A goal of family medicine residencies is to prepare family physicians to provide effective care to patients from many cultural backgrounds. The Institute of Medicine defines optimal primary care as including “an understanding of the cultural belief systems that may assist or hinder effective health care delivery.” Similarly, demonstration of sensitivity and responsiveness to patients’ culture, age, and gender is part of the Accreditation Council for Graduate Medical Education (ACGME) competencies for residents.

Despite the accepted goal of culturally sensitive care, current medical training separates cultural sensitivity from clinical skills. A recent survey of family medicine residency programs revealed that only 28% had a formal diversity curriculum in place; the remaining 72% had either an informal curriculum or none at all.

A common approach to diversity education focuses on learning about specific ethnic and racial differences. Success with this time-intensive approach requires faculty expertise about a multitude of ethnic and racial groups and beliefs and focuses on information rather than skills. Moreover, despite the effort involved, it cannot be assumed that once a patient of a specific cultural group is understood that this information transfers to other patients. While there may be patterns of beliefs and common experiences within racial and ethnic groups, there are many layers that make each individual unique.

An alternative approach is promoting attitudes and skills that enable residents to work effectively with patients from any mix of cultural backgrounds. This approach is consistent with the suggestions of Kleinman et al to negotiate value and belief differences with each patient. A focus on cultural humility is a similar approach and is the basis of the diversity curriculum discussed in this paper.

**Cultural Humility**

Cultural humility is defined as a:

... process that requires humility as individuals continually engage in self-reflection and self-critique as lifelong learners and reflective practitioners, it requires humility in how physicians bring into check the power imbalances that exist in the dynamics of physı-
cian-patient communication by using patient-focused interviewing and care, and it is a process that requires humility to develop and maintain mutually respectful and dynamic partnerships with communities.11

The cultural humility approach enhances patient care by effectively weaving an attitude of learning about cultural differences into patient encounters. Additionally, this approach cultivates self-awareness by encouraging physicians to acknowledge the belief systems and cultural values they bring to patient encounters. Cultural humility is a promising approach that allows the physician to consciously be aware of culture and patient uniqueness during each visit. This awareness is key in providing culturally responsive health care.12 The humbleness it engenders enhances patient care as understanding of patient belief systems becomes integral to their health care.11

In this article, we present a diversity curriculum based on cultural humility. The curriculum encourages residents to identify their patterns of unintentional and intentional bias, while broadening acceptance of patients who present the largest challenges to the provider. Cultural humility becomes the foundation on which patient-focused interviewing is added as the next layer—a tool to illustrate the value of patient input in patient-physician interactions. The effectiveness of the curriculum was assessed, and results are reported.

Methods

The curriculum was implemented in a 6-6-6 community-based family medicine residency program. The goals and objectives of the curriculum are shown in Table 1. The 36-hour curriculum is taught over 1 year in monthly 3-hour sessions. Second-year residents participate as a group in participatory didactic and structured learning sessions facilitated by faculty physicians. Key faculty members facilitate the sessions, and a faculty development session helps prepare all faculty members. The series starts with a noon-hour kickoff for staff, residents, and faculty to hear a dynamic speaker and participate in diversity games. Over 2 years, 11 residents participated in the diversity curriculum. The study was approved by the hospital institutional review board.

Learning Activities

Participatory learning activities are listed in Table 2. These activities are designed to move residents beyond an intellectual discussion of diversity into deeper, more-meaningful sharing and self-exploration. The basis of all activities was a teaching methodology in which activities were selected that allowed residents to see the world through the eyes of a patient, which in turn provides the opportunity to increase residents’ awareness and empathy. Cultural humility is woven into each activity by either exposure to a different belief system or exploration of one’s own beliefs. More infor-

