

Abstracts

PREFACE

The abstracts in this final appendix of *Setting the Agenda for Research on the Cultural Competence in Health Care: Final Report* are from articles cited in the rest of the report. These articles were identified by a literature search conducted to identify research that used empirical analysis to measure the impact of culturally and linguistically competent interventions on outcomes, specifically issues related to access, utilization, and health status.

The literature review was conducted in preparation for a meeting of the project Research Advisory Committee (RAC), held in April 2001. Abstracts were updated if unpublished studies subsequently became published after the meeting, but other literature published since the RAC meeting was not added. Abstracts of articles obtained during the literature review but not cited in the Final Report are not included here. The abstracts in this Appendix were reproduced as they were originally published. Grammatical and other errors were not corrected, nor were abstracts edited for consistent formatting.

The project team developed a key word template consisting of approximately 177 terms and word combinations. (See Appendix One for a complete list of search terms.) The template was applied to major literature databases, including MEDLINE (1966-2001), CINAHL (1982-2001), PsycINFO (1987-2001) and Sociological Abstracts (SOCA)/Sociofile (SOCIO) (1963-2001).

In an attempt to identify additional research, publications, or projects relating to cultural and linguistic competence, a Web site search was also conducted. This entailed the review of 38 private foundations currently funding public health and health services initiatives, 58 health policy organizations and associations, and the government Web sites of all Federal health and human services agencies and bureaus. Information about unpublished studies and research in progress was gleaned from these sources and also from RAC members and other individuals interested in research on cultural competence.

Cultural Competence Education and Training

Allison, K. W., Echemendia, R. J., Crawford, I., and Robinson, W. L. (1996). Predicting cultural competence: implications for practice and training. *Professional Psychology - Research & Practice, 27*(4), 386-393.

Training and work experience with clients from diverse groups were examined among 266 recent PhDs in counseling and clinical psychology. Surveys were mailed to 600 participants who completed their graduate work between 1985 and 1987. Analyses examined which training variables predicted self-rated competence in providing services to various cultural groups. Results indicated that most therapists reported competence in working with diverse clients, but there was notable variability among ratings of therapists' self-perceived competence with different client groups. Exposure during training to working with clients from specific cultural groups was important in predicting therapists' current perceived competence. Most respondents reported accessing education and training experiences in providing services to diverse client groups. A small but troubling number of respondents reported seeing clients despite reporting low levels of competence with that client group.

Copeman, R. C. (1989). Medical students, Aborigines and migrants: evaluation of a teaching program. *Medical Journal of Australia, 150*(2), 84-87.

In spite of evidence of poor communication between Aboriginal patients and doctors, there are few reports of educational efforts to overcome this problem. This paper describes a brief teaching program for fourth-year medical students that was aimed at improving their knowledge of, and attitudes towards, Aboriginal and migrant patients. It comprised a lecture, a clinical contact with an Aboriginal or migrant patient, and a tutorial. Evaluation of the program by the "before-and-after" measurement of student attitudes and knowledge showed a modest improvement in some attitudes, although there was an increased tendency to see all Aborigines as the same. Students' knowledge improved in one of the areas that were tested but not in the other. Teaching in this area could be improved further by more clinical contacts, videotaped consultations, and a student log-book.

Culhane-Pera, K. A., Like, R. C., Lebensohn-Chialvo, P., and Loewe, R. (2000). Multicultural curricula in family practice residencies. *Family Medicine, 32*(3), 167-173.

BACKGROUND AND OBJECTIVES: In 1985, results from a national survey indicated that 25% of family practice residencies taught about multicultural issues in their programs. Our current study identified the current status and content of the curricula and determined facilitating and impeding factors to multicultural curricula. **METHODS:** In 1998, the Society of Teachers of Family Medicine's Group on Multicultural Health Care and Education conducted a cross-sectional mail survey of all 476 family practice residency programs. **RESULTS:** With a 59% response rate, 58% of responding programs have an informal curriculum on multicultural issues, 28% have a formal curriculum, and 14% have no curriculum. Programs with a formal curriculum teach more content, employ more educational methods, use more evalua-

tion techniques, and feel more successful than programs with an informal curriculum. Important factors that facilitate curricula include cultural diversity of communities and residents, multicultural interests of faculty and residents, and faculty's multicultural expertise. Factors that impede curricula include lack of time, money, resources, faculty expertise, and cultural diversity in the community. Programs with formal, informal, and no curriculum identify different facilitators and impediments. **CONCLUSION:** There was a marked increase in the prevalence of multicultural curricula in family practice residencies from 1985 to 1998.

Culhane-Pera, K. A., Reif, C., Egli, E., Baker, N. J., and Kassekert, R. (1997). A curriculum for multicultural education in family medicine. *Family Medicine, 29*(10), 719-723.

BACKGROUND AND OBJECTIVES: To deliver effective medical care to patients from all cultural backgrounds, family physicians need to be culturally sensitive and culturally competent. Our department implemented and evaluated a three-year curriculum to increase residents' knowledge, skills, and attitudes in multicultural medicine. Our three curricular goals were to increase self-awareness about cultural influences on physicians, increase awareness about cultural influences on patients, and improve multicultural communication in clinical settings. Curricular objectives were arranged into five levels of cultural competence. Content was presented in didactic sessions, clinical settings, and community medicine projects. **METHODS AND RESULTS:** Residents did self-assessments at the beginning of the second year and at the end of the third year of the curriculum about their achievement and their level of cultural competence. Faculty's evaluations of residents' levels of cultural competence correlated significantly with the residents' final self-evaluations. Residents and faculty rated the overall curriculum as 4.26 on a 5-point scale (with 5 as the highest rating). **CONCLUSIONS:** Family practice residents' cultural knowledge, cross-cultural communication skills, and level of cultural competence increased significantly after participating in a multicultural curriculum.

Edwards, S. L. (1997). *Teaching strategies for multicultural competence (social workers)*. Unpublished Ph.D. Dissertation, University of South Carolina, Columbia.

This study evaluates the effectiveness of the presented educational model on graduate social workers' cultural competence. This study also examines the most effective ways to teach culturally sensitive material, using a developmental model that considers racial identity and the relationship to social work education. This quasi-experimental sample consisted of 48 advanced standing MSW students at a Southern university in the summer of 1997. There were 41 women and seven men in the sample. There were 25 White students and 12 African-American students. The age range was from 21 to 51. All participants completed D'Andrea, Daniels, and Heck's (1991) Multicultural Awareness, Knowledge, and Skills Survey at the beginning and at the end of the course. The study group participated in the presented educational model, and the comparison group participated in a traditional teaching format that generally stresses the knowl-

edge component. The study group also completed Janet Helm's Social Identity Scales (1990) during the course. A second design included students' and instructor's journals. This qualitative representation hopefully provides a better understanding of the quantitative data. The students who received the affective educational model displayed significantly greater improvement in the competency area of awareness than students who did not receive the intervention. A positive correlation was also shown between some racial identity stages and cultural competency scores. The exercises gave the students the opportunity to think about how their personal identity in terms of race, gender, ethnicity, and sexual orientation might influence their practice. The journal entries also gave the students the opportunity to describe the intervention and the impact that it had on them. This study offers empirical research in determining the effective teaching strategies for improved multicultural competence, highlighting affective components. The data strongly suggest that only through enhanced educational experiences will students become culturally competent, and only through that improved cultural competence will services be delivered to clients in culturally acceptable ways.

Farnill, D., Todisco, J., Hayes, S. C., and Bartlett, D. (1997). *Videotaped interviewing of non-English speakers: training for medical students with volunteer clients. Medical Education, 31(2), 87-93.*

In a multicultural society such as Australia, with over 20% of its population born overseas, interpreters are often required to facilitate medical interviews. However, where a patient has some proficiency in English, medical interviews are sometimes conducted across the boundaries of culture and language. This is a report of an educational innovation to teach interviewing skills to pre-clinical medical students with the assistance of volunteers of non-English-speaking backgrounds. Pre-clinical students interviewed community volunteers on topics of general life history in a sequence of 16 tutorials. Each student conducted two interviews. Teaching methods included feedback from the volunteers, tutorial discussion facilitated by playback of videotapes, and modeling of skills by the teachers. Evaluations by volunteers and students indicated high satisfaction with the teaching methods and outcomes. Students gained confidence in interviewing people from different cultures. Evaluation of students' pairs of videotapes by an independent rater achieved satisfactory reliabilities and indicated significant gains in inquiry skills and the communication of positive attitudes. Skills in communicating empathy and in using simple language did not improve measurably.

Flores, G., Gee, D., and Kastner, B. (2000). *The teaching of cultural issues in U.S. and Canadian medical schools. Academic Medicine, 75(5), 451-455.*

PURPOSE: Despite the importance of culture in health care and the rapid growth of ethnic diversity in the United States and Canada, little is known about the teaching of cultural issues in medical schools. The study goals, therefore, were to determine the number of U.S. and Canadian medical schools that have courses on cultural issues, and to examine the format, content, and timing of those courses. **METHOD:** The authors contacted the deans of students and/ or directors of courses on cultural

issues at all 126 U.S. and all 16 Canadian medical schools. Using a cross-sectional telephone survey, they asked whether each school had a course on cultural sensitivity or multicultural issues and, if so, whether it was separate or contained within a larger course, when in the curriculum the course was taught, and which ethnic groups the course addressed. **RESULTS:** The response rates were 94% for both U.S. (118) and Canadian (15) schools. Very few schools (U.S. = 8%; and Canada = 0%) had separate courses specifically addressing cultural issues. Schools in both countries usually addressed cultural issues in one to three lectures as part of larger, mostly preclinical courses. Significantly more Canadian than U.S. schools provided no instruction on cultural issues (27% versus 8%; $p = .04$). Few schools taught about the specific cultural issues of the largest minority groups in their geographic areas: only 28% and 26% of U.S. schools taught about African American and Latino issues, respectively, and only two thirds of Canadian schools taught about either Asian or Native Canadian issues. Only 35% of U.S. schools addressed the cultural issues of the largest minority groups in their particular states. **CONCLUSIONS:** Most U.S. and Canadian medical schools provide inadequate instruction about cultural issues, especially the specific cultural aspects of large minority groups.

Freed, J. R. (1998). *Test and dissemination of a multicultural dental education program. Princeton, NJ: Robert Wood Johnson Foundation.*

Sociocultural factors present significant barriers to dental health care for members of minority groups in the United States. With this grant from The Robert Wood Johnson Foundation, The University of California, Los Angeles (UCLA), School of Dentistry has developed a set of educational materials — six videotapes and accompanying instructor's manuals—designed to teach dental students, faculty, and practitioners how to effectively communicate with a culturally diverse population. These materials include one videotape with 25 stimulus vignettes — short statements based on actual experiences — featuring actors from a variety of racial/ethnic groups, and five videotapes using the Interpersonal Process Recall (IPR) method of instruction. The IPR tapes were developed by recording the initial encounter / interview of patients by dentists, who then each separately viewed and commented on the tape; these recalls were then edited back into the initial encounter. An instructor's manual was prepared for each videotape. These educational materials were presented at the American Association of Dental Schools' conference in March 1996. They are currently being used in a 20-hour "Culture and Health" required course at UCLA School of Dentistry, in a communications course at the dental school at the University of Colorado, and in a faculty development program at the dental school of the University of Michigan.

Gamble, V. N. (2000). *Medical education and cultural competence: a strategy to eliminate racial and ethnic disparities in health care. New York: Commonwealth Fund.*

The Association of American Medical Colleges has underscored its commitment to improving health care for minority Americans with its support of a new medical school accreditation standard designed to promote students' and faculties' understanding of the cultural factors that can affect health and health care deliv-

ery. This project will help medical schools assess and develop curricula related to cultural competence by providing guidelines on what should be taught, how it should be taught, and how students are to be evaluated.

Gany, F., and de Bocanegra, H. T. (1996). Maternal-child immigrant health training: changing knowledge and attitudes to improve health care delivery. *Patient Education & Counseling*, 27(1), 23-31.

This paper reports the development, implementation and evaluation of a training program for all levels of staff of Maternity Infant Care Family Planning Centers in New York City. The learner-centered training is designed to enhance cross-cultural sensitivity and communication skills. It provides epidemiological and patient management skills for serving ethnically diverse populations and focuses on skills training, such as the cross-linguistic, cross-cultural interview, and using epidemiological principles in diagnosis and treatment. In addition to the core curriculum, each module is tailored to the site-specific information needs of the participants, as determined during individualized needs assessments. There are five sessions: the cross-cultural medical interview and working with interpreters; epidemiological issues; attitudes and practices in maternal child health; family dynamics and interactions; and a session devoted to follow-up and evaluation. This training has been very successful in enhancing health care providers' sensitivity toward immigrant health issues. Pre- and post-test measurements found statistically significant improvements in the knowledge and attitudes of participants. Patient care has been greatly improved.

Johnson, A. E., and Baboila, G. V. (1996). Integrating culture and healing: meeting the health care needs of a multicultural community. *Minnesota Medicine*, 79(5), 41-45.

Delivering health care to culturally diverse patients is fast becoming an integral part of patient care—a change driven by shifting demographics in Minnesota and especially in the Twin Cities metro area. At United Hospital and Children's Health Care-St. Paul, ethnographic research is being used to create cross-cultural health care information systems that address the needs of providers and patients. These include an easy-to-use computer-based information system, brown bag seminars, and cross-cultural skills training. This article discusses that hospitals' efforts to identify provider needs, collect cultural information, and disseminate that information in a manner that supports quality and cost-effective health care delivery.

Kurtz, A. P. (1999). *Fostering a bicultural familial experience*. Unpublished M.S.W. Dissertation, University of Manitoba, Manitoba.

Transcultural foster placements are common in the child welfare system. Review of the literature revealed that educating foster parents aids in the creation of an awareness of the importance of providing bicultural environments when children enter care. This aids in the development of feelings of self-worth and positive self-identities in the children. Skills and knowledge regarding how to achieve successful bicultural foster placements were taught to caregivers of placed children using a time-limited, structured, psycho-educational group format. The curriculum was based on the adult learning modality within an eco-systemic

framework. A support and self-help component was also incorporated to meet the emotional needs of the caregivers participating in the program. The intent of this intervention was to educate the members about the impact of the children's culture on their emotional development and adjustment to placement, as well as to recognize the caregivers' stressors and emotional needs. The end result was the enrichment of the group members' skills in providing culturally respectful care for their foster children, as well as strengthening of the members' personal coping skills with the extreme demands of caring for apprehended children placed in their homes. The program was evaluated through pre- and post- test measures. The findings indicated that the group attracted highly competent caregivers who already had a keen interest in cultural issues and/or professional development.

Lefley, H. P. (1984). Cross-cultural training for mental health professionals: effects on the delivery of services. *Hospital Community Psychiatry*, 35(12), 1227-1229.

This description of research results from the University of Miami's Cross-Cultural Training Institute for Mental Health Professionals cross-cultural training program includes: impact of training on trainees, their agencies and clients; a databased discussion of affective reactions and identity issues raised by self-cultural awareness, with a special focus on minority providers dealing with value and status conflicts; and evaluating the effects of cross-cultural evaluation/long-range evaluation values and world views.

Lindquist, G. J. (1990). Integration of international and transcultural content in nursing curricula: a process for change. *Journal of Professional Nursing*, 6(5), 272-279.

A brief review of education and nursing literature indicates that it is essential to help students develop a global perspective as they prepare to practice nursing in a world of increasingly interdependent nations and people. The process currently being implemented to integrate international and transcultural content in the undergraduate nursing curriculum at a Midwestern state university is described in this article. Assessment of the school indicated that the student population and faculty are characterized by a high degree of radical-ethnic homogeneity. Assessment also included the mapping of content in all required courses in the undergraduate curriculum in the following areas: cultural differences, health care delivery systems in other countries, nursing in other countries, and international health organizations and issues.

