A Prescription for Cultural Competence in Medical Education

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Cultural competence programs have proliferated in U.S. medical schools in response to increasing national diversity, as well as mandates from accrediting bodies. Although such training programs share common goals of improving physician-patient communication and reducing health disparities, they often differ in their content, emphasis, setting, and duration. Moreover, training in cross-cultural medicine may be absent from students' clinical rotations, when it might be most relevant and memorable. In this article, the authors recommend a number of elements to strengthen cultural competency education in medical schools. This "prescription for cultural competence" is intended to promote an active and integrated approach to multicultural issues throughout medical school training.

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M edical education has witnessed a steady increase in efforts to train physicians to provide high-quality, culturally competent care. Training in cultural competence has risen to the forefront of medical education in part because the United States is becoming increasingly diverse. Ethnic minorities now comprise about 30% of the population, and demographic trends show that they will become the majority by the year 2050. 1,2 In addition, greater appreciation exists for the impact of culture on health care and health disparities.^{3,4} Health seeking behaviors are affected by cultural mores. Some patients may delay seeking care due to perceived cultural insensitivity,5 concern that they will receive a lower quality of care, 6 or the perception that they have been treated unfairly because of race or ethnic background. 7,8 Furthermore, health disparities have been widely recognized, with racial differences in treatment persisting after adjustment for insurance status, income level, and health status. 9-13

Published research suggests cultural competence may improve physician-patient communication and collaboration, increase patient satisfaction, and enhance adherence, thereby improving clinical outcomes and reducing health disparities. 3.4.7.8.14-18 The Liaison Committee for Medical Education and the Accreditation Council for Graduate Medical Education emphasize the need for training in cultural competence in medical schools and other post-graduate programs. 19,20 Their call to action is bolstered by the U.S. Department of Health and Human Services National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health Care, which provides a framework for implementing culturally and linguistically competent health services. 21

Despite the availability of guidelines and model programs, 22 not all cultural competence education is effective in improving the attitudes and skills of health professionals. 14,23 In this manuscript, we describe current approaches to cultural

competence education. Based on features of successful programs and drawing on established educational principles, we propose several elements that may improve cultural competence training in medical education.

Current Approaches to Cultural Competence Education

Conceptual Approach. Three major conceptual approaches have emerged for teaching cultural competence, focusing on knowledge, attitudes, and skills, respectively.24 Knowledgebased programs (the multicultural/categorical approach) focus on information, such as definitions about culture and related concepts, social determinants of health, and variations in disease incidence and prevalence. These programs may also identify common ethno-medical beliefs and practices thought to influence the patient-physician relationship and medical outcomes. Attitude-based curricula (the cultural sensitivity/awareness approach) seek to improve provider awareness of the impact of socio-cultural factors on patients' values and behaviors and how these factors may ultimately impact clinical outcomes. These curricula often use self-reflection and explore issues of bias, racism, and gender disparities. Skill-building educational programs (the cross-cultural approach) focus on learning communication skills, such as how to elicit the patient's explanatory model of illness and social context, and how to use an interpreter or cultural liaison. These skills are applied to negotiate the patient's participation in decisions and treatment.

Training Format. Different components of cultural competence can be taught through classroom lectures, workshops, electives, standardized patient exercises, clinical clerkships, language training, immersion programs, and other interactive exercises. Most training occurs during the first or second years of medical school, commonly in a case-based or didactic format. However, schools generally dedicate only a small portion of their curricular time to discussion of cultural competence as it relates to patient care. 14

Moreover, little attention is given to cross-cultural issues during students' clinical rotations, 5 a time when students have a valuable opportunity to experience, practice, and internalize multicultural communication skills.

While one large survey noted that cultural competence education is generally incorporated into larger courses, ⁵ it is unclear to what extent schools have succeeded in integrating cultural competence into the overall curriculum. Cultural competence training appears to primarily occur in the form of an occasional lecture, case study, or workshop. ^{5,25}

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Evidence of Impact. There is currently no consensus on how cultural competence should be taught in medical school curricula, and therefore considerable variability exists in the design and implementation of cross-cultural education. Emerging evidence shows that many of these varied cultural competence interventions can have an impact on the knowledge, attitudes, and skills of health professionals, as well as on patient satisfaction. ^{14,27} However, there is limited evidence demonstrating that the current models of education lend themselves to positive outcomes and implementation in clinical practice. ²⁸ In fact, 20% to 25% of recent medical school graduates feel unprepared to provide specific components of cross-cultural care. ²⁹