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Corresponding Learning Objective(s)</th>
<th>Average Resident Satisfaction Rating (Scale of 1=low to 3=high)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to curriculum</td>
<td>1, 2</td>
<td>2.3</td>
</tr>
<tr>
<td>Bafa Bafa game</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kickoff—guest speaker</td>
<td>1, 4</td>
<td>3.0</td>
</tr>
<tr>
<td>Diversity Bingo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gay, lesbian, bisexual, transgender panel</td>
<td>1, 2</td>
<td>2.7</td>
</tr>
<tr>
<td>Interdenominational panel</td>
<td>1, 2</td>
<td>3.0</td>
</tr>
<tr>
<td>Book discussion</td>
<td>1, 2, 3</td>
<td>2.5</td>
</tr>
<tr>
<td>Privilege and Being an Ally presentation</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Simulated patients</td>
<td>1, 2, 3</td>
<td>2.0</td>
</tr>
<tr>
<td>The Color of Fear™ video</td>
<td>1, 2</td>
<td>2.8</td>
</tr>
<tr>
<td>Home visits</td>
<td>1, 2</td>
<td>3.0</td>
</tr>
<tr>
<td>Culture of local seniors</td>
<td>1, 2</td>
<td>3.0</td>
</tr>
<tr>
<td>Patient interviewing</td>
<td>3</td>
<td>2.4</td>
</tr>
<tr>
<td>Unannounced simulated patients</td>
<td>3</td>
<td>—</td>
</tr>
<tr>
<td>Humanities</td>
<td>4</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Table 1
Curriculum Goals and Objectives

Curriculum goals:
1. To increase resident awareness of the beliefs, values, and biases that she/he brings into each patient encounter.
2. To increase residents’ abilities to interact effectively with individuals different than themselves.

Curriculum learning objectives:
1. Demonstrate awareness of individual patient’s culture and unique beliefs.
2. Demonstrate empathy in interactions with underserved patients to create a sense of partnership.
3. Facilitate participatory decision making with patients.
4. Define one’s own background, culture, beliefs, and values and the impact these factors may have on interactions with patients.
information about the learning activities is available at our residency’s Web site (www.fortcollinsresidency.com).

**Panel Presentations.** Two panel groups per year are selected based on residents’ requests. Panelists describe their belief systems and the effect on health care decisions. These volunteers present information, followed by an informal question and answer period. Examples of panels requested in the past 2 years are patients of the Islamic faith, gay/lesbian/bisexual/transgender (GLBT) individuals, and an interdenominational panel.

**Home Visits.** A powerful tool to develop deeper understanding of patients’ cultural context is a home visit. The goal of the visit is to talk to patients about their daily life in their own environment. By structuring the visit to be nonmedical, the patient is the “expert,” and the physician is the learner. This type of visit allows the resident to see the patient as a complete person.

Homes can be selected based on resident preference or with staff input. For example, one home visited was a low-income single mother, and another home visit was to a conservative Muslim family. Two residents and a faculty member visit each home for 1 hour. Following the visit, residents return to the clinic to debrief experiences in a 30-minute discussion. Faculty members facilitate the discussion and connect observations made in the home to potential effects on working with patients.

**Book Discussion.** Another teaching method used is a book discussion model. Review of The Spirit Catches You and You Fall Down,13 a description of the cultural conflicts around a Hmong child and her medical caretakers, allows discussion on the interface of culture and medical care.

Three 1.5-hour discussion sessions are scheduled 1 month apart. Specific chapters are assigned, focusing on segments of the book that best illustrate divergent belief systems, lack of sensitivity, and the influence on medical care. These guided discussions lead naturally to sharing personal experiences.

**Video Discussion.** Residents watch The Color of Fear14 video, which is an inside look at an intense men’s group discussion about the underlying feelings, causes, and fears of racism. The video stimulates dialogue about highly charged topics of discrimination and racism and serves as a launching point to talk about personal feelings, values, and experiences in this arena.

**Relationship-centered Interview Training.** A core aspect of the curriculum is designed to enhance physicians’ interpersonal skills consistent with cultural humility. Six skills (Table 3) are presented to residents, along with evidence supporting their effectiveness. Residents then observe a training video of resident interactions with actual patients, demonstrating the six interviewing skills.

**Simulated Patients.** The goals of the simulated patient sessions are to (1) enhance cultural humility by improving relationship-centered interviewing skills and (2) provide feedback in a supportive environment. Actors portray patients who have been identified by residents as challenging. Cases were created to highlight diversity of ethnicity (a Spanish-speaking patient), religion (a Muslim couple), age (elderly male), body habitus (obese patient), emotional stability (borderline personality disorder), and drug-seeking behavior.