Recommendations were then made regarding content in required courses, continuation of elective courses, and informal educational strategies. Examples of these are described, as well as the resultant changes. Some of the changes described include content added and educational strategies used to integrate transcultural and international health content in required courses. Elective courses, taught both on campus and abroad, are briefly described. Evaluation is an ongoing part of overall program evaluation. Highest priority for future planning is currently being placed on development of a semester study-abroad program and increasing cultural diversity in all students' educational experiences.

Majumdar, B., Keystone, J. S., and Cuttress, L. A. (1999). Cultural sensitivity training among foreign medical graduates. *Medical Education, 33*(3), 177-184.

OBJECTIVES: To examine the effectiveness of culture sensitivity training for foreign-trained medical graduates licensed to practice in Ontario, Canada. **DESIGN:** A study of pretest-post-test design was conducted to determine the effect of cultural sensitivity training on newly immigrated physicians licensed in Canada. Twenty-four physicians, those who had passed the medical licensing exam in 1996 and had not yet started their residency program, were given 15 hours of cultural sensitivity training and were considered the experimental group. This group was compared with a control group of 24 physicians who had passed the licensing exam and were in the process of completing residency. **SETTING:** University of Toronto. **SUBJECTS:** Foreign-trained medical graduates. **RESULTS:** Both groups completed the Cross-Cultural Adaptability Inventory both before and after the training of the experimental group. Statistical significance in three subscales of the Open-Mindedness/Flexibility, Emotional Resilience and Perceptual Acuity dimensions were demonstrated in the experimental group as compared with the control group. **CONCLUSIONS:** In order for Canada to mold professional and effective physicians, great care must be taken in the design and process of cultural sensitivity programs to enhance both knowledge and skills. Follow-up should be undertaken to compare their effectiveness with the control group.

Napholz, L. (1999). A comparison of self-reported cultural competency skills among two groups of nursing students: implications for nursing education. *Journal of Nursing Education, 38*(2), 81-83.

This study was designed to examine self-reported cultural competency skills of second-semester junior-level nursing students toward clients from culturally diverse backgrounds. The purpose of this study was to ascertain if the addition of an innovative cultural sensitivity intervention facilitated greater self-perceived cultural competency skills when compared with the traditional method of incorporating cultural diversity into a junior-level clinical course. The Ethnic Competency Skills Assessment Inventory was used to collect data from participants attending a university in an urban Midwestern county. Significant differences were noted between the pretest scores and posttest scores. Pretest scores were significantly lower than posttest scores for both groups. Nurse educators must examine further the differences in learning experiences related to cultural diversity that may account for these differences.

Norman, D. M. (1999). The effects of a cross-cultural psychoeducational intervention on counseling graduate students relative to bias reduction toward borderline personality disorder. Unpublished Ph.D. Dissertation, University of Mississippi. This study examined the presence of bias toward the borderline personality disorder (BPD) diagnostic category as had by counselor education graduate students. Further, this study explored the effect of prior cross-cultural education on BPD bias, and the ameliorating impact an instructional unit, based on cross-cultural theory and methodology, had on BPD bias reduction. Participants in this study were counselor education graduate students at The University of New Orleans and Our Lady of Holy

Cross College (n = 74). The Counselor Attitude Survey (CAS), a 44-item instrument containing BPD and V-Code client statements, was developed for use in this study. A dependent group's t-test compared pretest mean BPD and V-Code scale scores and found a more biased or negative counselor attitude toward the BPD condition. An independent group t-test compared participants at pretest who had a cross-cultural educational experience (n = 30) with those who had no such experience (n = 30) and found cross-cultural education experience had no effect on BPD bias. ANCOVA's with pretest CAS BPD scale scores serving as the covariate were conducted on posttest observations. Posttest-1 observations were conducted on treatment and control groups immediately following instructional unit completion. Posttest-2 observations were conducted six weeks post instructional unit. Attrition reduced the posttest observations to thirty graduate students in each of the treatment and control group cohorts. Posttest observations relative to the influence of the instructional unit on bias reduction did not suggest statistical significance. However, posttest-2 results did approach practical significance. A factor analysis on participants' responses to pretest CAS BPD items identified five factors: Self-Insufficiency, Threatening Gestures, Reactivity, Projection, and Self-Injurious Impulsivity. The factors of Threatening Gestures and Reactivity produced a statistically significant posttest-2 treatment shift suggesting the instructional unit had a positive influence on attitude relative to these two named factors. These results are encouraging if they lead to educational interventions and attitudinal measurement instruments designed to monitor and facilitate improved attitude toward difficult client populations such as the BPD category. Efforts to train counselors to work with difficult client populations may be enhanced via an amalgamation with cross-cultural theory and methodology, an approach demonstrated in this study.

Pruegger, V. J., and Rogers, T. B. (1994). Cross-cultural sensitivity training: Methods and assessment. *International Journal of Intercultural Relations, 18*(3), 369-387.

This study compared two methods of training cross-cultural sensitivity: an experiential approach using a simulation game called Bafa Bafa and a lecture-based, cognitive presentation. Sixty-seven undergraduates were assigned to one of four groups. A traditional quantitative program indicator using a carefully designed test to measure sensitivity failed to show differences between the approaches either immediately or at a two-month follow-up. However, qualitative data gathered from personal documents did indicate significantly greater effects of the experiential treatment. The implications of this finding for the documentation of cross-cultural training effects are discussed.

Rankin, S. B., and Kappy, M. S. (1993). Developing therapeutic relationships in multicultural settings. *Academic Medicine, 68*(11), 826-827.

The expertise of native peoples as well as resources drawn from humanities, education, and arts organizations in Arizona contributed to an educational program to heighten the cultural sensitivity of healthcare professionals at the Children's Health Center of St. Joseph's Hospital. The sentiment expressed by Kraut that "respect for the cultural preferences and taboos of more traditional medical systems thus renders American physicians

more effective and in the long-run more efficient" is supported by our experience with this program.

Ricardo, I. B., and Holden, E. W. (1994). Multicultural training in pediatric and clinical child psychology predoctoral internship programs. *Journal of Clinical Child Psychology, 23*(1), 32-38.

Fifty-five directors of training of pediatric and clinical child psychology predoctoral internships regarding the extent of multicultural training in their programs, faculty and trainee ethnic composition, recruitment of minority trainees, content of training curricula, and perceptions of barriers to multicultural training were surveyed. Seventy-five percent of programs indicated the frequent presence of multicultural issues within their training sites, and 35% of the sites reported formal mechanisms for addressing these issues. Ratings of the importance of multicultural training and the presence of minority interns were directly related to the presence of minority faculty. Recruitment of minority trainees occurred largely through program announcements. Didactic seminars on multiculturalism and informal resolution of intercultural conflicts predominated in internship settings with less emphasis on formal structures for addressing multicultural conflicts.

Sachdev, P. (1997). Cultural sensitivity training through experiential learning: A participatory demonstration field education project. *International Social Work, 40*(1), 7-25.

Reports the findings of a sensitivity training program designed to prepare social work students for cross-cultural practice. This pilot project involved four female undergraduates from an eastern Canadian university, who spent eight weeks in New Delhi, India, as part of a field placement to gain direct exposure to a culturally complex society. Program activities included visits to 13 different agencies and participation in programs aimed at the developmental needs of women, children, and marginalized workers. Students were selected on the basis of their maturity, interest in international development and ethnic cultures, and background. Attitudinal pretesting showed one student to hold negative attitudes toward different cultural groups, and these attitudes had intensified at posttesting. The other three students showed favorable changes in attitude and reported greater gains from the experience that had an impact on their personal growth and career choices.

Salcido, R. M., and Garcia, J. A. (1997). A comparative analysis of three cross-cultural training approaches: in search of cross-cultural competency. *Arete, 22*(1), 35-49.

This study compares the efficacy of three social work cross-cultural awareness training models: (1) video training, (2) helping skills, and (3) culture specific. Questionnaire data from 155 Master's of Social Work students at the University of Southern California (Los Angeles) who participated in learning labs, each of which tested one of the models, reveal that the models do not produce similar results in terms of student knowledge, skills, and satisfaction. The video training model, which incorporates the notion of social learning theory, was found to have the greatest impact on cross-cultural development.

Smith, L. S. (1998). *Evaluation of an educational intervention to increase cultural competence among registered nurses. Unpublished D.S.N. Dissertation, University of Alabama at Birmingham.*

All persons deserve to have their ethnicity valued by culturally competent nurses. Limited or lack of cultural competence of practicing nurses has been identified as inappropriate and potentially hurtful and harmful to client care outcomes. The purpose of this two-group intervention study (N = 94) was to determine if registered nurses (RNs) who participated in "culture school" improved objective levels of cultural competence to a greater extent than RNs who attended nursing informatics. The Giger and Davidhizar Transcultural Assessment Model/Theory (GDTAMT) was the study's theoretical foundation. A sample of 120 volunteer subjects (with 10% oversample) was identified from a randomized group of all Jefferson County, Alabama RNs. Randomly assigned participants (stratified by race) experienced 8.5 hours of either culture school or nursing informatics and completed survey tools in three phases (pre-intervention, immediate post intervention, three week follow-up). Cultural Self-Efficacy Scale (CSES) by Bernal and Froman (1987) and knowledge base questions by Rooda (1990) plus demographic profiles were used. Concepts empirically measured using these tools were analyzed by transcultural nursing experts for their congruence with GDTAMT. No significant demographic differences emerged between groups. Repeated measures analyses of covariance (race) resulted in significant differences between groups for both scales. Culture school participants demonstrated significantly greater cultural self-efficacy and cultural knowledge and these improvements remained for phase three. The six difference scores (CSES and knowledge base scales) were regressed individually in a stepwise fashion on the demographic variables. Final models included all significant predictors. Since the informatics group's mean knowledge question scores increased during phase three, factors other than the teaching/learning program may have influenced these levels. All participants reported high degrees of program satisfaction. Further research is recommended to allow for greater generalizability of findings, an examination of client perceptions, and actual nurse behaviors. Quantitative and qualitative examinations are needed regarding potential for increased cultural competence predictors. Most important would be: basic and current levels of education, motivation for cultural diversity program attendance, race, percent of culturally different clients, and nursing experience. How/why these factors impact new cultural competence learning needs further study.

Sublette, E., and Trappler, B. (2000). Cultural sensitivity training in mental health: treatment of Orthodox Jewish psychiatric inpatients. *International Journal of Social Psychiatry, 46*(2), 122-134.

This study examined cultural and religious issues arising in the treatment of 15 Orthodox Jewish inpatients (mean age 36.7 yrs) with major psychiatric disorders at a Brooklyn, New York hospital during the period 1994-1998. Cross-cultural therapeutic goals included integrating patients into the milieu environment and allowing legitimate religious practices while setting limits on maladaptive ritual. To minimize patient alienation, ward policies were modified. Cultural sensitivity training among staff included accommodating customs regarding rules of modesty, sexuality,

loyalty, and honor. Cultural and religious factors distinctly affected presentation, therapeutic interventions, and transference-countertransference reactions. Religion was used by patients and families as a means of defense, rationalization, or power-brokering.

Thom, D., and Tirado, M. (2000). *The impact of cultural competency on outcomes in primary care.* Woodland Hills: California Endowment.

The proposed study will develop, implement and evaluate a program to measure and improve cultural competency. Specifically, the study will assess the impact of cultural competency on outcomes of care for approximately 400 patients with hypertension or diabetes who are self-identified as members of an ethnic minority, in three settings: ten community-based, primary care practices; two academic-based primary care practices; one family practice residency program. Baseline variables, at the time of enrollment, will include measures of the cultural competency of the organizational setting, cultural competency of the physician, patient assessed cultural appropriateness of care, and patient trust in the physician. Baseline patient variables will include functional status, adherence to treatment, and the disease-specific measures of blood pressure for hypertension and glycosylated hemoglobin for diabetes. In phase one of the study, cultural competency will be measured by patient surveys and the results provided, in aggregate, to the physician and her or his office staff. At six months, the study will assess changes in cultural competency, trust, adherence to treatment, and control of diabetes or hypertension. In the second phase of the study, five of the community-based practices and one academic practice site will

be selected to receive a cultural competency training intervention developed and administered by the Stanford Geriatric Center in conjunction with each site. Six months after the training, the sites receiving the training intervention will be compared to the corresponding control sites with respect to measures of cultural competency, patient trust and satisfaction, patient adherence to treatment and control of diabetes and hypertension. As of January 1, 2001, we have enrolled 100 patients from our first site and have developed and successfully piloted the training intervention.

Wade, P., and Bernstein, B. L. (1991). *Culture sensitivity training and counselor's race: effects on Black female clients' perceptions and attrition.* *Journal of Counseling Psychology, 38(1), 9-15.*

Effects of brief culture sensitivity training for counselors and effects of counselors' race on Black female clients' perceptions of counselor characteristics and the counseling relationship and clients' satisfaction with counseling were examined in an actual counseling situation. Client attrition across three sessions was also assessed. Clients assigned to experienced counselors who had received culture sensitivity training rated their counselor higher on credibility and relationship measures, returned for more follow-up sessions, and expressed greater satisfaction with counseling than did clients assigned to experienced counselors who had not received the additional training (control condition). Although same-race counseling dyads resulted in less client attrition, this factor did not influence client perceptions of counselors and the counseling process.

Racial and Ethnic Concordance

Blank, M. B., Tetrick, F. L., Brinkley, D. F., Smith, H. O., and Doheny, V. (1994). *Racial matching and service utilization among seriously mentally ill consumers in the rural South.* *Community Mental Health Journal, 30(3), 271-281.*

The authors examined racial matching between case manager and client for 677 seriously mentally ill consumers served through a rural community mental health center in the southeastern United States. Nonparametric statistics indicated that client-case manager dyads were more likely to be of the same race than of different races. Same-race dyads tended to have greater service utilization as indicated by a greater number of made appointments over the study period. An interaction was found for failed appointments where African Americans in same-race dyads were more likely to fail appointments, while Caucasian consumers in same-race dyads were less likely to fail appointments.

Flaskerud, J. H. (1986). *The effects of culture-compatible intervention on the utilization of mental health services by minority clients.* *Community Mental Health Journal, 22(2), 127-141.*

This study examined the relationship between a culture-compatible approach to mental health service and utilization as measured by dropout and total number of outpatient visits. The sample (N = 300) was 23.5% Mexican, 22.8% White, 18.1% Black, 17.1% Vietnamese, 16.8% Filipino, and 1.7% other ethnic group.

A culture-compatible approach was found to be effective in increasing utilization. Three culture-compatibility components were the best predictors of dropout status: language match of therapists and clients, ethnic/racial match of therapists and clients, and agency location in the ethnic/racial community. Pharmacotherapy, education, previous treatment and a diagnosis of psychosis were significantly related to remaining in therapy.

Flaskerud, J. H., and Akutsu, P. D. (1993). *Significant influence of participation in ethnic-specific programs on clinical diagnosis for Asian Americans.* *Psychological Reports, 72(3 Pt 2), 1228-1230.*

Asian American clients (n=1528) in the Los Angeles County mental health system who were seen at ethnic-specific (Asian) clinics by Asian therapists were diagnosed with significantly lower percentages of psychotic disorders and other major psychiatric disorders and significantly higher percentages of nonpsychiatric disorders than were Asian clients who were seen by Asian and white therapists at mainstream clinics.

Flaskerud, J. H., and Hu, L. T. (1994). *Participation in and outcome of treatment for major depression among low income Asian-Americans.* *Psychiatry Research, 53(3), 289-300.*

This study examined the relationship of four aspects of psychi-

atric treatment (use of medication, client-therapist ethnic match, treatment in an Asian-specific clinic, and professional therapist) to participation in treatment and outcome of treatment in low-income Asian-American clients ($n = 273$) of the Los Angeles County mental health system who were diagnosed with major depression. Based on cultural responsiveness theory, the study tested the hypothesis that use of medication in treatment would have the greatest effect on participation and outcome followed, in order, by client-therapist ethnic match, treatment in an Asian-specific clinic, and treatment by a professional therapist. The hypotheses were largely supported: treatment with medication had a significant relationship to total number of treatment sessions (participation) and improvement in the admission-discharge Global Assessment Scale (GAS) score (outcome). Treatment by a therapist of the same ethnicity as the client and treatment in an agency designated to provide services to Asian clients both had significant relationships to the number of treatment sessions but not to GAS score improvement. Four covariates included in the analysis and treatment by a professional therapist had no relationship to either of the dependent variables.