Prescription for Success in Cultural Competence Education

 $\it l.$ Teach Practical Skills. Cultural competence programs have traditionally followed a knowledge-based approach. $\it l.^{24}$ Such curricula often include lists of preferred words, images, or approaches for treating minority groups, portraying each group as having particular values, beliefs, and behaviors based on culture. This oversimplified practice fails to acknowledge diversity within groups and emphasizes differences between groups, potentially reinforcing stereotyping behavior. $\it l.^{14}$

Instead, cultural competence programs should acknowledge heterogeneity within cultural groups and teach medical trainees how to apply knowledge of socio-cultural issues at the individual level. Even within a family unit, clinicians find different behavioral patterns and health beliefs, based on individual experiences, preferences, and acculturation level. 30,31 Skills that are generalizable across patients and cultures include the ability to elicit an individual's perceptions of health and illness, as well as his or her explanatory model and preferences for treatment. Berlin and Fowkes' LEARN guideline provides a framework for this interaction, suggesting that physicians listen to the patient's perception of the problem, explain their own opinion, acknowledge and discuss differences and similarities, recommend treatment, and negotiate an agreement.³² Kleinman's questions for eliciting a patient's explanatory model of illness also serve as a useful guide.³ A third framework, RISK, calls on clinicians to assess a patient's Resources, Identity, Skills, and Knowledge to gain a better understanding of the level of cultural influence on an individual patient's perceptions and behaviors.33

2. Use Interactive Educational Methods, Such as Standardized Patient Encounters, Role-play, and Self-reflective Journal Assignments. In order to effectively teach practical skills, it is important to use interactive educational methods that correspond with principles of adult learning. Standardized patient encounters using patient actors can create realistic clinical scenarios in which students and residents may practice new communication skills and receive direct feedback from the trained actor. Role-play exercises serve a similar purpose. During role-play, the opportunity to provide feedback to a colleague may give trainees more insight into their own behaviors. Finally, narrative writing helps trainees openly reflect on their own values, beliefs, and biases, 37,38 and encourages them to consider their personal experiences with prejudice, discrimination, challenging patient encounters,

and prior mistakes. 39 This exercise could help facilitate attitude change and promote awareness.

- 3. Provide Direct Faculty Observation and Feedback. In addition to trainees receiving feedback from standardized patients and their peers, direct observation and feedback from faculty members who have cultural competence training can provide a memorable and useful experience. An individual's culture is shaped by innumerable elements such as education, religion, economic status, immigration history, age, and places traveled.³³ Therefore, a teachable moment in cultural competence may exist in virtually any physician-patient interaction. 40 For example, a clinic preceptor could provide feedback on the student's ability to perform one of the skills described above, such as eliciting the patient's understanding of the illness etiology. 3 Alternatively, a faculty physician could review with the trainee a videotape of the trainee's standardized patient encounter, an actual patient encounter, or a prerecorded trigger tape.41-44
- 4. Discuss Cultural Competence Throughout Clinical Education, Rather Than in Isolated Workshops. Becoming culturally competent is a complex, life-long process. However, most cultural competence education for medical students has a total contact time of less than 1 week, ¹⁴ a duration that is unlikely to lead to long-term behavior change. ⁴⁵ To reinforce culturally-relevant knowledge and skills, cultural competence training should be infused throughout students' clinical education. There are many opportunities to discuss cultural issues with our learners. Whether treating a patient from another culture or simply one who does not share the Western biomedical view of disease, the discussion during medical rounds should be broad and include the patient's cultural background and its impact on disease and health behavior, in addition to teaching about pathophysiology and management.
- 5. Get Buy-in From the Top. The Liason Committee on Medical Education requires that medical school "faculty and students must demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments."19 On these grounds, seeking the support of medical school deans and a commitment from course directors to formal cultural competence training will facilitate complete integration of cultural competence training in medical education. Such a partnership has been formed at some institutions. At Wake Forest School of Medicine, for example, the Dean of Medical Education created a Cultural Competency Theme Team (CCTT), which is composed of individuals who direct curriculum components. The CCTT is charged with integrating culturally relevant activities throughout the 4 years of medical education.²⁷

In order to serve as effective partners and advocates, some top-level administrators and educators themselves may benefit from core cultural competence training, particularly if they attended medical school within the context of a less diverse society. Their personal participation will also deliver the message that cultural competence education is important. The American College of Physicians supports cultural training for health care providers and administrators at all levels. ⁴⁶ If medical schools plan to shape the practices of future physicians within the context of cultural competence, it is of vital importance for the medical profession to reassess traditionally

conceived values, beliefs, and biases, which may not be in agreement with current social diversity.

