended questions. Immediately prior to the OSCE we met with SPs and faculty to review the case and answer questions. We also held an instructional session for the 22 designated faculty preceptors.

## METHODS

### Recruitment and Sample

We recruited a convenience sample of 22 second-year medical students via email invitations sent to the entire class (166 students) offering a \$10 gift certificate for participation. All students had participated in the cultural competence OSCE station within the previous four weeks as part of a half-day OSCE experience held in March 2004.

### Interview Process

Two of the authors (AG, EM) conducted one-on-one, semistructured, 20- to 30-minute interviews in private rooms at the medical school. The

interview guide (Appendix 2) elicited students' perspectives on learning goals, take-home points, challenges, logistics of the station, faculty and SP feedback, case content, and suggestions for improvement. The interviewers explained the procedures and goals of the study, including confidentiality of responses, and obtained verbal consent. The protocol was approved by the Harvard Medical School Human Subjects Research Committee.

### Data Analysis

All interviews were audiotaped and transcribed verbatim. Content and thematic analysis was used to identify and code frequently expressed ideas and responses.<sup>14,15</sup> Two principal investigators (AG, EM) and a research assistant (RW) used a random subset of five transcripts to develop a provisional list of types of comments that emerged from the interviews. They reviewed and coded each transcript individually according to this list. The three coders met to review coding and emerging patterns, and any differences in coding were discussed until discrepancies were resolved. Additional codes were added as they emerged, and the range of responses was confirmed through an iterative process of multiple reviews of the transcripts. After review of half of the transcripts, few new codes emerged, which suggested content saturation was achieved.

For this particular analysis, we reviewed codes that referred specifically to the design and implementation of the ccOSCE. We generated themes on the basis of frequency and patterns of comments. Themes reflecting students' perspectives were grouped into categories pertinent to ccOSCE design and implementation, specifically organizing student comments into four areas – learning goals, logistics, faculty feedback, and SP feedback. Additional comments that did not refer to design and implementation (eg, general critiques of cross-cultural education) were

**Table 1. Characteristics of study participants vs the overall class**

Student Sample Description	Total participants n=22 (%)	Total in class N=166 (%)
<b>Sex</b>		
Female	14 (64)	90 (54)
Male	8 (36)	76 (46)
<b>Race/Ethnicity</b>		
White/Caucasian	10 (45)	71 (43)
Black and Hispanic	5 (23)*	42 (25)
Asian American	7 (32) †	48 (29)
Other	0 (0)	5 (3)
<b>Students' Self-Rating</b>		
Students who reported 'doing well' on the station	6 (27)	—
Students who reported feeling challenged by the station	13 (59)	—
Students who reported doing poorly or "failing" the station	3 (14)	—

\* 2 African American, 2 Latino, 1 Haitian.  
 † 4 East Asian, 3 South Asian.

not included in the analysis for this paper.

## RESULTS

Table 1 shows demographic characteristics of the 22 second-year medical students interviewed. We analyzed all interview transcripts, focusing on information that shed light on the process of designing and implementing a cultural competence OSCE station. We organized students' comments into four

categories of themes: 1) the learning goals and content of the station; 2) the logistics of the station; 3) the role of the faculty observer; and 4) the role of the standardized patient (SP). Most students thought that the cultural competence OSCE was a positive experience.

"I thought that was an incredible experience, because I've never had to say those kind of things before, and just to hear the words coming out of your mouth...just going through the motions of saying something, then feeling how the sentence is formed

when you're talking with someone. It's a great exercise."

## Learning Goals and Content of the Station

Most students identified at least one of the major learning goals of the station. Table 2 lists the learning goals as we had intended, compared to how these were perceived by the students. While these are similar in the aggregate, some students were confused. Uncertainty about the learning goals of the station emerged as a key theme. Sometimes the faculty preceptors contributed to the confusion.

"So before going in, I think that the point of the case would have been to figure out everything that might be potentially leading to medication non-compliance, and therefore, out of control hypertension. But after going through the station and interacting with a preceptor...it was a little unclear what the point was."