Flaskerud, J. H., and Liu, P. Y. (1990). Influence of therapist ethnicity and language on therapy outcomes of Southeast Asian clients. *International Journal of Social Psychiatry*, 36(1), 18-29.

The purpose of this study was to examine the relationship of Southeast Asian client-therapist ethnicity and language match on three therapy outcomes: number of sessions with primary therapist, dropout from therapy and admission-discharge difference in Global Assessment Scale (GAS) scores. The sample consisted of 543 Southeast Asian client episodes in Los Angeles County mental health facilities between January 1983 and August 1988. Various types of multiple regression analyses were used to investigate the relationship of language and ethnicity match to the three outcome variables and to eight sociodemographic variables. Either therapist-client language or ethnicity match significantly increased the number of client sessions with the primary therapist. Dropout from therapy was significantly affected by a language match in the Cambodian sample only but the effect was to increase dropout. Neither ethnicity nor language match was significantly related to GAS score gain. Several possible explanations for these findings and their clinical significance were explored.

Flaskerud, J. H., and Liu, P. Y. (1991). Effects of an Asian client-therapist language, ethnicity and gender match on utilization and outcome of therapy. *Community Mental Health Journal*, 27(1), 31-42.

The purpose of this study was to examine the relationship of Asian client-therapist ethnicity, language and gender match on two measures of utilization: number of sessions with primary therapist and dropout from therapy; and one measure of client outcome: admission-discharge difference in Global Assessment Scale (GAS) scores. The sample consisted of 1746 Asian client episodes in Los Angeles County mental health facilities between January 1983 and August 1988. Various types of multiple regression analyses were used to investigate the relationship of language, ethnicity, and gender match to the three dependent variables and to eight socio-demographic variables. Either client-

therapist language match or ethnic match significantly increased the number of client sessions with the primary therapist. However, only ethnicity match had a significant effect on dropout rate. Gain in GAS admission-discharge score was not affected by either a client-therapist ethnicity or language match. Gender match had no consistent effect on the dependent variables. Of the covariates examined, only therapist discipline (social worker) had a consistent effect on the dependent variables. It was concluded that both client-therapist language and ethnicity match are important variables affecting the utilization of treatment. Further research will be needed to separate the effects of language and ethnicity on therapy utilization.

Handler, A., Raube, K., Kelley, M. A., and Giachello, A. (1996). Women's satisfaction with prenatal care settings: a focus group study. *Birth*, 23(1), 31-37.

BACKGROUND: Patient satisfaction is considered, together with health status, to be an outcome of the delivery of health care services as well as a measure of its quality. A focus group study of 50 low-income Mexican-American, Puerto Rican, African-American, and white women in Chicago, Illinois, explored the characteristics of prenatal care that affect women's satisfaction. **METHODS:** Transcripts from the focus groups were analyzed using researcher-derived coding categories to develop broad themes. **RESULTS:** Despite their diverse ethnic backgrounds, participants revealed few differences with respect to what they value in prenatal care. Aspects of care that appeared to affect women's satisfaction included the "art of care," the technical competence of the practitioner, continuity of caregiver, and the atmosphere and physical environment of the care setting. The one characteristic that did not appear to affect satisfaction was the caregiver's ethnicity. **CONCLUSION:** Knowledge of how the characteristics of prenatal care affect women's satisfaction can help increase use of care and ultimately improve perinatal outcomes.

Porter, J. R., and Beuf, A. H. (1994). The effect of a racially consonant medical context on adjustment of African-American patients to physical disability. *Medical Anthropology*, 16(1), 1-16.

The effect of a racially consonant medical context on reaction to physical handicap stemming from disease is explored in a sample of 90 African-American patients with vitiligo, a disfiguring skin disorder. The adjustment of sixty-nine patients in a predominantly black hospital setting is compared to that of twenty-one patients in a predominantly white hospital setting. The patients in the predominantly black clinic, where the physicians, staff, and clientele are African-American, show significantly better adjustment than do African-American patients in a medical context that is primarily white. Interviews with a random sample of one-third of the patients in each clinic show that patients are significantly more positive to black physicians and a black hospital setting and that other patients of the same race provide informal networks of support, as does the predominantly African-American community in which the hospital is located. Implications for both medical theory and practice are suggested on the basis of these findings.

Rubin, D. B. (1999). *Parental satisfaction with mental health case management services for their children*. Unpublished Ph.D. Dissertation, University of Pittsburgh.

Children with serious emotional difficulties often receive services from disparate service sectors. Case management services for these children and their families can provide coordination of care, support parents and help children remain at home. This study examined parent satisfaction with case management services and parents' perceptions of the cultural competence of their children's case managers. One hundred forty-six randomly selected parents of children with extensive mental health needs were interviewed. Twenty-six additional families receiving services from an agency providing intensive case management services were also interviewed. All families received medical assistance for some or all of their child's treatment. New measures of case management satisfaction and cultural competence were administered and required parents to rate specific aspects of satisfaction and cultural competence on a 1 to 5 scale. Interviews also included five measures of child and family functioning. Summary scores from these measures were used to construct a severity index. Case management services were categorized for all respondents as either "traditional" or "intensive." Results from the study showed that mothers of children who were employed were significantly more satisfied with case management services than those who were not employed. Other demographic variables were not significant. Parents receiving intensive case management were more satisfied than those receiving traditional case management when controlling for demographic variables and functional status of the child and the family. Cultural competency scores were significantly related to overall satisfaction scores and intervened in the relationship between type of case management and parent satisfaction. There appeared to be conceptual overlap in the instruments used to measure satisfaction and cultural competency. Cultural competency appears to be difficult to operationalize as a discreet concept although racial match of the parent and case manager was significantly related to cultural competency but not satisfaction scores. No relationship was found between functional status and type of case management suggesting that children receive case management services for reasons other than severity of their or their families' problems. Further research is needed to determine who receives intensive case management and to refine measures of cultural competency.

Saha, S., Komaromy, M., Koepsell, T. D., and Bindman, A. B. (1999). Patient-physician racial concordance and the perceived quality and use of health care. *Archives of Internal Medicine*, 159(9), 997-1004.

BACKGROUND: Patients from racial and ethnic minority groups use fewer health care services and are less satisfied with their care than patients from the majority white population. These disparities may be attributable in part to racial or cultural differences between patients and their physicians. **OBJECTIVE:** To determine whether racial concordance between patients and physicians affects patients' satisfaction with and use of health care. **METHODS:** We analyzed data from the 1994 Commonwealth Fund's Minority Health Survey, a nationwide, telephone survey of noninstitutionalized adults. For the 2201 white, black, and Hispanic respondents who reported having a regular physician,

we examined the association between patient-physician racial concordance and patients' ratings of their physicians, satisfaction with health care, reported receipt of preventive care, and reported receipt of needed medical care. **RESULTS:** Black respondents with black physicians were more likely than those with nonblack physicians to rate their physicians as excellent (adjusted odds ratio [OR], 2.40; 95% confidence interval [CI], 1.55-3.72) and to report receiving preventive care (adjusted OR, 1.74; 95% CI, 1.01-2.98) and all needed medical care (adjusted OR, 2.94; 95% CI, 1.10-7.87) during the previous year. Hispanics with Hispanic physicians were more likely than those with non-Hispanic physicians to be very satisfied with their health care overall (adjusted OR, 1.74; 95% CI, 1.01-2.99). **CONCLUSIONS:** Our findings confirm the importance of racial and cultural factors in the patient-physician relationship and reaffirm the role of black and Hispanic physicians in caring for black and Hispanic patients. Improving cultural competence among physicians may enhance the quality of health care for minority populations. In the meantime, by reducing the number of underrepresented minorities entering the US physician workforce, the reversal of affirmative action policies may adversely affect the delivery of health care to black and Hispanic Americans.

Saha, S., Taggart, S. H., Komaromy, M., and Bindman, A. B. (2000). Do patients choose physicians of their own race? *Health Affairs*, 19(4), 76-83.

This study seeks to determine whether minority Americans tend to see physicians of their own race as a matter of choice or simply because minority physicians are more conveniently located within predominantly minority communities. Using data from the Commonwealth Fund 1994 National Comparative Survey of Minority Health Care, we found that black and Hispanic Americans sought care from physicians of their own race because of personal preference and language, not solely because of geographic accessibility. As minority populations continue to grow, the demand for minority physicians is likely to increase. Keeping up with this demand will require medical school admissions policies and physician workforce planning to include explicit strategies to increase the supply of underrepresented minority physicians.

Sawyer, L., Regev, H., Proctor, S., Nelson, M., Messias, D., Barnes, D., and Meleis, A. (1995). Matching versus cultural competence in research: methodological considerations. *Research in Nursing and Health*, 18(6), 557-567.

OBJECTIVE: The purpose of this paper is: to consider the complexities in using matching in research with diverse populations; to challenge the idea that matching of researchers and participants is the only strategy for generating culturally valid knowledge, and to argue that cultural competence, as a synthesis of cultural knowledge, sensitivity, and collaboration, could be used in facilitating the development of culturally competent nursing knowledge. **RESULTS/CONCLUSIONS:** Conceptual issues for cultural matching in research projects include: (1) what to match (ethnicity, geographic area and/or residence, language, social class, social values, gender, etc.), (2) when to match (during question development), data collection, data analysis, dissemination of findings, (3) and feasibility of matching (availability and costs). Essential components in the conduct of culturally competent

research include cultural knowledge, cultural sensitivity, and collaboration. Culturally competent knowledge will not be developed and expanded without methods and research processes that are more congruent with population diversity. We have argued that the complexity inherent in matching hinders, rather than promotes, the pursuit of cultural diversity in research. We further argued that matching may be one possible strategy but that it, in itself, does not ensure cultural competence in the research process.

Snowden, L. R., Hu, T., and Jerrell, J. M. (1995). Emergency care avoidance: ethnic matching and participation in minority-serving programs. *Community Mental Health Journal, 31(5), 463-473.*

Using data from a county level mental health service system, relationships were examined between ethnic matching, program involvement and emergency service use. When clients were matched with an ethnically similar clinician who was also proficient in their preferred language, they had fewer emergency service visits than did clients who were unmatched on the basis of ethnicity and language. Equally if not more significant than ethnicity or language matching was the client's program and the proportion of minority clients it served. Clients in programs serving a relatively large proportion of minority clients had fewer emergency service visits than those in programs serving a smaller proportion of minority clients. More research is needed to document the impact of matching along with greater attention to minority oriented programs.

Takeuchi, D. T., Sue, S., and Yeh, M. (1995). Return rates and outcomes from ethnicity-specific mental health programs in Los Angeles. *American Journal of Public Health, 85(5), 638-643.*

OBJECTIVES. The present study compared the return rate, length of treatment, and treatment outcome of ethnic minority adults who received services from ethnicity-specific or mainstream programs. **METHODS.** The sample consisted of 1516 African Americans, 1888 Asian Americans, and 1306 Mexican Americans who used 1 of 36 predominantly White (mainstream) or 18 ethnicity-specific mental health centers in Los Angeles County over a 6-year period. Predictor variables included type of program (ethnicity specific vs mainstream), disorder, ethnic match (whether or not clients had a therapist of the same ethnicity), gender, age, and Medi-Cal eligibility. The criterion variables were return after one session, total number of sessions, and treatment outcome. **RESULTS.** The study indicated that ethnic clients who attended ethnicity-specific programs had a higher return rate and stayed in the treatment longer than those using mainstream services. The data analyses were less clear cut when treatment outcome was examined. **CONCLUSIONS.** The findings support the notion that ethnicity-specific programs seem to increase the continued use of mental health services among ethnic minority groups.

Community Health Workers

Barnes-Boyd, C., Norr, K. F., and Nacion, K. W. (1996). Evaluation of an interagency home visiting program to reduce postneonatal mortality in disadvantaged communities. *Public Health Nursing, 13(3), 201-208.*

This paper describes an interagency home visiting program, Resources, Education and Care in the Home (REACH), designed to reduce preventable causes of morbidity among normal, socioeconomically disadvantaged infants at risk for adverse outcomes due to social factors. Home nursing visits by a trained nurse-community worker team were made throughout the first year of life to 1,269 infants from predominantly African American families. Results demonstrate that repeated home visits with ongoing infant health monitoring plus individualized and culturally sensitive teaching helped mothers maintain good health practices and identify illnesses early. Infants' outcomes during the neonatal period and at 12 months showed consistent, though statistically nonsignificant, positive effects on physical health. The postneonatal mortality rate among REACH infants was 4.7 deaths per 1000 live births in communities where rates for non-participants ranged from 5.2 to 10.9 per 100. The evaluation demonstrates a need in this population for more intensive services with greater continuity of care. Specific areas where more education is needed include home safety, skin care, and early identification and treatment of upper respiratory infections. Infants from communities with high infant mortality rates present numerous

preventable morbidities requiring interventions, even when they are not considered medically high-risk at birth.

Bird, J. A., McPhee, S. J., Ha, N. T., Le, B., Davis, T., and Jenkins, C. N. (1998). Opening pathways to cancer screening for Vietnamese-American women: lay health workers hold a key. *Preventive Medicine, 27(6), 821-829.*

PURPOSE: We describe a controlled trial of a community outreach intervention to promote recognition, receipt, and screening-interval maintenance of clinical breast examinations (CBE), mammograms, and Pap smears among Vietnamese-American women. **METHODS:** Over a 3-year period, indigenous lay health workers conducted small-group sessions of Vietnamese women in a low-income district of San Francisco, California. Women in Sacramento, California, served as controls. Lay workers conducted 56 sessions on general prevention, 86 on cervical cancer, and 90 on breast cancer. Surveys of 306 to 373 women were conducted in the study communities in 1992 and 1996. **RESULTS:** In the intervention community, recognition of screening tests increased significantly between pre- and post-intervention surveys: CBE, 50 to 85%; mammography, 59 to 79%; and Pap smear, 22 to 78% ($P = 0.001$ for all). Receipt of screening tests also increased significantly: CBE, 44 to 70% ($P = 0.001$); mammography, 54 to 69% ($P = 0.006$); and Pap smear, 46 to 66% ($P = 0.001$). Best-fitting logistic regression models, adjusting for

preintervention rates and significant covariates, also showed statistically significant odds ratios for the intervention effect ($P < 0.0001$). **CONCLUSIONS:** Trained Vietnamese lay health workers significantly increased Vietnamese women's recognition, receipt, and maintenance of breast and cervical cancer.

Buchanan, T. J. (1999). *Health promotion behaviors of Mexican-American adults participating in a Promotoras project. Texas Tech University, Lubbox, TX*

The purpose of the descriptive study was to provide a comparison of the number of health promoting behaviors of the "Promotoras" project group with a group of prospective project members who have not had the educational intervention. The Health Promoting Lifestyle Profile (HPLP) instrument and a demographic information sheet were administered to a convenience sample of Promotoras project participants and prospective clients of the same program before intervention. The independent variables of culturally competent basic health care education, assistance with access to economic and social resource programs, and the personal social support of Promotoras personnel were assessed. The dependent variable of the two groups was the number and type of health promotion behaviors. The study results contributed to the knowledge about health promoting behaviors in Mexican-American adults in the southern Texas/New Mexico area and support the effectiveness of the Promotoras teaching project.