6. Promote Cultural Diversity Among Medical Students and at All Levels of the Medical School Faculty. The diversity of the U.S. population is not reflected in the composition of the student body or faculty at most medical schools, or in the community of practicing physicians. Although minority groups comprise 30% of the U.S. population, only 13% of medical students, 6% of practicing physicians, and 3% of medical school faculty are members of an underrepresented minority group. 47-50 Minority faculty are less likely to be promoted, 51 and less than 2% of senior leaders in health care management are nonwhite. 52 Such lack of diversity in the health care workforce and leadership may limit the ability of health care systems to adapt to the changing demands of an increasingly diverse population.⁵⁰ Racial discordance between physician and patient is also associated with lower patient satisfaction and less participatory clinical interactions.⁵³

Efforts to promote diversity among health care providers should begin early and occur at many levels. Physicians can play an important role by serving as role models for minority students who may consider a career in medicine, and medical schools must continue recruiting diverse student bodies. Societal efforts are also needed to improve the education of minority students at all stages of schooling.

Although minority physicians provide a disproportionate amount of care to underserved populations, ^{54–56} it should be noted that they are not necessarily more culturally competent than the majority group. Therefore, while it is important to increase the diversity of medical schools and health care systems, minority physicians should also receive cultural competency training in order to maximize their ability to relate to patients of a different background. Cultural competence training is for everyone regardless of cultural background.

7. Involve an "Opinion Leader" as the Physician Champion.

According to the diffusion of innovations theory, innovation is communicated over time, through particular channels, among the members of a social system. ⁵⁷ This theory predicts that the uptake of cultural competence education will follow an S-shaped curve, spreading in sequence through groups of individuals categorized as innovators, early adopters, early majority, late majority, or laggards. ⁵⁷ Opinion leaders comprise a key segment of the early adopters group. An opinion leader is an educationally influential colleague who models appropriate behaviors. ⁵⁸ The social influences model of behavior change suggests that an opinion leader plays a vital role in the diffusion of the educational program to the larger community, by lending credibility and serving as a physician champion. ^{59,60}

In cultural competence education, while it is often a minority faculty member who plays the role of a physician champion, it may actually be more difficult for a single minority instructor to try to convince a majority group of the topic's importance. He or she may not be seen as an opinion leader, but rather as someone with a personal agenda or an advocate for a particular group. In cases where the primary champion of cultural competence education is a minority physician and that individual is not widely seen as an opinion leader, it may be helpful to include additional minority faculty or an influential member of the majority racial/ethnic group. Such a strategy should help appropriately sanction the activity and speed its dissemination.

8. Develop a Cadre of Dedicated Faculty. To augment the efforts of the physician champion(s), training an additional group of faculty in cultural competence will begin to build an "early majority" of supporters. This group is critical for the spread of new programs beyond the early adopters. ⁵⁷ As noted above, cultural competence education should not take place only in workshops, and the teaching should not be done by 1 or 2 physician champions alone. In addition, by equipping an early majority of committed faculty physicians with the skills necessary to routinely discuss multicultural issues as part of patient care, teachable moments around culture will be explored more often. The regular discussion of cultural issues during rounds will influence the "hidden curriculum," the informal part of medical education delivered through role modeling and other sometimes subconscious activities. ^{61,62}

9. Make it a "Real Science." Training in cross-cultural communication may be viewed as a "soft-science," where discussions of explanatory models and empathy contrast against the fact-oriented majority of medical education.²⁴ To satisfy medical trainees' demand for scientific evidence, curricula should emphasize the wealth of research on health disparities, the importance of culture in patient care, and the demonstrated value of cultural competence education. 14,28,63,64 A recent systematic review by Beach et al. 14 concluded that cultural competence education improves the knowledge, attitudes, and skills of health professionals, as well as patient satisfaction. However, little consistency exists among training programs, and it is difficult to conclude what method and duration of training is most effective. Evaluation studies are often limited to a single institution, with homogenous learner populations and unique evaluation strategies. As the field moves forward, multicenter studies using standardized and validated measures will be critical to more fully assess the impact of training on physician's attitudes, skills, and knowledge, as well as the effect of newly acquired skills on patient outcomes. 14,27,65,66