A few students thought the complexity of the case was confusing. Two others thought that as second-year students, they were not yet ready to integrate cultural competency with a standard medical workup. However,

**Table 2. Cultural competence OSCE learning goals**

Intended Learning Goals	Student Perceived Learning Goals
Elicit a complete and concise history in a patient presenting for a blood pressure check	Make sure patients understand their diagnosis and medications
Identify nonadherence as a central problem which can affect clinical outcomes	Take a step back and realize there is more than just a diagnosis when caring for a patient
Demonstrate a framework for approaching non-adherence with a particular focus on key cross-cultural and social issues: -illness beliefs -complementary/alternative medicine use -low literacy -financial barriers	Understand why patients may not take their medications -misunderstanding of their disease -side effects -low literacy -financial barriers -language barriers
Communicate effectively with patients of different cultural backgrounds	Understand patients' use of complementary/alternative medicines Establish rapport with someone not from your culture
Present cross-cultural issues orally	Keep an open mind Sensitivity to cultural issues OK to explore sensitive topics with patients Find out whether a patient trusts doctors and the medical community

some students found the station straightforward.

*"I thought it was really good. You didn't so much need a complicated case...It was pretty straightforward, which I think I like."*

The realism of the station was another key theme. Several students commented that the content of the case itself – a patient with a “silent” chronic condition (hypertension) who was non-adherent to medical therapy – was a realistic and common scenario.

*"I think it was realistic. There's a lot of patients who don't comply with their meds and for a lot of reasons."*

Some students related the case content to situations that they had experienced with patients or with their own family. Another theme was concern about stereotyping. Some students were concerned that the content of the case could lead to stereotypic thinking about Latino patients.

*"I questioned what the message of the station was. ...If you see a Latino patient, are they not supposed to take their medicines, you see what I mean? Like, is that an assumption we're being trained to make?"*

### Logistics of the Station

Students were candid about the logistical aspects of the station they found problematic. Several comments centered around a key theme of unclear expectations. Some students were unsure whether or not to counsel the patient once they found out the reasons for her nonadherence.

*"I guess I didn't feel like I could pretend to be her doctor and give her advice, because in a real life situation, as a medical student, I wouldn't be the one telling her what to do with her medications."*

While we hoped students would integrate patient-based cross-cultural interviewing into their standard medical

history, we did not expect them to advise patients or negotiate, which are more advanced skills. Others understood that they were not supposed to give advice but felt that this put them in an awkward position.

*"...then don't add the part about 'don't counsel' because part of finding out why people do things is also partially counseling them."*

Another important key theme was the separateness of this station from the other stations, noted by almost all students. Most said they knew it was the cultural competency station. Reasons they gave included the more detailed instruction sheet, Spanish name, and the fact that the actor was Latina with an accent. We tried to avoid this by framing it as an exercise to explore the reasons for the patient's poorly controlled hypertension. We did not label the station as a cultural competence station, but we did advise students that cultural competence would be assessed in the overall OSCE program. Students voiced different perspectives on the separateness of the station and its focus on cultural competence. Several were adamantly against it.

*"I think kind of in some ways it marginalizes the topic because you know that there's going to be one cultural competence station..."*

However, some appreciated the change from the other stations.

*"And so you have to kind of take a step back and you're forced to think out of the high pressure OSCE. You take a step back and figure there's more than just the diagnosis when you're dealing with a patient. That was really interesting."*

Some were not sure what to make of this.

*"I definitely knew. I don't know whether it's actually good or bad."*

Two students were concerned that the station was perceived by some as

a “trick case.” Several would have preferred it to be less obvious and more similar to the other stations that addressed more conventional biomedical topics, especially since the “separateness” of this station could contribute to stereotyping.

*"So maybe if it was just more integrated that this might be any patient you see on any day, you know, and like it's just a situation that you walk into."*

Others recommended that cultural competence issues be integrated into the other stations rather than consolidated into one case.

Students made several other comments about the logistics. Some said the oral presentation part seemed awkward and they were unprepared to present cases this way. Two commented that a practice session beforehand would have been helpful for dealing with cultural competency issues. One called for interactive debriefing sessions afterwards, beyond the large group session that now takes place. Some students would have preferred conducting the interview in Spanish. A few felt that the time constraints were particularly challenging for this case.

### Role of the Faculty Observer

Students' comments about the 5-minute faculty feedback part of the OSCE ranged widely. Many felt the feedback was very helpful.

*"It was great...I feel like this station is where you got the most feedback and he touched on the issues you were supposed to think about, like literacy, finances, insurance, and other issues. He went over that, and if you didn't get that, how you could get to it. He was really helpful in saying when you encounter a patient like this, this is the framework you should think about."*

A key theme emerged around usefulness of specific feedback (rather than general), especially when addressing things that students did well or could have done better.

*"He really taught me some things. He asked me what I was thinking and how did you come to this conclusion? Where were you heading with this? So I thought that was really good."*

Some students commented that feedback was particularly helpful when faculty prompted them to go over their thought process.