Burhansstipanov, L., Dignan, M. B., Wound, D. B., Tenney, M., and Vigil, G. (2000). *Native American recruitment into breast cancer screening: the NAWWA project. Journal of Cancer Education, 15(1), 28-32.*

BACKGROUND: American Indian women's historically low breast cancer incidence and mortality rates have gradually increased such that in many parts of the United States they equal "U.S. All Races" rates. Thus, American Indian women need screening to maintain their low rates. **METHODS:** In an outreach program, local American Indian women were trained as lay health advisers, "Native Sisters," to locate and contact American Indian women in the Denver metropolitan area and provide education and encouragement to increase participation in mammography screening. Participation was monitored and interviews collected descriptive information and information about risk factors for breast cancer. An interrupted-time-series design was used to assess changes in mammography participation. **RESULTS:** The Native American Women's Wellness through Awareness (NAWWA) program increased recruitment of American Indian women ($p < 0.05$). Women recruited by the Native Sisters were more likely to be currently on hormone replacement therapy and to be menopausal. **CONCLUSIONS:** The lay health adviser program was effective in recruiting American Indian women to have screening mammography. Barriers to participation were complex and often involved cultural values and beliefs.

Corkery, E., Palmer, C., Foley, M. E., Schechter, C. B., Frisher, L., and Roman, S. H. (1997). *Effect of a bicultural community health worker on completion of diabetes education in a Hispanic population. Diabetes Care, 20(3), 254-257.*

OBJECTIVE: To determine the effect of a bicultural community health worker (CHW) on completion of diabetes education in an

inner-city Hispanic patient population and to evaluate the impact of completion of the education program on patient knowledge, self-care behaviors, and glycemic control. **RESEARCH DESIGN AND METHODS:** Patients were randomized into CHW intervention and non-CHW intervention groups. All patients received individualized, comprehensive diabetes education from a certified diabetes nurse educator after baseline demographic information, diabetes knowledge, diabetes self-care practices, and glycohemoglobin levels were assessed. Rates of education program completion were determined. Diabetes knowledge, self-care practices, and glycohemoglobin levels were reassessed at program completion and at a later post-program follow-up medical appointment and compared to baseline. Logistic regression analysis and the Mantel-Haenszel chi 2 statistic were used to determine the effect of the CHW assignment on program completion. Analyses of covariance were performed with end-of-treatment behavior scores, knowledge scores, and glycohemoglobin levels as outcome variables, controlling for baseline values and testing for the effect of CHW assignment. **RESULTS:** Of 64 patients enrolled in the study, 40 (63%) completed and 24 (37%) dropped out before completing the diabetes education program. Of the patients having CHW intervention, 80% completed the education program, compared with 47% of patients without CHW intervention ($P = 0.01$). "Dropouts" were younger (age 47.5 +/- 12.5 years [mean +/- SD]) compared with patients who completed the program (55.9 +/- 9.9 years) ($P = 0.004$). Dropout status showed no significant relationship to educational level achieved or literacy level. For the program "completers," knowledge levels and selected self-care practices significantly improved, and glycohemoglobin levels improved from a baseline level of 11.7% to 9.9% at program completion ($P = 0.004$) and 9.5% at the postprogram follow-up ($P < 0.001$). The effect of the CHW assignment on program completion, controlling for financial status and language spoken, was extremely robust ($P = 0.007$). The effect of the CHW on knowledge, self-care behavior, or glycohemoglobin outcome variables was not statistically significant. **CONCLUSIONS:** These findings suggest that intervention with a bicultural CHW improved rates of completion of a diabetes education program in an inner-city Hispanic patient population irrespective of literacy or educational levels attained. Our data further suggests that completion of individualized diabetes educational strategies leads to improved patient knowledge, self-care behaviors, and glycemic control.

Earp, J. A., and Flax, V. L. (1999). *What lay health advisors do: an evaluation of advisors' activities. Cancer Practice, 7(1), 16-21.*

PURPOSE: Since the 1970s, health promotion and disease prevention programs that rely on lay health advisors have proliferated, making it important to ascertain the levels and types of activity that can reasonably be expected from such advisors. This report describes the activities of lay health advisors participating in a program to increase mammography screening by older African American women and shares lessons that the authors learned about evaluating advisors' activities. **DESCRIPTION OF STUDY:** Between September 1994 and January 1996, 144 lay health advisors, associated with the North Carolina Breast Cancer Screening Program, were asked to complete, on a periodic basis, a standardized, self-administered activity report that asked about

group presentations in the past 3 months and one-on-one contacts in the past week. Eighty-five advisors submitted one or more reports. The authors tabulated responses for lay health advisors overall, for those turning in one or more reports, and for those reporting a specific type of activity. **RESULTS:** The responses showed that North Carolina Breast Cancer Screening Program lay health advisors made approximately one group presentation every 3 months and had one to three individual contacts per week. Group presentations were commonly in churches and homes, and focused on who needs a mammogram, how then, and where to get one. During one-on-one encounters, advisors primarily encouraged women to get mammograms or discussed fears about mammograms. **CLINICAL IMPLICATIONS:** Information about lay health advisor activities serves several important purposes. Such information allows programs to identify the types of messages that lay health advisors transmit and the number of contacts they make, while also identifying the groups that are more and less difficult to reach, and the topics and locations favored by advisors and the women they contact. Activity data may indicate what resources or other support the advisors need, whether in-service training is necessary, and how to enhance the recruitment and training of additional lay health advisors.

Fernandez, M. E., DeBor, M., Candreia, M. J., Wagner, A. K., and Stewart, K. R. (1999). Evaluation of ENCOREplus, a community-based breast and cervical cancer screening program. *American Journal of Preventive Medicine*, 16(3 Suppl), 35-49. **BACKGROUND:** Minority women and women with low income levels are significantly less likely to practice appropriate mammography and Pap test screening. ENCOREplus is a health promotion program that provides outreach, education, referral, and other services that facilitate breast and cervical cancer screening for medically underserved women. The program is delivered through a network of community-based non-profit organizations (YWCA of the U.S.A). The purpose of this study was to assess the effectiveness of ENCOREplus in promoting mammography and Pap test screening among women who were nonadherent to screening guidelines. **METHODS:** Baseline data were collected from women participating in the program. Follow-up occurred within six months of baseline to assess whether or not enrollees received recommended screenings. Screening-completion rates were compared to rates from other published intervention studies. **RESULTS:** Data from the program's second implementation year show that 27,494 women participated in the ENCOREplus program. Over half the women were racial/ethnic minorities, over 75% reported annual incomes under \$15,000, and 49% reported no insurance. Among women 40 and over, 69.7% were nonadherent to ACS mammography screening guidelines at baseline. Among participants 18 and older, 68.9% were nonadherent to Pap test screening guidelines. Of nonadherent participants, 57.8% received mammograms and 36.5% received Pap tests. Both mammography and Pap test screening-completion rates compared favorably with other programs. **CONCLUSION:** This study demonstrates that programs implemented through community-based organizations can be successful in increasing mammography and Pap test screening among low-income and minority women.

Rodney, M., Clasen, C., Goldman, G., Markert, R., and Deane, D. (1998). Three evaluation methods of a community health advocate program. *Journal of Community Health*, 23(5), 371-381. The title Community Health Advocate (CHA) is one of thirty or more titles used throughout the world for an indigenous outreach worker who is trusted and respected in his or her community and who serves as a bridge between peers and health professionals. In 1992, the Center for Healthy Communities in Dayton, Ohio developed a program to train as Advocates people indigenous to the communities in which they would be working. Since the first CHAs began work in January 1993, the effectiveness of the program has been evaluated from three perspectives: the Community Health Advocates, the managers/directors of the community sites at which the CHAs work, and the clients with whom the CHAs work. Advocates indicated that the training program adequately prepared them for their roles and functions. They also identified systematic frustrations and barriers that made it more difficult for them to perform their job. Community site directors and community leaders indicated that the CHAs were considered a positive force in meeting client needs and facilitating independence, and were very effective in outreach and coordination of resources. A survey of CHA clients revealed an overwhelmingly positive response to the Advocate's work, validating the belief that CHAs can fill an important niche in the health care community. The three evaluation processes described in this paper helped to document the need for and the effectiveness of this program and can serve as a model for similar programs.

Weber, B. E., and Reilly, B. M. (1997). Enhancing mammography use in the inner city: a randomized trial of intensive case management. *Archives of Internal Medicine*, 157(20), 2345-2349. **BACKGROUND:** Breast cancer screening with mammography is an effective intervention for women aged 50 to 75 years but it is underused, especially by the urban poor. **OBJECTIVE:** To improve mammography completion rates for urban women aged 52 to 77 years who had not had a mammogram in at least 2 years. **METHODS:** We conducted a randomized controlled trial of a case management intervention by culturally sensitive community health educators versus usual care in six primary care practices supported by a computerized clinical information system. **RESULTS:** Women in the intervention group were nearly three times as likely to receive a mammogram (relative risk, 2.87; 95% confidence interval, 1.75-4.73). The benefit persisted when analyzed by age; race, and prior screening behavior. This intervention was practice based, not dependent on visits, and enhanced the efficacy of an already successful computerized preventive care information system. **CONCLUSIONS:** Personalized education and case management are successful in enhancing compliance with breast cancer screening among historically noncompliant vulnerable urban women. This intervention, when combined with a preventive care information system, has the potential to achieve Healthy People 2000 objectives for breast cancer screening.

Cultural Competence Health Promotion

Alcalay, R., Alvarado, M., Balcazar, H., Newman, E., and Huerta, E. (1999). *Salud para su corazon: a community-based Latino cardiovascular disease prevention and outreach model. Journal of Community Health, 24(5), 359-379.*

Cardiovascular disease (CVD) is the leading cause of death for Latinos living in the United States. This population is generally unaware of important lifestyle or behavioral changes that can prevent CVD. The National Heart, Lung, and Blood Institute (NHLBI) designed and implemented *Salud para su Corazon* (Health for Your Heart), a culturally appropriate, community-based, theory-driven intervention model. NHLBI's goals were: (1) to design an intervention model appropriate to Latino populations; (2) to pilot test the model in a specific community with the objectives of increasing awareness about heart disease, raising knowledge about CVD prevention, and promoting heart-healthy lifestyles; and (3) to disseminate the model and the materials developed to other communities with similar needs. An agency-community partnership, under the leadership of the Community Alliance for Heart Health, guided all stages of the community intervention project. The multimedia bilingual community intervention included television telenovela format public service announcements (PSAs), radio programs, brochures, recipe booklets, charlas, a promotores training manual, and motivational videos. An evaluation survey assessed the impact of the intervention. A pre-post intervention survey was conducted with more than 300 participants, and results showed that the respondents were substantially more aware of risk factors for CVD, and had greatly increased their knowledge of ways to prevent heart disease. Dissemination efforts have resulted in numerous requests by health organizations, universities, and health maintenance organizations (HMOs) for educational materials and communication strategies produced by *Salud para su Corazon*. In addition, Univision, the largest Spanish-language broadcast television network, is airing the initiative's PSAs. Also, training seminars for promotores are being conducted in different regions of the United States, and several locations are planning to replicate this study.

Bailey, E. J., Erwin, D. O., and Belin, P. (2000). *Using cultural beliefs and patterns to improve mammography utilization among African-American women: the Witness Project. Journal of the National Medical Association, 92(3), 136-142.*

Breast cancer and early detection of the disease is a significant issue for all women. Moreover, the sociocultural implications in the differential mortality rates increased interest in possible barriers to screening practices. Recently, a number of studies have investigated African Americans' cultural beliefs associated with breast cancer. This study is based upon qualitative focus group data gathered from 1989 to 1991 and 1996. This article provides focus group data that informed a culturally competent community-based cancer education program for African-American women—the Witness Project. Analysis of the qualitative data along with the quantitative outcome data revealed a direct relationship between cultural beliefs and patterns with mammography utilization. The once perceived cultural barriers can actually

be applied as a cultural intervention strategy to improve breast cancer screening initiatives designed specifically for African-American women.

Barnhart, J. M., Mossavar-Rahmani, Y., Nelson, M., Raiford, Y., and Wylie-Rosett, J. (1998). *Innovations in practice. An innovative, culturally-sensitive dietary intervention to increase fruit and vegetable intake among African-American women: a pilot study. Topics in Clinical Nutrition, 13(2), 63-71.*

Thirty African-American women (mean age 60.5 years) participated in a church-based, three-session workshop pilot program that focused on increasing fruit and vegetable intake. The program was designed and presented by a medical school-based health professional team in consultation with the church's Nurses' Unit. Fruit and average daily vegetable intake increased from 0.89 to 1.2 and from 0.81 to 1.1 servings, respectively. Evaluation indicated that cookbooks, food co-ops, and workshops were preferred methods for learning about increasing fruit and vegetable intake. Collaboration with the church's Nurses' Unit facilitated tailoring a nutrition program to the church membership and networking with other churches.

Bell, T. S., Branston, L. K., Newcombe, R. G., and Barton, G. R. (1999). *Interventions to improve uptake of breast screening in inner city Cardiff general practices with ethnic minority lists. Ethnicity & Health, 4(4), 277-284.*

OBJECTIVE: To increase the uptake of breast screening in three inner city GP practices with a high proportion of ethnic minority patients. **SETTING:** The study was carried out in May and June 1997 in the South East Wales division of Breast Test Wales (BTW). Three inner city general practices in Cardiff, with a low uptake in the previous round of breast screening and a high proportion of ethnic minority women on their lists, were targeted to receive interventions to increase uptake. This preliminary study was not randomized but sought to offer insights into the interventions that may be worth pursuing and the groups that are harder to reach. **DESIGN:** Interventions: identification of ethnic language groups; GP endorsement letter; translated literature including: multilingual leaflet, GP letter, screening invitation; transport to the screening center; language support. **RESULTS:** Of 369 women invited, 187 attended for screening. This gives an uptake of 50.7% compared with an uptake of 35.2% in the previous screening round, a statistically significant increase of 15.5%. (95% CI + 8.2% to + 22.5%). **CONCLUSION:** Findings show that translated literature, GP endorsement letter and language support by linkworkers were beneficial. The provision of free transport was ineffective and under-utilized. Uptake was highest amongst Urdu and Gujarati speaking groups and lowest for Bengali and Somali speakers that are hardest to reach. There is scope for improving the attendance rate amongst ethnic minority groups but this can prove costly.

Blackford, J., and Street, A. (1999). Problem-based learning: an educational strategy to support nurses working in a multicultural community. *Nurse Education Today*, 19(5), 364-372.

Physical dislocation of people from their homelands either as refugees, immigrants or exiles has resulted in the creation of multicultural communities that have diverse health needs. Like elsewhere, nurses in Australia have been faced with the challenge of responding to an ever-changing migrant population. A modified problem-based learning project was conducted in Melbourne to assist nurses to enhance their practice of caring for children and families of non-English speaking backgrounds (NESB). Clinical nurses worked with the researchers to develop and trial problem-based educational packages. The packages were designed for use in the clinical areas and graduate nursing programs to assist nurses overcome the cultural and communication difficulties they experienced when caring for people of NESB.

Brown, S. A., and Hanis, C. L. (1999). Culturally competent diabetes education for Mexican Americans: the Starr County study. *Diabetes Educator*, 25(2), 226-236.

PURPOSE: Few culturally competent health programs have been designed for Mexican Americans, a group that bears a disproportionate burden of Type 2 diabetes. In Starr County, a Texas-Mexico border community, investigators designed and tested a culturally competent intervention aimed at improving the health of this target population. The purpose of this article is to describe the development process of this diabetes education and support group intervention. **METHODS:** The development stages were (1) community assessment, (2) intervention design, (3) selection or development of outcomes, (4) pilot testing, and (5) a randomized clinical investigation. **RESULTS:** Focus group participants identified knowledge deficits regarding diabetes and self-management strategies, and suggested characteristics of an effective intervention for Mexican Americans. Outcome measures included metabolic control indicators, a newly developed knowledge instrument, and an existing health belief instrument. Preliminary analyses indicated that the intervention was successful in significantly improving metabolic control in the target population. **CONCLUSIONS:** Developing successful diabetes interventions for minority groups requires a number of stages, careful planning, assessment of cultural characteristics of the target population, and a systematic approach to implementation.