In this respect, it is important that programs in cultural competence include an evaluation component. Several appropriate methods are available to demonstrate the impact of curricula on physician-patient communication and other processes of care, such as pretest and posttest evaluations, Objective Structured Clinical Exams (OSCE), and videotaped or audio-taped clinical encounters. Attempts to rigorously evaluate the effectiveness of these programs will, expectantly, lead to a consensus regarding core concepts as well as a standardized approach to instruction. However, many in the field believe it is also important not to hold cultural competence curricula to unfair evaluation standards. Much of what is standard in undergraduate medical education has no proven link to improved health outcomes. 14

Conclusion

This prescription for cultural competence calls for a more active approach, integrated across all levels of medical education. Our recommendations are founded in adult learning theory and the diffusion of innovations model and are concordant with other published guides. ^{24,46,67–69} Though it may be more challenging to implement multilevel curricula, achieve support from senior administrators, and tap the hidden curriculum, this approach is more likely to yield long-term results than are isolated workshops. As the field continues to move

forward, outcomes-based research efforts will be essential in determining the value of these strategies and others as we seek to improve health care and reduce health disparities.

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REFERENCES

- Resident population estimates for the US by sex, race, and Hispanic origin: April 1, 1990 to July 1, 1999, with short-term projection to November 1, 2000. Available at: http://www.census.gov/population/ estimates/nation/intfile3-1.txt. Accessed October 28, 2005.
- Projections of the resident populations by race, Hispanic origin, and nativity: middle series, 2016 to 2020. Available at: http://www.census. gov/population/projections/nation/summary/np-t5-e.txt. Accessed October 18, 2005.
- Kleinman A, Eisenberg L, Good B. Culture, illness, and care: clinical lessons from anthropologic and cross-cultural research. Ann Intern Med. 1978:88:251–8.
- Pachter LM. Culture and clinical care. Folk illness beliefs and behaviors and their implications for health care delivery. JAMA. 1994;271:690–4.
- Flores G, Gee D, Kastner B. The teaching of cultural issues in U.S. and Canadian medical schools. Acad Med. 2000;75:451–5.
- Race, ethnicity and medical care: a survey of public perceptions and experience. Available at: http://www.kff.org/minorityhealth/1529index.cfm. Accessed October 18, 2005.
- Borkan JM, Neher JO. A developmental model of ethnosensitivity in family practice training. Fam Med. 1991;23:212-7.
- Carrese J, Rhodes L. Bridging cultural differences in medical practice.
 The case of discussing negative information with Navajo patients. J Gen Intern Med. 2000: 15:92-6.
- Bach PB, Cramer LD, Warren JL, Begg CB. Racial differences in the treatment of early-stage lung cancer. N Engl J Med. 1999;341:1198–205.
- Canto JG, Allison JJ, Kiefe CI, et al. Relation of race and sex to the use of reperfusion therapy in medicare beneficiaries with acute myocardial infarction. N Engl J Med. 2000;342:1094–100.
- Schulman KA, Berlin JA, Harless W, et al. The effect of race and sex on physicians' recommendations for cardiac catheterization. N Engl J Med. 1999;340:618–26.
- Trivedi AN, Zaslavsky AM, Schneider EC, Ayanian JZ. Trends in the quality of care and racial disparities in Medicare managed care. N Engl J Med. 2005;353:692–700.
- Ayanian JZ, Cleary PD, Weissman JS, Epstein AM. The effect of patients' preferences on racial differences in access to renal transplantation. N Engl J Med. 1999;341:1661–9.
- Beach MC, Price E, Gary TL, et al. Cultural competence: a systematic review of health care provider educational interventions. Med Care. 2005;43:356-73.
- Carrillo JE, Green AR, Betancourt JR. Cross-cultural primary care: a patient-based approach. Ann Intern Med. 1999;130:829–34.
- $16. \ \textbf{Day TW.} \ Cross-cultural \ medicine \ at \ home. \ Minn \ Med. \ 1992; 75:15-7.$
- Riffenburgh RS. Communication in cross-cultural medicine practice. West Med Med J West. 1966;7:320-2.
- Brach C, Fraser I. Can cultural competency reduce racial and ethnic health disparities? A review and conceptual model. Med Care Res Rev. 2000;57(suppl):181–217.
- Liason Committee on Medical Education. Full text of LCME Accreditation Standards. Available at: http://www.lcme.org/stnd-text.htm#educationalprogram. Accessed October 18, 2005.
- Accreditation Council on Graduate Medical Education. ACGME Outcome Project. Available at: http://www.acgme.org/outcome/comp/compFull.asp. Accessed October 18, 2005.
- 21. U.S. Department of Health and Human Services: Office of Minority Health. National standards for culturally and linguistically appropriate