*"It was kind of positive, but I don't remember taking anything away from it that was more like constructive criticism."*

Some students were less enthusiastic, especially when feedback was perceived as non-specific.

Other students had negative perceptions of the faculty feedback. A theme here was that faculty members tended to focus on medical rather than sociocultural issues. It seemed that in some of these interactions neither the faculty nor the students were clear about how much relative emphasis to give to these issues.

### Role of the Standardized Patient

Almost all students highlighted a theme that the SPs were very realistic as patients.

*"The patient I thought was very convincing, and did a wonderful job. I'm not even sure until this day. Was that patient an actor? That answers your question."*

However, students had mixed opinions about the challenge of obtaining information from SPs, and this sometimes felt artificial. Some students felt that the SPs tended to give up information too easily.

*"Yeah. It was sort of pre-fed, so it was simpler than it probably would have been in a real world situation."*

Others had the exact opposite impression.

*"The good thing about it was that she didn't try to help you that much. She wasn't talking a lot. You actually have to ask her the right questions."*

Students raised a key theme of variability among SPs in how they responded to different students.

*"I do know that between the different people who did it, there was variation. She responded to my questions more than she responded to other peoples' questions."*

While SPs do vary, this may also reflect students' lack of awareness of the instructions to SPs to reveal more information when asked open-ended questions and less when asked closed-ended questions. Students' impressions of the 1-minute feedback from the SPs also varied. One student felt the SP helped her to realize the importance of speaking in clear, basic terms.

*"The SP advised that even those questions that I thought were basic still need to be really, really basic and very clear. That was useful and that was something that I'll definitely take away."*

Another learned that it was appropriate to ask sensitive questions.

*"I learned from her that she didn't mind being asked about money or insurance or immigration status."*

Two students said the SP gave good feedback on what questions should have been asked and how to ask them. However, several students had neutral or negative comments about the SP feedback. This often focused on the idea that feedback was vaguely complimentary without providing specifics.

*"Um, it was fine. It was pretty, just pretty general, you know, like 'you made me feel comfortable' - that sort of thing."*

### CONCLUSION

Teaching and evaluating cultural competency skills are essential and challenging aspects of medical education. This study provides some valuable

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*Students appreciated the focus on a common clinical challenge (non-adherence) in a cross-cultural context, the realistic SPs, and the opportunity to practice thinking broadly about patient care.*

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lessons about the design and implementation of a cultural competence OSCE station. While we were pleased with the enthusiasm that most students expressed about the experience overall, we learned the most from their honest critique of the process.

We found that OSCE can be a powerful teaching tool for cultural competence education if used strategically. Students appreciated the focus on a common clinical challenge (non-adherence) in a cross-cultural context, the realistic SPs, and the opportunity to practice thinking broadly about patient care. However, several students voiced confusion with the complexity of the exercise, lack of clarity in the instructions, and feedback from faculty (eg, how much to focus on the medical issues versus sociocultural issues). A key lesson we learned was to avoid incorporating numerous cross-cultural issues into a single station. We recognized that standardized patients need careful training on when and how to disclose information about issues such as non-adherence, health beliefs, complementary/alternative practices, and literacy. We also learned that, unlike many standard OSCE stations, faculty should be adequately trained or experienced in cross-cultural communication to make this a meaningful learning experience.

To address these concerns from a logistical standpoint, we have since simplified the learning goals and clari-

fied the instructions. We created a faculty development program (including a two-hour session that focuses on the ccOSCE) as part of a broader effort to organize a cadre of 22 core faculty in culturally competent care. We instructed faculty to focus most feedback on students' ability to communicate and explore cross-cultural issues. We also plan to expand the students' cultural competence training prior to the OSCE to include practice sessions for cross-cultural interviewing.

Another concern with the ccOSCE station is its perceived separateness from the other stations and risk of promoting stereotypes. Here a tension exists between focusing on cultural competence skills in one dedicated station (allowing students to practice and receive specific feedback) versus emphasizing these skills in each station (avoiding the separateness of the station but making focused feedback more difficult). To address this tension we plan to integrate some cultural competence skills assessment into the other stations, while maintaining it as the primary focus of this particular station. We also plan to make this station's format more similar to the others and to hold sessions with students after the OSCE to avoid group-specific generalization. Educators should take special care when developing a ccOSCE experience to avoid marginalizing the topic of cultural competence.<sup>16</sup> Good faculty development, pre and post-OSCE discussions, and using cases that break stereotypes may help mitigate this effect. While the OSCE format is geared toward assessing very discreet and tangible history and physical examination skills, with careful planning it can be adapted to assess cultural competence skills.