Chen, M. S., Zaharlick, A., Kuun, P., Li, W. L., and Guthrie, R. (1992). Implementation of the indigenous model for health education programming among Asian minorities: beyond theory and into practice. *Journal of Health Education*, 23(7), 400-403.

This article describes the setting for the first Office of Minority Health funded Minority Community Health Demonstration Grant Project targeted toward the Southeast Asian minorities of Cambodians, Laotians, and Vietnamese, explains how the theoretical basis of the Indigenous Model was implemented, and offers lessons learned and suggestions for future minority health programs. Three examples of how the Indigenous Model was applied, in some instances, in unanticipated ways are discussed. Lessons related to implementing the Indigenous Model for minorities are suggested.

Cooper, L. A. (2001). *The BRIDGE (Blacks Receiving Interventions for Depression and Gaining Empowerment) study*. Baltimore, MD: Johns Hopkins Medical Institutions, Welch Center for Prevention, Epidemiology, & Clinical Research.

Several studies document underutilization of outpatient specialty mental health services by African Americans. However, African Americans with depression are just as likely as whites to receive care in primary care settings. Despite their use of primary care services, African American patients are less likely than whites to be recognized as depressed, offered pharmacotherapy, and to initiate or complete pharmacotherapy or psychotherapy for depression. African American patients express stronger preferences for counseling and more negative attitudes toward antidepressant medication, the most common form of treatment of depression used by primary care physicians. African Americans are also more likely to see depression and its treatment through a spiritual or religious framework. Studies show that African Americans receive less optimal technical and interpersonal health care than whites for many conditions. Depression is a common chronic condition that results in substantial morbidity, functional disability, and resource use. Despite the proven efficacy of pharmacotherapy and psychotherapy for treatment of depression, the gap between research findings and clinical practice is wide for management of depression in primary care. Recent intervention work has shown that quality improvement strategies for depression in primary care are effective. Research also shows that cultural adaptations can improve adherence and retention in care for ethnic minority patients. We have created a cultural adaptation that includes many of the components of recent successful quality improvement interventions for depression in primary care. The proposed study uses a patient-centered, culturally tailored, education and activation intervention with active follow-up by a depression case manager.

It also includes academic detailing and structured mental health consultation tailored to physicians' needs and emphasizes cultural competence to improve care for African American primary care patients with major depressive disorder. Thirty physicians and 250 patients will be randomized to either usual care or the combined patient and physician intervention. The main hypothesis is that patients in the intervention group will have higher remission rates from depression, lower levels of depressive symptoms, and better functional status at 12 months than patients in the usual care group. We will also measure patient adherence to guideline concordant care and several process measures (patient and physician satisfaction with technical and interpersonal care, and depression care, patient and physician attitudes towards depression, and self-efficacy) in managing depression. This study will add to knowledge about how to effectively engage African American patients in care of depression and serve as a prototype of how to incorporate cultural sensitivity in programs to improve care for common conditions in ethnically diverse populations.

Davis, S. M., Lambert, L. C., Gomez, Y., and Skipper, B. (1995). Southwest Cardiovascular Curriculum Project: study findings for American Indian elementary students. *Journal of Health Education*, 26(2 Suppl), 72-81.

The Southwestern Cardiovascular Curriculum is a multidisciplinary school-based program to promote cardiovas-

cular health behavior change in fifth grade Navajo and Pueblo students. The curriculum was implemented at 11 elementary schools located on or near American Indian reservations in rural New Mexico. The five-year program was designed to be culturally relevant to rural American Indian children in the southwest, incorporating Native American traditions and values into lessons and activities. Participating schools were randomly assigned to curriculum or control conditions. Students in the curriculum group showed significant increases in knowledge when compared with controls for both Navajos and Pueblos. A higher proportion of students in the curriculum group reported a decrease in the frequency of salt use at the table and butter on bread or tortillas. Of students who had tried smoking at baseline, boys and Pueblo students in the curriculum group reported decreasing their smoking habits more than controls. Similarly, boys and Navajo students who had tried smokeless tobacco at baseline, and received the curriculum, reported using less smokeless tobacco at the post-test than controls. In the curriculum group, 70 percent of students reported increasing the amount they exercised since baseline. These results indicate that culturally appropriate school-based programs can help promote behavior changes that lead to healthy lifestyles in American Indian children.

Dignan, M. B., Michielutte, R., Wells, H. B., Sharp, P., Blinson, K., Case, L. D., Bell, R., Konen, J., Davis, S., and McQuellon, R. P. (1998). Health education to increase screening for cervical cancer among Lumbee Indian women in North Carolina. *Health Education Research*, 13(4), 545-556.

Although age-adjusted mortality rates from cancer among Native-Americans are generally lower than for the US population as a whole, cervical cancer mortality rates are higher. This report presents results from a National Cancer Institute-funded health education program conducted among the Lumbee tribe in North Carolina that was designed to increase the proportion of women, age 18 and older, who receive Pap smears to screen for cervical cancer. The Solomon Four Group research design was used for this project. Participants were selected at random from the enrollment records of the Lumbee tribe and data collection was carried out during face-to-face interviews. The health education program was provided one-on-one in women's homes by a trained lay health educator and included verbal, print and videotape information. A total of 979 women were enrolled in the study, and 125 were lost to follow-up between the pre-test and post-test. Women who received the education program were found to be more likely to have knowledge of the Pap smear and to report a Pap smear in the past year at the post-test than those in the control group, regardless of whether they received the pre-test interview, $P < 0.05$. Women most likely to respond to the education program were also likely to have reported that they receive an annual physical examination. Women with better knowledge of the Pap smear tended to have more education, higher income and greater identification with Native-American culture than those with less knowledge. We conclude that the health education program was associated with greater knowledge about cervical cancer prevention and higher proportions of Lumbee women obtaining Pap smears in the past year.

Duffy, S. A., Bonino, K., Gallup, L., and Pontseele, R. (1994). Community baby shower as a transcultural nursing intervention. *Journal of Transcultural Nursing*, 5(2), 38-41.

A community assessment was conducted by nursing students to determine the educational needs of Native American women whose infants were at risk for infant mortality. As a result, a culturally-based community baby shower that incorporated health education was provided for the women and their infants. Games, prizes, and lunch were provided for the mothers upon completion of educational newborn care, immunizations, and infant safety learning activities. The intervention project based upon maintaining a Native American cultural theme was used with cake, favors, prizes, invitations, and advertisements. In addition, a recognized Native American spiritual leader was invited to begin the shower with a traditional blessing. Multiple community resources such as businesses, stores (including drug), churches, hospitals, a local nursing home, and several private individuals also contributed time, money, and baby care items for the shower. From the advertising, many women expressed interest in attending the baby shower than could be accommodated. Press releases provided exposure for the school of nursing, contributors, participants, and many members of the Native American community. A pre- and post-test survey indicated that by the end of the baby shower, all ten key Native American women participants were able to demonstrate the use of the information taught by the nursing students. The baby shower enhanced the Native American mothers' self confidence and provided them with culturally sensitive care. The welcoming atmosphere created by the students for the Native Americans was also important to the success of the project.

Edwards, N., Ciliska, D., Halbert, T., and Pond, M. (1992). Health promotion and health advocacy for and by immigrants enrolled in English as a Second Language classes. *Canadian Journal of Public Health. Revue Canadienne de Sante Publique*, 83(2), 159-162.

An intersectoral immigrant health promotion project in Hamilton, Ontario is described. The project goal was to facilitate the entry of new immigrants to the Ontario health care system and equip them with knowledge and skills to strengthen their preventive and promotive health practices. A needs assessment preceded project development. The three phases of the project are described. The first phase commenced with the development of culturally sensitive health promotion resource materials to be used with immigrants enrolled in English as a Second Language classes. In phase two, activities focused on strengthening the ability of ESL teachers to incorporate a preventive and promotive health focus in their classes. The final phase shifted to a community-based project. During this phase, a core immigrant group developed their skills as health advocates for their immigrant community.

Erwin, D. O., Spatz, T. S., Stotts, R. C., and Hollenberg, J. A. (1999). Increasing mammography practice by African American women. *Cancer Practice*, 7(2), 78-85.

PURPOSE: This study examines the effectiveness of the Witness Project, a culturally competent cancer education program that trains cancer survivors to promote early detection and increased breast self-examination and mammography in a popula-

tion of rural, underserved, and African American women. **DESCRIPTION OF STUDY:** The primary setting for the Witness Project—an intensive, community-based, culturally sensitive educational program that incorporates spirituality and faith—was the African American church. Baseline and six-month follow-up surveys were obtained from 206 African American women in two intervention counties and from 204 African American women in two control counties in the rural Mississippi River Delta region of Arkansas. **RESULTS:** Witness Project participants significantly increased ($P < .0001$) their practice of breast self-examination and mammography ($P < .005$) compared with the women in the control counties. **CLINICAL IMPLICATIONS:** These results demonstrate that intensive, community-based, culturally sensitive educational programming incorporating the spiritual environment of the faith community, such as the Witness Project, can positively influence breast cancer screening behaviors among rural, underserved African American women. Through the use of community churches and cancer survivors, breast cancer screening activities can be improved in this population.

Erwin, D. O., Spatz, T. S., Stotts, R. C., Hollenberg, J. A., and Deloney, L. A. (1996). Increasing mammography and breast self-examination in African American women using the Witness Project model. *Journal of Cancer Education, 11(4), 210-215.*

BACKGROUND: The five-year survival rate for African American women with breast cancer is notably lower than the rate for white women; thus, appropriate cancer education and screening efforts are needed to increase mammography and breast self-examination practices by African American women. **METHODS:** The Witness Project is a theory-based intervention designed to provide culturally sensitive messages, from African American breast cancer survivors, in churches and community organizations. These messages emphasize the importance of early detection to improve survival. **RESULTS:** Intervention research in eastern Arkansas with 204 African American women demonstrated a significant increase in the practice of breast self-examination ($p < 0.001$) and mammography ($p < 0.001$) after participation in the Witness Project. There was no significant difference between the pre- and postintervention scores for scaled items for the health-belief model and locus of control. **CONCLUSIONS:** Results demonstrate that culturally appropriate cancer education programs are able to change behavior by meeting the beliefs of participants rather than attempting to change their beliefs.

Ferguson, S. L. (1996). *Evaluation of the effects of peer counseling in a culturally-specific adolescent pregnancy prevention program for African American females.* Unpublished Ph.D. Dissertation, University of Virginia, Charlottesville.

This study determined the effects of peer counseling in a culturally-specific pregnancy prevention program for African American females. Social learning theory was used as the theoretical framework. The study took place in Charlottesville, Virginia. A random pretest and multiple posttest comparison group design was used to obtain data on a total sample size of 63 African-American adolescent females, ages 12-16, who lived in four local public housing developments. Descriptive data and tests of significance were calculated to evaluate the effectiveness of the intervention of peer counseling on preventing pregnancy, de-

laying sexual intercourse, increasing knowledge related to reproduction, sexually-transmitted diseases, and contraceptives and using effective contraceptives if sexually-active. A total of 52 females remained in the study at the three-month posttest. None of the participants who received the intervention of peer counseling became pregnant within three months of the intervention. Likewise, none of the comparison group participants became pregnant during the study. There was no delay in sexual intercourse for the sexually-experienced participants in the experimental group or in the comparison group. However, the majority of sexually-experienced participants in the experimental group reported having no sexual intercourse within the last four weeks at both pretest and three-month posttest. Findings further revealed that a statistically significant increase in knowledge of reproduction, sexually-transmitted diseases, and contraceptives occurred within the experimental group when comparing their pretest and eight-week posttest scores. Their average knowledge scores remained the same when comparing eight-week posttest and three-month posttest scores. The comparison group participants improved their knowledge scores significantly based on eight-week and three-month posttest scores. Finally, there was not a statistically significant difference between the sexually-experienced participants in the experimental and comparison groups in their use of effective methods of contraception. Recommendations for nursing include: (a) nurses should be culturally competent when planning and evaluating community-based adolescent pregnancy prevention programs for adolescents from culturally and ethnically diverse populations; and (b) nurses should continue to train peer counselors to be involved in adolescent pregnancy prevention programs.

Flaskerud, J. H., Nyamathi, A., and Uman, G. (1997). Longitudinal effects of an HIV testing and counseling program for low-income Latina women. *Ethnicity & Health, 2(1-2), 89-103.*

OBJECTIVES: The purpose of this study was to assess the effects of an HIV antibody testing, counseling and education program on the knowledge and practices of low-income Los Angeles Latina women. **METHODS:** The study design was prospective and longitudinal involving pre-test, post-test and retest measures over a 2-year period. The study employed an experimental group and a comparison group that did not receive the intervention. The study group was comprised of a convenience sample of 508 low-income Latina women who were recruited from the Public Health Service nutrition program for women, infants and children (WIC). The comparison group ($n = 51$) was recruited from the same setting. A battery of instruments was selected to measure HIV knowledge and practices, the social support received, self-esteem, the level of acculturation and sociodemographic characteristics. The instruments were administered at pre-test, 2 weeks post-test and 1 year retest. The HIV antibody serostatus was assessed at pre-test and retest. An intervention protocol based on cultural competence, women as traditional health care givers and the major transmission categories was provided after the pre-test and was reinforced post-test. Finally, qualitative data were collected from the focus group participants ($n = 55$) to evaluate the intervention protocol. **RESULTS:** The participants in the study made significant improvements in HIV knowledge and reported condom use practices from pre-test to post-test that were retained on retest. The comparison

group subjects did not make significant pre-test-post-test improvements on these measures. **CONCLUSIONS:** It should be noted that the changes in practices made by the study group did not necessarily reduce their risk of HIV infection or transmission and were not related to the demonstrated knowledge and skills improvement. Of special significance to program planners, educators and researchers, both the quantitative and qualitative data revealed problem areas with the intervention protocol related to cultural norms and the possible fragmentation of information based on the behavioral transmission categories.

Flaskerud, J. H., and Nyamathi, A. M. (1990). Effects of an AIDS education program on the knowledge, attitudes and practices of low income black and Latina women. *Journal of Community Health, 15*(6), 343-355.

The purpose of this study was to test the effects of an AIDS education program on the knowledge, attitudes and practices of low income black and Latina women. A pretest-posttest nonequivalent control group design was used with a 2-3 month retest of the experimental group. The sample consisted of 506 experimental and 206 control group women who were clients of the Public Health Foundation's Nutrition Program for Women, Infants and Children in Los Angeles County. The program included a slide-tape presentation, and educational and resource brochures in English and Spanish. Knowledge, attitudes, and sexual and drug use practices were measured using a structured questionnaire that was developed in English and Spanish. Content validity and reliability of the questionnaire were established. A two-way repeated measures ANOVA examined differences in pretest-posttest knowledge, attitudes, and practices for experimental and control groups and for both racial/ethnic groups. The experimental group made significant gains over the control group on pretest-posttest measures of knowledge and attitudes. Both experimental and control groups made significant changes in practice. Changes in knowledge were retained on retest; changes in practices came close to significance on retest. Blacks and Latinas differed on pretest knowledge and attitudes but not practices. Blacks had more knowledge and positive attitudes on pretest. However, posttest improvements for both knowledge and attitudes were greater in Latinas than in blacks. A multiple regression analysis revealed that the best predictors of knowledge, attitudes and practices were racial/ethnic group, education, and religion. It is concluded that a didactic audio visual program can positively affect the knowledge and possibly the practices of participants and that these are retained over time but that changes in attitudes will take further efforts.

Gilliland, S. S., Carter, J. S., Perez, G. E., Two Feathers, J., Kenui, C. K., and Mau, M. K. (1998). Recommendations for development and adaptation of culturally competent community health interventions in minority populations with type 2 diabetes mellitus. *Diabetes Spectrum, 11*(3), 183-184.

The experience from the Native American Diabetes Project and the Native Hawaiian Diabetes Intervention Program illustrates the intervention development and adaptation process in two minority populations. The recommendations presented may be useful to health practitioners and researchers interested in developing or adapting culturally competent diabetes interventions for minority populations affected with diabetes.