- services in health care. Available at: http://www.omhrc.gov/omh/programs/2pgprograms/finalreport.pdf. Accessed October 18, 2005.
- Promoting, reinforcing, and improving medical education (PRIME) culture and diversity curriculum. Available at: http://www.amsa.org/ programs/diversitycurriculum.cfm. Accessed October 18, 2005.
- 23. Beagan BL. Teaching social and cultural awareness to medical students: "it's all very nice to talk about it in theory, but ultimately it makes no difference." Acad Med. 2003;78:605–14.
- 24. **Betancourt JR.** Cross-cultural medical education: conceptual approaches and frameworks for evaluation. Acad Med. 2003;78:560–9.
- Loudon RF, Anderson PM, Gill PS, Greenfield SM. Educating medical students for work in culturally diverse societies. JAMA. 1999;282: 875–80.
- 26. Furman G, Dent MM. Seamless learning: incorporating cultural competency into the curriculum. Cultural Competency in Medical Education: A Guidebook for Schools: Department of Health and Human Services; 2004.
- Crandall SJ, George G, Marion G, Davis S. Applying theory to the design of cultural competency training for medical students: a case study. Acad Med. 2003;78:588–94.
- Anderson LM, Scrimshaw SC, Fullilove MT, Fielding JE, Normand J.
 Task Force on Community Preventive Services. Culturally competent healthcare systems. A systematic review. Am J Prev Med. 2003;24 (suppl):68–79.
- Weissman JS, Betancourt J, Campbell EG, et al. Resident physicians' preparedness to provide cross-cultural care. JAMA. 2005;294:1058–67.
- Hunt LM, Schneider S, Comer B. Should "acculturation" be a variable in health research? A critical review of research on US Hispanics. Soc Sci Med. 2004:59:973–86.
- Salant T, Lauderdale DS. Measuring culture: a critical review of acculturation and health in Asian immigrant populations. Soc Sci Med. 2003;57:71–90.
- Berlin EA, Fowkes WC Jr. A teaching framework for cross-cultural health care. Application in family practice. West J Med. 1983;139:934–8.
- Kagawa-Singer M, Kassim-Lakha S. A strategy to reduce cross-cultural miscommunication and increase the likelihood of improving health outcomes. Acad Med. 2003;27:577–87.
- Knowles M. The Adult Learner: A Neglected Species. Houston: Gulf Publishing Co.; 1973.
- Colliver JA, Swartz MH. Assessing clinical performance with standardized patients. JAMA. 1997;278:790–1.
- Wearne S. Role play and medical education. Aust Fam Physician. 2004;33:858.
- DasGupta S, Charon R. Personal illness narratives: using reflective writing to teach empathy. Acad Med. 2004;79:351–6.
- Yamada S, Maskarinec GG, Greene GA, Bauman KA. Family narratives, culture, and patient-centered medicine. Fam Med. 2003;35: 279–83.
- Erwin DO, Henry-Tillman RS, Thomas BR. A qualitative study of the experiences of one group of African Americans in pursuit of a career in academic medicine. J Natl Med Assoc. 2002;94:802–12.
- Bowling JR. Clinical teaching in the ambulatory care setting: how to capture the teachable moment. J Am Osteopath Assoc. 1993;93:235–9.
- King DE, Blue A, Mallin R, Thiedke C. Implementation and assessment of a spiritual history taking curriculum in the first year of medical school. Teach Learn Med. 2004;16:64–8.
- 42. **Morell VW, Sharp PC, Crandall SJ.** Creating student awareness to improve cultural competence: creating the critical incident. Med Teach. 2002;24:532–4.
- Rabinowitz D, Melzer-Geva M, Ber R. Teaching the cultural dimensions of the patient-physician relationship: a novel approach using didactic trigger films. Med Teach. 2002;24:181-5.
- 44. **Grainger-Monsen M, Haslett J.** World's Apart: A Four-part Series on Cross-cultural Healthcare. Boston, MA: Fanlight Productions; 2003.
- Engler CM, Saltzman GA, Walker ML, Wolf FM. Medical student acquisition and retention of communication and interviewing skills. J Med Educ. 1981;56:572–9.
- Groman R, Ginsburg J, American College of Physicians. Racial and ethnic disparities in health care: a position paper of the American College of Physicians. Ann Intern Med. 2004;141:226–32.
- American Association of Medical Colleges. Minorities in Medical Education: Facts and Figures 2005. Washington, DC: American Association of Medical Colleges; 2005.
- Barzansky B, Etzel SI. Educational programs in US medical schools, 2001–2002, JAMA, 2002;288:1067–72.