Our study has several limitations. As a qualitative study with a small sample size, we cannot generalize our findings to all students at HMS or to other medical schools. Similarly, we cannot make statistical associations between student characteristics and their re-

sponses. Our conclusions are based on one cross-cultural case, and it is not clear how students would react to other cases with differing characteristics. Since this was a self-selected sample of students, with strong opinions about the ccOSCE (both positive and negative), they may have more knowledge about cultural competence and different perspectives than other students. However, the sample was well balanced in terms of ethnicity, sex, and self-perceived performance.

The student reflections in this study provide important lessons for educators interested in cultural competence training using OSCE. The study also raises important questions and challenges essential to the broader issue of how culturally competent care is taught. The use of OSCEs to teach and evaluate cross-cultural skills in medical education has great potential and deserves further study. Emphasizing these skills in a formal, evaluative exercise also sends a message to students and faculty about the value of cultural competence as an integral part of high-quality medical care.

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#### AUTHOR CONTRIBUTIONS

*Design concept of study:* Green, Miller, Krupat, White, Taylor, Hirsh, Wilson, Betancourt

## CULTURALLY COMPETENT CLINICAL EXAMINATIONS - Green et al

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### APPENDIX 1. AN OSCE STATION FOCUSING ON CROSS-CULTURAL INTERVIEWING SKILLS\*

Case summary (this paragraph is not provided to students)

*Mrs. Bonilla is a 56 year-old woman from the Dominican Republic with poorly controlled hypertension. She had been on various medications, but her blood pressure had remained high. She has not been adherent to her antihypertensive medication for several reasons—most importantly, she has a different understanding (explanatory model) of hypertension. She believes hypertension comes on only with stress and anxiety, when she feels her blood pressure rising. Accordingly, she takes the hypertension medication only when she feels she needs it. She often uses a medicinal herb tea from the local botanica instead of medication. She also has difficulty reading medication bottles and instructions due to a low literacy level both in English and Spanish.*

#### Student instructions

Setting: You are a second-year student working in a primary care clinic with your preceptor.

Patient: A 58-year-old woman who comes into her primary care clinic for a routine follow-up.

You learn from a quick review of the record that the patient's blood pressure has been difficult to control despite multiple medications. She's had a full medical work-up for secondary causes of hypertension and all tests were completely negative. Today she presents without major complaints, and has a blood pressure of 154/96 on right and 150/94 on left with a heart rate of 84.

You will:

- Take a concise but relevant history of all the details important to understanding why the patient's blood pressure is not controlled (8 minutes)
- Prepare oral presentation (2 minutes)
- Perform an oral presentation based on your findings from the history (4 minutes). The presentation is as if you were informing your preceptor of a patient you just saw in the clinic
- Answer a written question on the case (1 minute)
- Receive feedback (5 minutes)

\* Note: SPs complete communication skills evaluation sheet and faculty observers complete a checklist of students' performance. Students receive a report on their performance but this does not count toward their grade.

### APPENDIX 2. SEMI-STRUCTURED INTERVIEW GUIDE

Thanks very much for taking the time to give us some feedback on one of the OSCE stations. We are specifically interested in the

case of Sra. Bonilla and her difficult-to-control hypertension.

- 1) Please tell me what you thought was the essence of the case or some of the take-home points for this case.
- 2) More specifically, what would you say you personally 'took away' from this case? Perhaps some aspect of the case that might change the way you practice? That you found useful? What were the greatest challenges to do well on this particular case?  
What did you need to understand in order to do well on this case?
- 3) What do you think you did well in the station?
- 4) What were some of the difficulties you had with the station?
- 5) What did you think about the standardized patients?  
How realistic was the standardized patient?  
How useful was the SP feedback?  
How did the fact that the patient was bilingual affect your approach to the case?
- 6) What about the faculty feedback?  
How useful was the faculty feedback?  
Can you recall any specifics of this feedback? How was it delivered?
- 7) What did you think about the actual case?  
Did the case assess skills and knowledge you have learned prior to the OSCE?  
If so, specifically, what? Which skills?  
What kinds of knowledge?  
Do you remember what your impressions were of this patient and what was going on with her, prior to getting the feedback from the SP and faculty?
- 8) Any additional thoughts? Suggestions for improving the case and/or the station itself?