Griffin, J. A., Gilliland, S. S., Perez, G., Helitzer, D., and Carter, J. S. (1999). Participant satisfaction with a culturally appropriate diabetes education program: the Native American diabetes project. *Diabetes Educator, 25*(3), 351-363.

PURPOSE: The purpose of this paper is to report on participant satisfaction with the Native American Diabetes Project diabetes education program. **METHODS:** A questionnaire was designed to measure satisfaction among participants in the diabetes education program, which consisted of five sessions designed according to the Transtheoretical Model of Change and Social Action Theory with input from community members. Eight pueblo communities participated in the program. Sessions were taught by community mentors in three sites in New Mexico. One site taught sessions in a one-on-one format, and two sites taught sessions in a group format. **RESULTS:** The results showed that participant satisfaction did not vary based on session delivery type or by session site. Overall, participants responded positively to sessions designed according to Social Action Theory and with cultural competency. Retention rates for the sessions were 81% for group sessions and 91% for one-on-one sessions. **CONCLUSIONS:** Using a strong theoretical framework and community input to design diabetes education sessions may be important factors in participant satisfaction and retention in diabetes lifestyle education sessions.

Hartweg, D. L., and Berbiglia, V. A. (1996). Determining the adequacy of a Health Promotion Self-Care Interview Guide with healthy, middle-aged, Mexican American women: a pilot study. *Health Care for Women International, 17*(1), 57-68.

The Hispanic/Latino population is the second largest and fastest growing minority in the United States, with Mexican Americans comprising 60.4% of the total. Existing research instruments and procedures must be made culturally specific, both theoretically and empirically, for use with this population. Our purpose in the present study was to determine whether one part of the Health Promotion Self-Care Interview Guide (HPSCIG), developed to identify self-care actions that promote well-being in healthy, middle-aged Anglo American and African American women (Hartweg, 1991, 1993), was culturally sensitive for use with Mexican American women. This was a necessary step before the full HPSCIG was translated into Spanish for a larger bilingual study. Twenty Mexican American women identified 232 self-care actions they took to promote well-being as they defined it. More than 81% of the self-care actions were performed to meet the universal self-care requisites, 11% were performed to meet the developmental requisites of middle-age, and 2% were performed to meet health deviation self-care requisites. Six percent of the actions could not be classified using the theoretical coding scheme. Inherent in the study were questions about the congruence and relevance of self-care as a concept in this population. The findings support the use of the HPSCIG with healthy, middle-aged Mexican American women.

Jackson, J., Kennedy, B. L., Mandel, D., Carlson, M., Cherry, B. J., Fanchiang, S. P., Ding, L., Zemke, R., Azen, S. P., Labree, L., and Clark, F. (2000). Derivation and pilot assessment of a health promotion program for Mandarin-speaking Chinese older adults. *International Journal of Aging & Human Development*, 50(2), 127-149.

As the percentage of older adults of diverse ethnicities increases in the United States, the call for culturally sensitive health care service strategies that target the special needs of older people grows. The present report describes methods used to adapt a health care program so that it would better meet the needs of a group of well, older Mandarin-speaking Chinese residents of Los Angeles. The specific qualitative research procedures that we used to adapt the treatment program are described, along with the particular adaptations that emerged. Additionally, outcomes from a randomized pilot experiment are presented that are consistent with the notion that the adapted program was effective in reducing health-related declines among older Mandarin-speaking men and women. The overall outcome of this project is in agreement with other reports in the health care literature that address the importance of providing culturally sensitive health care service for elders.

Litrownik, A. J., Elder, J. P., Campbell, N. R., Ayala, G. X., Slymen, D. J., Parra-Medina, D., Zavala, F. B., and Lovato, C. Y. (2000). Evaluation of a tobacco and alcohol use prevention program for Hispanic migrant adolescents: promoting the protective factor of parent-child communication. *Preventive Medicine*, 31(2 Pt 1), 124-133.

BACKGROUND: Interventions designed to prevent tobacco and alcohol use targeting high-risk adolescents are limited. In addition, few studies have attempted to improve parent-child communication skills as a way of improving and maintaining healthy youth decision-making. **METHODS:** A total of 660 Hispanic migrant families participated in a randomized pre-post control group study that was utilized to determine the impact of the intervention on parent-child communication. Both treatment and attention-control groups of youth were exposed to an eight-session culturally sensitive program presented by bilingual/bicultural college students. Parents jointly attended three of the eight sessions and participated in helping their child complete homework assignments supporting the content of each session. The content of the treatment intervention included (1) information about tobacco and alcohol effects, (2) social skills training (i.e., refusal skills), and (3) the specific development of parent-child communication skills to support healthy youth decisions. **RESULTS:** Significant intervention by household size interactions for both parent and youth perceptions of communication were found indicating that the treatment was effective in increasing communication in families with fewer children. Based on the effect size and the previously established relationship between communication and susceptibility to tobacco and alcohol use, it was determined that the intervention effect could be translated into a future 5 to 10% decrease in susceptibility for these smaller families. **CONCLUSIONS:** A culturally sensitive family-based intervention for migrant Hispanic youth was found to be effective in increasing perceived parent-child communication in families with fewer children. It is expected that increases in this important protective factor will lead to later observed decreases in tobacco and alcohol use.

Marin, G., Marin, B. V., Perez-Stable, E. J., Sabogal, F., and Otero-Sabogal, R. (1990). Changes in information as a function of a culturally appropriate smoking cessation community intervention for Hispanics. *American Journal of Community Psychology*, 18(6).

This study tested a seven-month, media-based, community intervention among Hispanics in San Francisco designed to change levels of information on the damaging effects of cigarette smoking and on the availability of culturally appropriate cessation services. Three community-wide surveys of Hispanics were conducted with independent random samples, two as baselines ($n = 1,660$ and $2,053$) and one postintervention ($n = 1,965$). Results showed that changes in the level of awareness of cessation services had taken place after implementation of the intervention. Furthermore, those changes took place primarily among the less acculturated Spanish-speaking Hispanics who were the target of the intervention. The changes in information reported here demonstrate that a culturally appropriate information dissemination campaign that utilizes multiple channels can produce changes in a community's level of information even when the campaign is implemented for a relatively short period.

Marin, G., and Perez-Stable, E. J. (1995). Effectiveness of disseminating culturally appropriate smoking-cessation information: Programa Latino Para Dejar de Fumar. *Journal of the National Cancer Institute* 18, 155-163.

BACKGROUND: The need for a culturally appropriate smoking-cessation intervention for Latinos is based on data on current patterns of tobacco use, possible targeting by the tobacco industry, and the lack of smoking-cessation interventions that are appropriate to the cultural characteristics of Latino smokers. **PURPOSE:** Our goal was to evaluate the effectiveness of the Programa Latino Para Dejar de Fumar (PLDF) in disseminating smoking-cessation information in San Francisco's Latino community. **METHODS:** Annual cross-sectional telephone surveys were conducted from 1986 to 1993 of Latino adults, 18-65 years of age, living in census tracts with at least 10% Latinos. Surveys in 1986 and 1987 formed the base line for comparison of PLDF effects. **RESULTS:** Awareness of a Hispanic smoking-cessation program (odds ratio [OR] = 1.11; 95% confidence interval [CI] = 1.09-1.14), awareness of PLDF specifically (OR = 1.14; 95% CI = 1.10-1.17), awareness of available printed information to help smokers quit (OR = 1.09; 95% CI = 1.06-1.12), and having a copy of the Guia Para Dejar de Fumar (OR = 1.09; 95% CI = 1.05-1.14) were significantly associated with year of survey. In addition, those same variables were significantly associated with a lower acculturation score (respective ORs = 3.95, and 95% CI = 3.57-4.37; OR = 5.40, and 95% CI = 4.86-6.01; OR = 0.63, and 95% CI = 0.58-0.69; and OR = 4.54, and 95% CI = 3.89-5.30). Women were more likely than men to report awareness of a Hispanic smoking-cessation program (OR = 0.88; 95% CI = 0.81-0.96), awareness of PLDF (OR = 0.84; 95% CI = 0.77-0.92), and awareness of available printed information (OR = 0.78; 95% CI = 0.72-0.85). Cigarette-smoking prevalence decreased from 1986 through 1990, stabilized in 1991, and appeared to increase among all groups in 1993. Prevalence of smoking cessation remained stable overall, but it showed a steady increase among less acculturated respondents. **CONCLUSION:** We conclude that a culturally appropriate community intervention to promote nonsmoking can be successful

at disseminating information about smoking cessation. Latino community norms about smoking are evolving, leading to decreased social acceptability.

Mattson, S., and Lew, L. (1992). Culturally sensitive prenatal care for Southeast Asians. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 21(1), 48-54.

OBJECTIVE: To evaluate the success of the Southeast Asian Health Project in terms of client satisfaction with the prenatal care and other services. To obtain additional data about Southeast Asian women's health practices regarding childbearing. **DESIGN:** Survey through questionnaires administered as interviews. **SETTING:** In clients' homes or via telephone. **PARTICIPANTS:** 119 women from SEAHP's case files of recently delivered clients. **MEASUREMENTS AND MAIN RESULTS:** Interviews were conducted by four community workers fluent in Cambodian or Lao. The majority of women were satisfied with SEAHP, particularly the interpretation and education in native languages. Women were also satisfied with SEAHP, encouraging others to seek care. **CONCLUSIONS:** SEAHP appears to meet prenatal care needs of Southeast Asian women in Long Beach, California. More objective outcome data await analyses, but the program's approach may ensure access to and use of health services.

McAvoy, B. R., and Raza, R. (1991). Can health education increase uptake of cervical smear testing among Asian women? *British Medical Journal*, 302(6780), 833-836.

OBJECTIVES: To determine the effects of three different methods of providing health education on the uptake of cervical smear testing among Asian women, and to evaluate the acceptability of different health education materials. **DESIGN:** Prospective cohort study over one year of effects of written materials by post, personal visit to give written materials, and personal visit to show a video on the uptake of smear testing. Techniques included a personally administered questionnaire. **SETTING:** Leicester, a city with a large Asian population. **SUBJECTS:** 737 randomly selected Asian women aged 18 to 52 who were not recorded on the central cytology laboratory's computer as ever having had a cervical smear test. 159 declined to participate or were not contactable. **INTERVENTIONS:** Women were randomized into four groups: visited and shown a video (263), visited and shown a leaflet and fact sheet (219), posted a leaflet and fact sheet (131), not contacted at all (124). **MAIN OUTCOME MEASURES:** Cervical smear test recorded on computer within four months after intervention. **RESULTS:** 57 (37%, 26% of group) of the women visited and given leaflets and 80 (47%, 30% of group) shown the video attended for cervical smears. Only six (5%) of those who were not contacted and 14 (11%) of those sent leaflets had a smear test during the study. **CONCLUSION:** Health education interventions increased the uptake of cervical cytology among Asian women in Leicester who had never been tested. Personal visits were most effective irrespective of the health education materials used, but there was some evidence that home viewed videos may be particularly effective in one of the most hard to reach groups: Urdu speaking, Pakistani Moslems. Written translated materials sent by post were ineffective.

McPhee, S. J., Bird, J. A., Davis, T., Ha, N. T., Jenkins, C. N., and Le, B. (1997). Suc khoe la vang: (health is gold:) Vietnamese Community Health Promotion Project, barriers to breast and cervical cancer screening among Vietnamese-American women. *American Journal of Preventive Medicine*, 13(3), 205-213.

INTRODUCTION: We investigated barriers to breast and cervical cancer screening among Vietnamese women in San Francisco and Sacramento, California. **METHODS:** Face-to-face interviews were conducted in 1992 of 306 Vietnamese women in San Francisco and of 339 women in Sacramento. **RESULTS:** In both communities, only about one half of Vietnamese women had ever had routine check-ups, clinical breast examinations, mammograms, and Pap smear tests, and only about one third were up-to-date for these screening examinations. Among women age 40 or older, 35% had never even contemplated having a mammogram. This study identified several significant barriers to recognition, receipt, and currency of screening tests. Negative predictors of test recognition included low level of education and not having a regular physician. Negative predictors of test receipt included low level of education, not having a regular physician, short duration of residence in the United States, and never having been married. A major negative predictor of test currency was low level of education. With a few exceptions, attitudes and beliefs generally were not important predictors. **CONCLUSIONS:** Health education and screening programs for early breast and cervical cancer detection among Vietnamese women must be culturally appropriate and conducted in the Vietnamese language. Special outreach efforts are needed to assist recent immigrants in obtaining recommended breast and cervical cancer screening examinations.

Miano, L. Y., Rojas, M. S., and Trujillo, M. (1996). "Platicas y Merienda": reaching Spanish-speaking patients in an oncology setting. *Cancer Practice: A Multidisciplinary Journal of Cancer Care*, 4(4), 199-203.

PURPOSE: The United States Hispanic population has tripled since the mid-1950s and is projected to be the largest growing segment of the population through the year 2000. The traditional support group model has not been effective in reaching this population. Healthcare professionals must become innovative to better understand and provide programs for Spanish-speaking cancer patients. **DESCRIPTION OF PROJECT:** At the M.D. Anderson Cancer Center, a group program titled "Platicas y Merienda" was developed that derived from several group modalities: education, social, and peer support. The program is coordinated and facilitated by Spanish-speaking social workers and uses other professionals within the institution as speakers to promote a multidisciplinary approach to providing support services. **FINDINGS:** Participants experienced an increased sense of social and emotional well-being, expanded their knowledge of health-related information, and became aware of other services and benefits available to them. **CLINICAL IMPLICATIONS:** During this time of change in the healthcare environment, innovation in clinical practice and program development is necessary to address the needs of the growing Hispanic population.

Michielutte, R., Sharp, P. C., Dignan, M. B., and Blinson, K. (1994). Cultural issues in the development of cancer control programs for American Indian populations. *Journal of Health Care for the Poor & Underserved*, 5(4), 280-296.

Cancer is the third-leading cause of death among American Indians. The persistent disadvantage in cancer survival rates among American Indian populations emphasizes the importance of developing effective cancer control programs for prevention and early detection. However, substantial cultural differences between American Indians and whites can affect the success of these programs. This paper examines the concept of cultural sensitivity in the context of developing cancer control programs for American Indian populations. It explores fundamental differences in beliefs, behaviors, and values between American Indian and white majority cultures, and presents examples of culturally sensitive health education programs. The paper highlights insights and experiences gained in developing the North Carolina Native American Cervical Cancer Prevention Project, and gives recommendations for the development of future programs.

Nevid, J. S., and Javier, R. A. (1997). Preliminary investigation of a culturally specific smoking cessation intervention for Hispanic smokers. *American Journal of Health Promotion*, 11(3), 198-207.

PURPOSE: The purpose of this study was to compare a culturally specific, multicomponent behavioral smoking cessation program for Hispanic smokers with a low-intensity, enhanced self-help control condition. **DESIGN:** Participants who completed pretreatment assessment were randomly assigned to treatment conditions. Smoking status was evaluated at posttreatment, six-month follow-up, and 12-month follow-up intervals. **SETTING:** The study was based in predominantly Hispanic neighborhoods in Queens, New York. **PARTICIPANTS:** Ninety-three Hispanic smokers participated: 48 men and 45 women. **INTERVENTION:** The multicomponent treatment involved a clinic-based group program that incorporated a culturally specific component consisting of videotaped presentations of culturally laden smoking-related vignettes. The self-help control program was enhanced by the use of an introductory group session and follow-up supportive telephone calls. **MEASURES:** Smoking outcomes were based on cotinine-validated abstinence and self-reported smoking rates. Predictors of abstinence were examined, including sociodemographic variables, smoking history, nicotine dependence, acculturation, partner interactions, reasons for quitting, self-efficacy, and linguistic competence. **RESULTS:** Significant group differences in cotinine-validated abstinence rates in favor of the multicomponent group were obtained, but only at posttreatment. With missing data included and coded for nonabstinence, validated abstinence rates at posttreatment were 21% for the multicomponent group and 6% for the self-help group. At the 6-month follow-up, the rates were 13% for the multicomponent group and 9% for the self-help group. By the 12-month follow-up the rates declined to 8% and 7% for the multicomponent and self-help groups, respectively. A dose-response relationship between attendance at group sessions and abstinence status was shown at posttreatment and six-month follow-up intervals. **CONCLUSIONS:** The results of the present study failed to show any long-term benefit from use of a clinic-based, culturally specific multicomponent smoking cessation

intervention for Hispanic smokers relative to a minimal-contact, enhanced self-help control.