- Collins KS, Hall A, Neuhaus C. U.S. Minority Health: A Chartbook. New York: The Commonwealth Fund; 1999.
- 50. Betancourt JR, Green AR, Carrillo JE, Ananeh-Firempong O II. Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. Public Health Rep. 2003;118:293–302.
- Fang D, Moy E, Colburn L, Hurley J. Racial and ethnic disparities in faculty promotion in academic medicine. JAMA. 2000;284:1085–92.
- Evans RM. Increasing minority representation in health care management. Health Forum J. 1999:42:22.
- Cooper-Patrick L, Gallo JJ, Gonzales J, et al. Race, gender, and partnership in the patient-physician relationship. JAMA. 1999;282:583–9.
- Brotherton SE, Stoddard JJ, Tang SS. Minority and nonminority pediatricians' care of minority and poor children. Arch Pediatr Adolesc Med. 2000;154:912–7.
- 55. Komaromy M, Grumbach K, Dake M, et al. The role of Black and Hispanic physicians in providing health care for underserved populations. N Engl J Med. 1996;334:1305–10.
- Moy E, Bartman BA. Physician race and care of minority and medically indigent patients. JAMA. 1995;273:1515–20.
- 57. Rogers E. Diffusion of Innovations. New York: Free Press; 1983.
- 58. Hiss R, MacDonald R, David W. Identification of physician educational influentials in small community hospitals. Paper presented at the Seventeenth Annual Conference on Research in Medical Education, 1978; Washington, DC.
- Borbas C, Morris N, McLaughlin B, Asinger R, Gobel F. The role of clinical opinion leaders in guideline implementation and quality improvement. Chest. 2000;118(suppl):248–32S.

- 60. Thomson O'Brien MA, Oxman AD, Haynes RB, Davis DA, Freemantle N, Harvey EL. Local opinion leaders: effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews. 2005:4.
- Turbes S, Krebs E, Axtell S. The hidden curriculum in multicultural medical education: the role of case examples. Acad Med. 2002;77: 209–16.
- Hafferty FW. Beyond curriculum reform: confronting medicine's hidden curriculum. Acad Med. 1998;73:403–7.
- 63. Bertakis KD, Callahan EJ, Helms LJ, Azari R, Robbins JA, Miller J. Physician practice styles and patient outcomes: differences between family practice and general internal medicine. Med Care. 1998;36: 879–91.
- 64. van Ryn M. Research on the provider contribution to race/ethnicity disparities in medical care. Med Care. 2002;40(suppl):1140–51.
- Pena Dolhun E, Munoz C, Grumbach K. Cross-cultural education in U.S. medical schools: development of an assessment tool. Acad Med. 2003;78:615–22.
- American Association of Medical Colleges. Tool for Assessing Cultural Competence Training (TACCT). Available at: http://www.aamc.org/meded/tacct/start.htm. Accessed April 25, 2006.
- Cultural Competency in Medical Education: A Guidebook for Schools. Department of Health and Human Services; 2004.
- American Academy of Pediatrics Committee on Pediatric Workforce.
 Culturally effective pediatric care: education and training issues.
 Pediatrics. 1999;103:167–70.
- Flores G. Culture and the patient-physician relationship: achieving cultural competency in health care. J Pediatr. 2000;136:14–23.