Each resident participates in three scenarios, which are observed from a remote site on a closed-circuit display by a faculty member and one or two of the resident’s peers. The simulated patient assesses resident performance on the six target skills (Table 3), with each resident receiving a rating of “absent,” “partial,” or “complete” on his or her performance with the six skills. A faculty member facilitates the discussion between the actor and the resident.

Residents have the option of an unannounced simulated patient in their routine clinic schedule. This requires assistance from the clinic supervisor to create an artificial patient account for medical records, billing, and insurance purposes. Additionally, a fictitious patient name is written into the clinic schedule directly after the unannounced simulated patient to allow time for feedback and discussion. A faculty member facilitates the feedback between the actor and resident physician.

**Culture of Local Seniors.** To provide exposure to healthy, functional elders, a session is composed of site visits to three community agencies. The site visits and faculty-led discussions are designed to identify tendencies toward ageism.

**Teaching With Humanities.** Humanities are integrated into the curriculum to encourage self-reflection and self-disclosure among residents. Activities include collage creation, listening to music, and reflective writing activities and tend to reveal aspects of self not easily accessed through typical reading and verbal discussion.

**Curriculum Evaluation**

To assess the effect of the curriculum, data were obtained from trained observers, simulated patients, and residents. Observational data were collected by videotaping 20 patient visits for each resident, 10 at the beginning and 10 at the end of their second year of residency. Interviews were video recorded, with patient consent, during routine clinic visits.
Feedback from simulated patients provided a second evaluation method. Residents conducted up to five simulated patient interviews. The simulated patients rated the resident using a 3-point scale (absent, partial, complete) on the six interviewing skills listed in Table 3.

At the beginning and end of the yearlong curriculum, residents were interviewed about their biases and difficulties working with patients of diverse backgrounds. Residents also completed a checklist requiring them to identify patient types with whom they recognized a level of discomfort. After residents identified the type of patient with whom they felt least comfortable, they completed a Q-sort activity to designate level of intensity of their feelings. The activity involved placing adjectives on a continuum from “The most accurate description of how I feel about this patient” to “The least accurate description of how I feel about this patient.” Residents repeated the interview and Q-sort activity after participating in the curricular activities, using the same target population. The pre- and post-curriculum data allowed change to be measured.

Data Analysis
Videotaped patient visits were reviewed by a trained research assistant. Each of the six interview skills (Table 3) were rated absent, partial, or complete. These scores were quantified as 0, 1, and 2, respectively, and analyzed using SPSS Version 11.5 for Windows. Wilcoxon signed rank tests were done to compare resident performance pre- and post-curriculum data. To assess interrater reliability, 27 of the 220 interviews were randomly selected and coded by a second observer.

Data from the Q-sort activity were analyzed using PQMethod, a free statistical program designed to meet the requirements of Q studies (available at www.qmethod.org). Both pre- and post-curriculum responses to the sorting activity were analyzed using the factor analytic process provided by the software.

Results
Ratings of the videotaped office visits indicated that residents improved in three areas. After the curriculum, residents were more likely to involve patients in agenda setting (Z=3.187, P=.001), to solicit patient perceptions related to their illness (Z=-2.240, P=.025), and to involve the patient in decision making (Z=-6.293, P<.001). Residents also increased their awareness of the patient’s context, but this change was not significant (P>.05). Interrater reliability of the coded office visits was 76%, indicating moderately high agreement.

The second data source was simulated patient ratings of resident performance of the six target interviewing skills. Announced simulated patients’ ratings showed that 55.8% of the ratings across all residents and all areas of competency were rated “complete” (highest rating), 43.6% were rated “partial,” and 0.6% received an absent rating. In the six unannounced simulated patient visits, ratings were 100% “complete.”

Resident ratings of the learning activities were positive (Table 2). The mean rating of the learning value of the 12 sessions on a 1 (low) to 3 (high) scale was 2.54.

Comparison of pre- and post-curriculum results on the Q-sort activity showed no significant change in resident-perceived ability to work with specific patients previously rated as difficult.

Discussion
The curriculum was designed to make a difference in the exam room. The outcome measures provide modest support that the curriculum was effective in changing resident behavior. Following the educational experience, residents were more likely to seek the patient’s perspective and to include the patient in decision making. These changes are consistent with the cultural humility approach—involving the patient as a partner.