Shapiro, J., and Simonsen, D. (1994). Educational/support group for Latino families of children with Down syndrome. *Mental Retardation*, 32(6), 403-415.

Experiences and observations based on an ongoing parent education-support group for Mexican-origin Latino parents of children with Down syndrome were described. Culturally mediated concepts were discussed in terms of their relevance to specific aspects of group functioning, including group structure, membership, and leadership. Problems of particular concern to this population that might adversely affect maintenance and growth of the group were also examined. Finally, the potential value of such support groups for this parent population were considered as were guidelines for enhancing the group experience.

Shintani, T., Beckham, S., O'Connor, H. K., Hughes, C., and Sato, A. (1994). The Waianae Diet Program: a culturally sensitive, community-based obesity and clinical intervention program for the Native Hawaiian population. *Hawaii Medical Journal*, 53(5), 136-141.

The Waianae Diet Program (WDP) is a community-based program designed at the Waianae Coast Comprehensive Health Center in response to the high rates of obesity and chronic disease among Native Hawaiians. Its foundation is a three-week program of traditional Hawaiian diet and cultural teachings. It employs eight innovations in clinical nutrition and health promotion theory: 1. Non-calorie restricted weight loss protocol, 2. Dietary clinical intervention, 3. Cultural sensitivity, 4. Transition diet, 5. Whole-person approach, 6. Group ohana (family) support, 7. Community intervention, and 8. Role modeling. It has demonstrated significant weight loss with no calorie restriction, improvement in blood pressure, serum glucose, and serum lipids. It appears to have wide acceptance in the Hawaiian community. More studies are warranted to determine the long-term effect of this program.

Soto Mas, F. G., Kane, W. M., Going, S., Ford, E. S., Marshall, J. R., Staten, L. K., and Smith, J. E. (2000). Camine con Nosotros: connecting theory and practice for promoting physical activity among Hispanic women. *Health Promotion Practice*, 1(2), 178-187.

Despite the popularity and widespread use of theory in health education, practitioners still find it difficult to design and implement theory-based interventions. This is especially true when working with ethnic/racial minority groups, including Hispanic groups. Practitioners working with Hispanic communities face additional barriers that may often discourage them from using theories when planning interventions. These barriers include the diversity that exists within the Hispanic population, lack of reliable data, and issues related to cross-cultural applicability of current behavior theories. However, the use of theory constitutes a valuable tool for developing more effective programs, and theorist researchers should be more sensitive to practitioners' needs. By explaining the processes for selecting and applying theory in the same detail as outcome results, researchers will contribute to increasing practitioners' interest in theory. This article describes Camine con Nosotros, a theory-based physical

activity program for Hispanic women, and explains the process of selecting the theoretical framework of the program and connecting theory and practice.

Stevenson, H. C., Gay, K. M., and Josar, L. (1995). Culturally sensitive AIDS education and perceived AIDS risk knowledge: reaching the "know-it-all" teenager. *AIDS Education and Prevention*, 7(2), 134-144.

Video education is the most popular and effective medium for informing the adolescent population. This study investigated the impact of a culturally relevant HIV/AIDS video education. One hundred and ninety-four African-American teenagers were assigned to either a culturally sensitive or culturally dissimilar video education intervention. Results indicate that both interventions were effective in increasing AIDS knowledge scores. An interaction effect was found between levels of perceived AIDS risk knowledge and participation in the culturally sensitive intervention (CSV). Only the CSV intervention was effective with adolescents who claimed to "know a lot" about AIDS (e.g., "Know-It-All" subgroup). Students in both conditions who were worried about getting AIDS demonstrated higher AIDS risk knowledge at post-assessment. This study provides further evidence of within-ethnicity diversity among African-American youth and for developing culture- and subgroup-specific HIV/AIDS education.

Stillman, F. A., Bone, L. R., Rand, C., Levine, D. M., and Becker, D. M. (1993). Heart, body, and soul: a church-based smoking-cessation program for urban African Americans. *American Journal of Preventive Medicine*, 22(3), 335-349.

BACKGROUND: This article provides a descriptive overview of the implementation process of the Heart, Body, and Soul program. The program objective was to test strategies to reduce the prevalence of cigarette smoking among urban African Americans in East Baltimore. **METHOD:** This study constitutes a prospective randomized trial among inner-city African Americans designed to improve quit rates among church attenders. A random-digit-dialing survey was conducted to establish baseline levels of self-reported cigarette smoking, examine attendant attitudes, and determine the presence of known cardiovascular risk factors among community residents of the catchment area. A similar survey was conducted among churchgoers to establish a baseline. Twenty-two churches were recruited and randomly assigned to either intensive or minimal (self-help) intervention strategies. Baseline health screenings were held in all participating churches. Innovative culturally specific smoking cessation strategies mediated through lay volunteers from participating churches were implemented in the intensive intervention churches. **RESULTS:** Pastors of all churches were directly involved in all aspects of the planning and implementation process. A total of 29 volunteer lay smoking-cessation specialists were trained and successfully implemented the intensive interventions in churches. An additional 272 church members were trained to conduct their church's health screenings. **CONCLUSION:** The essential component of this successful implementation process were building trust and acceptance and providing the technical support to encourage smoking-cessation strategies. This description of the project is presented to assist others involved in church-based trials in urban African American communities.

Sung, J. F., Blumenthal, D. S., Coates, R. J., Williams, J. E., Alema-Mensah, E., and Liff, J. M. (1997). Effect of a cancer screening intervention conducted by lay health workers among inner-city women. *American Journal of Preventive Medicine*, 13(1), 51-57.

INTRODUCTION: We conducted a randomized controlled trial to determine if an in-home educational intervention conducted by lay health workers (LHWs) could increase adherence among low-income, inner-city, African-American women to breast and cervical cancer screening schedules. **METHODS:** We recruited 321 African-American women from diverse inner-city sources. After baseline interviews, they were randomly assigned to either the intervention (n = 163) or the control (n = 158) group. Those in the intervention group were visited in their homes up to three times by LHWs who provided a culturally sensitive educational program that emphasized the need for screening. **RESULTS:** Ninety-three (93) women in the intervention group and 102 in the control group completed the postintervention interview. For Pap smears, the increase in screening was similar in both groups. For clinical breast exams (CBEs), however, there was a modest increase in the intervention group. The improvement was greatest for mammography, for which there was a 10% to 12% increase. Among women who were not on recommended schedules at baseline, the improvement was substantial and greater in the intervention group. **CONCLUSIONS:** LHWs' intervention appeared to improve the rate at which inner-city women obtained CBEs and mammograms, but had no effect on Pap smears. A high attrition rate weakened our ability to make conclusive statements about the exact impact of the intervention.

Wang, C. Y., and Abbott, L. J. (1998). Development of a community-based diabetes and hypertension preventive program. *Public Health Nursing*, 15(6), 406-414.

The purpose of this project was to develop rapport with a Chinese Community Association and then establish preventive diabetic and hypertension programs with the Chinese in Chinatown, Hawaii. Subjects were recruited from this Chinese Community Association. Two hundred Chinese responded to the invitation. Among these, 75 individuals had either Type 2 diabetes, hypertension or both. Thirty-six males and 39 females ranging in age from 51 years old to 96 years old (Mean = 71.76, SD = 9.58) participated. Surveys and educational programs were carried out in Chinese. Results were described in terms of quantitative measures (family support and health outcomes) and qualitative experiences (case studies). Eighty percent of participants had decreased their diastolic blood pressure from above 95 mmHg to below 90 mmHg and systolic blood pressure from above 155 mmHg to below 140 mmHg. Ninety-five (n = 71) percent of participants had maintained their glucose level within the 90 mg/dL to 150 mg/dL range with a mean reduction of 57.86 mg/dL in one year. The hardest thing for families was the glucose self-monitoring. Case studies suggested that open-minded active listening and persistence formed the basis for developing a culturally sensitive community-based self management program for chronic diseases. Collaboration among the community, public health nurses, and diabetes nurse educators facilitated the process of community education and health promotion.

Wright, A. L., Naylor, A., Wester, R., Bauer, M., and Sutcliffe, E. (1997). Using cultural knowledge in health promotion: breastfeeding among the Navajo. *Health Education & Behavior, 24*(5), 625-639.

Although many attempts have been made to promote breastfeeding in a variety of contexts, few programs have explicitly incorporated cultural beliefs in these efforts. This article describes a breastfeeding promotion program conducted on the Navajo reservation. This program was designed to be culturally appropriate. Background information regarding beliefs and factors affecting infant feeding practices in this setting is provided, followed by a description of the intervention. The intervention, which incorporated both social marketing and community participation techniques, consisted of three components: an intervention in the health care system, a community intervention, and an individual intervention. Based on medical records review of feeding practices of all the infants born the year before ($n = 988$) and the year after ($n = 870$) the intervention, the program was extremely successful. This combination of techniques, including qualitative and quantitative research into local definitions of the problem, collaboration with local institutions and individuals, reinforcement of traditional understandings about infant feeding, and institutional change in the health care system, is an effective way of facilitating behavioral change.

Yancey, A. K., Tanjasiri, S. P., Klein, M., and Tunder, J. (1995). Increased cancer screening behavior in women of color by culturally sensitive video exposure. *Preventive Medicine, 24*(2), 142-148.

BACKGROUND: Electronic media have demonstrated efficacy in increasing knowledge and promoting health-protective behavior among individuals at high risk for chronic disease. In "Stimulating Cancer Screening among Women of Color through Video" (A. K. Yancey and L. Walden, 1994, *J Cancer Educ* 9:46-52) the development of a cost-effective documentary format for culturally sensitive health education videos was described. These videos could not be independently evaluated within the cancer control program for which they were developed. **METHODS:** A quasi-experimental study design tested the hypothesis that exposure to these videos increases cervical cancer screening behavior among samples of women from two clinic populations of predominantly low-income African-Americans and Latinos in New York City and Los Angeles. A 1-week-on-1-week-off design was utilized, in which the videos were continuously displayed in designated waiting rooms during (intervention) weeks, with each facility serving as its own control during off weeks. **RESULTS:** The proportion of women seen as patients during the intervention weeks who subsequently obtained Pap smears was significantly higher than that of those seen during the control weeks at each site ($P < 0.05$). **CONCLUSIONS:** Culturally sensitive videos displayed in waiting rooms may be useful in health promotion efforts in communities of color. The similarity of results in both clinic sites suggests that Spanish-language tapes may be constructed to appeal to Latinos of different nationalities.

Family/Community Inclusion in Health Care Delivery

Amundson, M. J., and Trotter, C. M. (1991). Developing a network of mental health workers for Pacific Islands. *International Nursing Review, 38*(1), 14-18.

Community participation was central from the inception of this project and throughout the four phases. Participants were involved in trainee selection, curriculum development and modification and negotiation of clinical practicum and evaluation. Their contributions significantly influenced the content and process of the workshops on a daily basis. For the in situ training the indigenous trainers used a similar process of participation and planning, and adapted the workshops specifically to the island culture. Evaluation methods were similarly adapted to the specific communities. High success rate of returns resulted from the evaluators' careful sensitivity to the culture and the adaptation of the Western research process. The team involvement in the participant's transformation and self-reliance created a productive mutual experience.

Anonymous. (2000). A council of elders: creating a multi-voiced dialogue in a community of care. *Social Science & Medicine, 50*(6), 851-860.

In an era of 'medical care delivery systems', there is an increasing need for the patient's voice to be heard, for it to be invited, listened to, and taken seriously. This challenge is particularly

evident in geriatrics education, a domain of clinical training in which educators and clinicians alike must struggle to overcome adverse attitudes towards the elderly ('ageism'). In this paper we introduce a 'Council of Elders' as an educational innovation in which we invited community elders to function as our 'Senior Faculty', to whom medical residents present their challenging and heartfelt dilemmas in caring for elder patients. In the conversations that ensue, the elders come to function not simply as teachers, but collaborators in a process in which doctors, researchers, and elders together create a community of resources, capable of identifying novel ways to overcome health-related difficulties which might not have been apparent to either group separately. Using the first meeting of the Council as an exemplar, we describe and discuss the special nature of such meetings and also the special preparations required to build a dialogic relationship between participants from very different worlds—different generations, different cultures (including the professional culture and the world of lived experience). Meetings with the council have become a required part of the primary care residency program—a very different kind of 'challenging case conference' in which moral dilemmas can be presented, discussed and reflected upon. It is not so much that elders give good advice in their responses—although they often do—as that they provide life world and value orientation as young residents gain

a better sense of the elder's experience and what matters most to them. This project has been particularly worthwhile in addressing the problem of ageism—a way to render visible stereotypes and adverse physician values, with implications for decision-making with the patient, not for the patient.

Chen, A. M., Wismer, B. A., Lew, R., Kang, S. H., Min, K., Moskowitz, J. M., and Tager, I. B. (1997). "Health is Strength": a research collaboration involving Korean Americans in Alameda County. *American Journal of Preventive Medicine*, 16(6 Suppl), 93-100.

INTRODUCTION: This is a preliminary report from a research collaboration between Asian Health Services (community health center); Koreans in Alameda County, California; and the University of California at Berkeley School of Public Health. This five-year Centers for Disease Control and Prevention project supports a collaborative community intervention to improve breast and cervical cancer screening behavior among Korean women. **METHODS:** A Korean Community Advisory Board and Korean-American staff were recruited, and community sensitive research (CSR) and participatory action research (PAR) principles were applied: (1) building community infrastructure for sustainable action, (2) cultural appropriateness, (3) assuring responsiveness to community needs, and (4) a prevention focus that would assist health care providers. We conducted a population-based telephone survey on 676 Korean adults (272 men and 404 women). **RESULTS:** The collaborative process yielded (1) a high response rate (79%), (2) baseline health information on Korean Americans, (3) broadening of the original research topic, (4) survey responses that will guide intervention design, (5) culturally competent strategies, and (6) expanded Korean-American Community capacity for local action. **CONCLUSIONS:** Research collaboration between universities, community-based organizations, and ethnic communities can yield high-quality research. CSR and PAR approaches help break through cultural barriers in otherwise "hard to reach" API sub-populations. Determinants of success include sharing common goals; trust, honesty, and integrity; shared decision making; mutual respect of each partner's expertise; cultural sensitivity and cultural competence; flexibility, good communication, and mutual learning; and continuity of partners. Actively engaging members of the study population in the research process builds community capacity, thus laying the foundation for future projects that improve health status.

Shapiro, J. (1999). Correlates of family-oriented physician communications. *Family Practice*, 16(3), 294-300.

BACKGROUND: Family orientation in patient care has long been one of the primary tenets of the practice of family medicine. Yet we know surprisingly little about how frequently family-oriented transactions occur in actual doctor-patient encounters, or about what other aspects of physician communication patterns might be associated with increased family orientation. The purpose of this study was to investigate both frequency and correlates of family orientation in a residency-based practice. **METHODS:** Sixty videotapes representing 38 second and third-year residents interviewing a range of multiethnic patients over a 2-year period at a community clinic were analyzed for evidence of family-oriented communications, as well as other interaction behaviors such as information exchange and partnership building. Interrater agreement was 78%. **RESULTS:** Asking for medical information, clarifying patient information, and giving medical information and explanations were the most common types of resident actions. Family orientation was much less common, but was more frequently observed than the eliciting of a patient-centered agenda or suggestion of a psychosocial intervention or referral. Family orientation was associated with longer interviews, non-interpreted interviews, more physician questions and clarifying behaviors, and greater tendency to elicit the patient's agenda. **CONCLUSIONS:** Findings of this investigation suggest that family orientation in the medical interview is enhanced by having more time and a shared language, as well as a generally probing, clarifying, patient-centered style on the part of the physician.