A strength of this project was the collection of baseline and post-intervention data in the exam room. Outcome measures of most studies of diversity training are limited to participant self-report. In our study, we used announced and unannounced simulated patients, and residents’ behavior with these simulated patients was consistent with the behavior changes observed in the videotaped office visits with actual patients. Despite changes in observed behaviors, however, resident self-ratings did not show change. This result may be due to lack of sensitivity of the instrument. It is also plausible that residents did not perceive a change in their ability to care for patient groups found to be personally challenging.

In retrospect, residents appeared more engaged in the curriculum when they provided input into learning activities, such as selecting topics for panel discussions and suggesting families to host home visits. Similarly, during post-activity group discussions, the learning points derived from reflection about personal experiences seemed particularly meaningful to residents. Through structured participatory learning activities

Table 3

<table>
<thead>
<tr>
<th>Interviewing Skills Rated</th>
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<tbody>
<tr>
<td>1. Establishing rapport</td>
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<tr>
<td>2. Clarifying patient’s agenda</td>
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<tr>
<td>3. Addressing emotions of patient and family members present</td>
</tr>
<tr>
<td>4. Understanding patient’s perceptions of illness or problem</td>
</tr>
<tr>
<td>5. Involving patient in decision making</td>
</tr>
<tr>
<td>6. Awareness of patient’s context</td>
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</table>
followed by self-reflection and discussion, many of the learning points were generated by residents. In a sense, faculty facilitators were modeling the humility that is the core of the curriculum. No formal assessment was attempted to verify that a conscious effort to model humility in teaching was a more-effective approach. Our formal observations, however, suggest that a structured but participatory curriculum ensures consistency over time in achieving the educational objectives while increasing resident interest and creating meaningful outcomes.

Our curriculum differs from a cultural competence model in that greater emphasis is placed on physician self-awareness and on a relationship-centered approach and less on distinguishing characteristics of various ethnic groups. The curriculum could easily be tailored to include more information about specific cultural groups. While additional information may increase residents' sensitivity to group differences, teachers and learners must remain aware of the risk of making inaccurate assumptions about individual patients within cultural groups. Gaining normative information about cultural groups may unintentionally reinforce the physician’s role as a “knower” rather than “learner,” diminishing the openness to individual differences implicit in cultural humility. By integrating the concept of cultural humility into the curriculum, educators can enhance residents’ ability to provide care that is both culturally sensitive and culturally competent.

We believe that three elements contributed to the success of the curriculum. The development and implementation of the curriculum were time-intensive efforts. Two grant-funded staff members worked full-time on grant implementation, coordination, and evaluation. Second, protected time in the schedule was necessary, and the structured learning sessions were critical to success. Third, it was important that faculty facilitators remained sensitive to resident experience, modeling humility while interacting with learners.

Limitations

Several limitations of this study deserve comment. The lack of a control group leaves open the possibility that behavioral change could be the result of factors beyond the curriculum, and the small sample size limits generalizability of results. There was also no delayed measure of resident performance (such as in year 3) to see if changes in behavior persisted. Finally, since the curriculum is composed of varied activities, it cannot be determined if the observed changes were due to specific elements or the combined effect of all 12 sessions.

The curriculum itself also has limitations. Due to limited time available with residents, it was necessary to select certain patient populations on which to focus the participatory learning activities. Other programs might also choose to increase depth of focus and include just one or two patient populations in all learning activities. Improvements might include making the unannounced simulated patient experience mandatory, increasing the number of home visits, or increasing the number of panel presentations to allow more focus on specific topics.

Conclusions

Our effort to transform the concept of cultural humility into an educational curriculum showed promising results. The learning activities were well received by residents (Table 2). Following the curriculum, residents were more likely to seek patients’ perceptions of problems and involve them in decisions. Efforts to assess residents’ attitudes and awareness of their own biases proved more elusive. Additional studies are needed to evaluate the potential value of integrating cultural humility with specific knowledge about particular cultural groups, to identify valid methods to assess cultural humility, to assess patient perceptions of providers who practice cultural humility, and, ultimately, to evaluate whether cultural humility affects patient outcomes.

Teaching residents to be culturally humble providers requires less emphasis on knowledge and greater emphasis on fostering self-awareness, interpersonal sensitivity, and an attitude of openness and learning from patients. We believe the concept is consistent with the values of the Future of Family Medicine project and warrants further study and application.

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