Speice, J., Harkness, J., Laneri, H., Frankel, R., Roter, D., Kornblith, A. B., Ahles, T., Winer, E., Fleishman, S., Luber, P., Zevon, M., McQuellon, R., Trief, P., Finkel, J., Spira, J., Greenberg, D., Rowland, J., and Holland, J. C. (2000). Involving family members in cancer care: focus group considerations of patients and oncological providers. *Psycho-Oncology*, 9(2), 101-112.

Family members are an integral part of a patient's cancer care from the moment the diagnosis is delivered to the conclusion of treatment. Family members bring with them a range of emotional reactions, interpersonal dynamics and expectations for the care the patient receives. This study is part of a multi-institutional project to continue to improve the process of cancer care. In this study, 19 focus groups (11 patient and 8 provider) were conducted concerning issues related to doctor-patient communication in eight cancer centers in the United States. The content of the conversations was analyzed and thematic categories emerged that highlight the various strengths and difficulties associated with family involvement. The focus groups' comments support the need for explicit conversations between professional caregivers, patients and their loved ones, in order to negotiate the expectations and needs of each team member. Implications for clinical practice and strategies for working with family members are offered.

Suarez, L., Ramirez, A., Villarreal, R., Marti, J., McAlister, A., Talavera, G., Trapido, E., and Perez-Stable, E. (2000). Social networks and cancer screening in four U.S. Hispanic groups. *American Journal of Preventive Medicine*, 19(1), 47-52.

BACKGROUND: Evidence shows that social relationships play an important role in health and health behavior. We examined the relationship between social networks and cancer screening among four U.S. Hispanic groups. **METHODS:** We used telephone surveys to collect data in eight U.S. regions that have concentrations of diverse Hispanic-origin populations. We interviewed 8903 Hispanic adults, for a response rate of 83%; analysis was restricted to the 2383 women aged ≥ 40 . As a measure of social integration, we formed a social network index from items on the number of close relatives and friends, frequency of contact, and church membership. We used logistic regression to estimate the effects of social integration on screening, adjusting for sociodemographic factors. **RESULTS:** Among Mexican, Cuban, and Central-American women, the effect of social integra-

tion on mammography screening was slight. The odds ratios (OR) per unit change in social integration category ranged from 1.16 to 1.22 with confidence intervals (CI) that overlapped with the null. For Pap smear screening, the effect was strongest among Mexican-American women (OR=1.44, 95% CI=1.21 to 1.72), but also evident among Central-American women (OR=1.22, 95% CI=0.72 to 2.06) and Cuban women (OR = 1.25, 95% CI = 0.81 to 1.93). Among Puerto Rican women, social integration had no effect on either mammography (OR=1.03) or Pap smear screening (OR=1.08). **CONCLUSIONS:** Independent of socioeconomic factors, social integration appears to influence cancer screening participation of Hispanic women. The modest effect is not universal across Hispanic groups and was stronger for Pap smear than for mammography screening behavior. Researchers should recognize Hispanic group differences in social network characteristics and the potential of social networks to change screening behavior.

Coordination of Conventional Medicine and Traditional Practices/Healers

Bhopal, R. S. (1986). The inter-relationship of folk, traditional and Western medicine within an Asian community in Britain. *Social Science & Medicine*, 22(1), 99-105.

A community-based interview study of Asians and a questionnaire study of health professionals were performed to ascertain the role of traditional medicine in the context of health care within the Asian community. Among Asians, knowledge of herbal remedies, the Asian healer and cultural concepts such as the 'hot/cold' theory was high. They frequently used culinary ingredients to treat common diseases such as abdominal discomfort, earache and toothache. The use of metal-based medications was rare, application of the 'hot/cold' concept was not of nutritional significance and Asian healers were infrequently consulted except during visits to India and Pakistan. Among health professionals awareness of Asian medicine was low. None had encountered morbidity resulting from its remedies while 50% felt that such remedies should be encouraged unless shown to be harmful. Traditional medicine was found to play a modest but not insignificant role within the context of total health care. There was little evidence that use comprises a significant health threat. Opportunities for further research and a prediction of the future of Asian medicine in Britain is presented.

Del Castillo, R. R. (1999). Effective management strategies when incorporating curanderismo into a mainstream mental health system. Unpublished Ph.D. Dissertation, University of Colorado at Denver, Graduate School of Public Affairs.

As America approaches the year 2000 and beyond, coupled with the challenges of a growing and diverse population, public administrators will be asked to do more with less. Congress will continue to grapple with the question of health and mental health care for all of its citizens; therefore, it is useful to include all relevant modalities of health and mental health care in the debate. Additionally, in order to ensure effectiveness and prudent expenditure of the public's dollars, as health and mental health

care providers attempt to incorporate alternative methods of treatment into their health and mental health care systems, associated management strategies that accompany these innovations should also be analyzed. There is a paucity of literature regarding management problems and strategies associated with incorporating what is considered to be a nontraditional form of mental health treatment into mainstream systems. This research is exploratory in nature, utilizing the topical life history approach with both curanderas/os (indigenous healers) and public administrators and managers. These public servants were involved in the implementation of curanderismo, defined as the practice of spiritual folk medicine, generally used in Indian and Mexican-American communities as it was implemented in a publicly funded mental health system. This dissertation asks the question, what management strategies are effective when incorporating curanderismo into a publicly funded mental health system? The actual research demonstrates those strategies used by South-west Denver Community Mental Health, a publicly funded mental health center, now consolidated under the Mental Health Corporation of Denver, as curanderismo was first introduced into the system, followed by a process of institutionalization. Analyzing the findings of this research through the eyes of organizational innovation, this research outlines management strategies that were effectively implemented and that eventually resulted in the institutionalization of curanderismo into the system, both as a treatment modality and as educational strategy. The findings of this research demonstrate that the incorporation of curanderismo into a mainstream mental health system was successfully accomplished. Some of the management strategies that were learned include the building of a solid infrastructure to support alternative mental health programming, the demonstration of effective leadership, a strong minority voice, the introduction of intermediaries who play key roles in the process of institutionalization and cultural competency.

Elder, N. C., Gillcrust, A., and Minz, R. (1997). Use of alternative health care by family practice patients. *Archives of Family Medicine, 6*(2), 181-184.

In recent years, the use of alternative medicine has become more acknowledged in the United States. Many different practices are encompassed by the terms alternative, unorthodox, or complementary medicine, and their use by the population is just now being defined. The number of established family practice patients also using alternative medicine is not yet known. To help answer this question, a survey of family practice patients concerning their use of alternative medicine was performed in 4 family practices in a large community in the western United States. Volunteers from the survey respondents attended a focus group to discuss more fully their use of alternative medicine. Questionnaires were completed by 113 family practice patients. Fifty percent (57/113) of patients had or were using some form of alternative medicine, but only 53% (30/57) had told their family physician about this use. No significant difference in the percentage who used alternative medicine or who told their physician about it was attributable to gender, educational level, age, race, or clinic attended. The main reason given for using alternative medicine, alone or in combination with care from a family physician, was a belief that it would work. Many of those who worked in combination with a family physician spoke of acceptance and control, but those who did not work with their physician mentioned traditional medicine's limitations and narrow-mindedness. Family physicians need to be aware that many of their patients may be using alternative health care. Open and nonjudgmental questioning of patients may help increase physician knowledge of this use and lead to improved patient care as physicians and patients work together toward health.

Foster, P. M. (1996). *Ritual healing an African-centered model of psychotherapeutic intervention based on Ndepp, Candomble, and urban Baptist ritual.* Unpublished Ph.D. Dissertation, Union Institute and University, Cincinnati.

This project demonstrating excellence is an original contribution to the newly emerging field of ethnopsychology and seeks to integrate key elements of traditional African healing with Western approaches to psychotherapeutic intervention. The model draws heavily from healing rituals and practices emanating from three African cultural and religious traditions: Ndepp (Rufisque, Senegal), Candomble (Bahia, Brazil) and afro-Baptist (U.S.A.). The model proposes five phases of intervention which are thematically and procedurally centered around therapeutic rituals: the Rite of Inclusion, the Rite of Expiation, the Rite of Immolation, the Rite of Transfiguration and the Rite of Passage. The five phases of intervention also involve the culturally competent use of techniques drawn from Western models of psychotherapy. The model expands on the group approach to intervention and requires the participation of (extended or reconstructed) family and community in the therapeutic process, and extends the meaning of "therapeutic use of self" in clinical practice. Drawbacks of the model include its focus on cultural practices that may be unfamiliar to Western consumers of therapeutic services, and the labor- and resource-intensive design. Strengths of the model include its experiential and ritual focus, cultural specificity and applicability to a clinically diverse client population.

Kahn, M. W., and Delk, J. L. (1973). Developing a community mental health clinic on the Papago Indian reservation. *International Journal of Social Psychiatry, 19*(3-4), 299-306.

This study describes the establishment of the first mental health facility serving the Papago Indian Tribe of Arizona. The success of the clinic was founded on several policies determined during planning: (a) communication with other agencies serving the Papagos was encouraged; (b) Papagos were employed as staff members when possible, and they were encouraged to develop professional skills; (c) Papago medicine men were used as paid consultants on cases involving traditional Papago beliefs; and (d) tribal approval and support were viewed as essential. These policies have resulted in general acceptance of the clinic and widespread use of its facilities. Demographic and symptomatic characteristics of 73 clients seen during the 1st 15 months of operation are presented.

Kim, C., and Kwok, Y. S. (1998). Navajo use of native healers. *Archives of Internal Medicine, 158*(20), 2245-2249.

BACKGROUND: Although the Indian Health Service provides extensive health care service to Navajo people, the role of native healers, or medicine men, has not been quantitatively described. **OBJECTIVE:** To determine the prevalence of native healer use, the reasons for use, cost of use, and the nature of any conflict with conventional medicine. **METHODS:** We conducted a cross-sectional interview of 300 Navajo patients seen consecutively in an ambulatory care clinic at a rural Indian Health Service hospital. **RESULTS:** Sixty-two percent of Navajo patients had used native healers and 39% used native healers on a regular basis; users were not distinguishable from nonusers by age, education, income, fluency in English, identification of a primary provider, or compliance, but Pentecostal patients used native healers less than patients of other faiths. Patients consulted native healers for common medical conditions such as arthritis, depression, and diabetes mellitus as well as "bad luck." Perceived conflict between native healer advice and medical provider advice was rare. Cost was the main barrier to seeking native healer care. **CONCLUSIONS:** Among the Navajo, use of native healers for medical conditions is common and is not related to age, sex, or income but is inversely correlated with the Pentecostal faith; use of healers overlaps with use of medical providers for common medical conditions. Patients are willing to discuss use of native healers and rarely perceive conflict between native healer and conventional medicine. This corroborates other research suggesting that alternative medicine is widely used by many cultural groups for common diseases.

Ma, G. X. (1999). Between two worlds: the use of traditional and Western health services by Chinese immigrants. *Journal of Community Health, 24*(6), 421-437.

This study examined the use of traditional and Western health services by Chinese immigrants, as well as the cultural and socioeconomic factors affecting health-seeking behaviors and health service utilization patterns among the study population from the perspectives of consumers and Chinese health care providers. Two instruments were used for data collection. The first, a consumer instrument, was designed for interviews of service recipients; the second, a health provider instrument, was designed to elicit information from traditional and Western pro-

viders. A few topics in the former instrument were cross-examined from the perspectives of health care providers. The investigation employed a combination of qualitative and quantitative research methods for data collection. Qualitative ethnographic methods used included: (1) participant-observation, (2) face-to-face interview, and (3) case study. To complement the qualitative data, structured quantitative survey were conducted with all selected informants. A total of 105 informants participated in the study: 75 Chinese consumers and 30 Chinese health professionals. The latter group was composed of Western physicians and traditional practitioners. Results revealed several patterns of health-seeking and service utilization behaviors among the Chinese of Houston and Los Angeles. These included high rates of self-treatment and home remedies (balanced diets and other alternative medicines); medium rates of utilization of integrated Western and traditional health services, including travel to country of origin for care; and low rates of exclusive utilization of Western or traditional Chinese treatments.

Marbella, A. M., Harris, M. C., Diehr, S., and Ignace, G. (1998). Use of Native American healers among Native American patients in an urban Native American health center. *Archives of Family Medicine*, 7(2), 182-185.

To gain an understanding of the prevalence, utilization patterns, and practice implications of the use of Native American healers together with the use of physicians, we conducted semi-structured interviews at an urban Indian Health Service clinic in Milwaukee, Wisc. of a convenience sample of 150 patients at least 18 years old. The mean age of patients was 40 years, and the sex distribution was 68.7% women and 31.3% men. Thirty tribal affiliations were represented, the largest groups being Ojibwa (20.7%), Oneida (20.0%), Chippewa (11.3%), and Menominee (8.0%). We measured the number of patients seeing healers and gathered information on the types of healers, the ceremonies used for healing, the reasons for seeing healers, and whether patients discuss with their physicians their use of healers. We found that 38.0% of the patients see a healer, and of those who do not, 86.0% would consider seeing one in the future. Most patients report seeing a healer for spiritual reasons. The most frequently visited healers were herbalists, spiritual healers, and medicine men. Sweat lodge ceremonies, spiritual healing, and herbal remedies were the most common treatments. More than a third of the patients seeing healers received different advice from their physicians and healers. The patients rate their healer's advice higher than their physician's advice 61.4% of the time. Only 14.8% of the patients seeing healers tell their physician about their use. We conclude that physicians should be aware that their Native American patients may be using alternative forms of treatment, and they should open a respectful and culturally sensitive dialogue about this use with their patients.

Reissland, N., and Burghart, R. (1989). Active patients: the integration of modern and traditional obstetric practices in Nepal. *Social Science & Medicine*, 29(1), 43-52.

This paper describes the integration of modern and traditional obstetric practices in a provincial hospital in the Maithili-speaking area of southern Nepal. The doctors and nurses consciously distance themselves from the traditional practices of their obstetrical patients, whom they view as 'ignorant'; but because

hospital resources are insufficient to impose the normative form of modern medical organization, patients and their relatives assert a more active role in providing hospital-based care. In consequence, mothers are delivered according to modern, clinical as well as local cultural practices. Recent WHO policy has cast modern medicine as the agent in the integration of traditional healing within national health systems. This essay shows that in poor countries the powers of agency may not be exclusively in the hands of the medical profession. Patients, and others in their social networks, have become agents, constraining and negotiating the terms on which modern medicine is to be integrated within their traditional obstetric practices.

Skaer, T. L., Robison, L. M., Sclar, D. A., and Harding, G. H. (1996). Utilization of curanderos among foreign-born Mexican-American women attending migrant health clinics. *Journal of Cultural Diversity*, 3(2), 29-34.

This study explores the parallel use of "folk healers" and modern medicine among foreign born, Mexican-American women attending migrant health clinics in rural, eastern Washington state. Face-to-face interviews (n = 434) revealed that 21.4% of the women had sought care from curanderos within the past five years. Statistically significant predictors of utilization included Spanish as the language of preference (odds ratio = 2.58), having resided in the U.S. from one to five years (odds ratio = 2.82), and having received medicine or medical care from Mexico within the prior five years (odds ratio = 9.22). Implications for providers working in cross-cultural settings are discussed.

Tabora, B. L., and Flaskerud, J. H. (1997). Mental health beliefs, practices, and knowledge of Chinese American immigrant women. *Issues in Mental Health Nursing*, 18(3), 173-189.

The purpose of this study was to describe the mental health beliefs and practices of Chinese American immigrant women. A two-part design using both qualitative and quantitative techniques was employed. The first step utilized focus group (n = 14) and key informant (n = 2) interviews to discover the beliefs, practices, and knowledge about mental health of this population. Content analysis was used to examine and condense the qualitative data. After completion of the qualitative component, 72 women were recruited to complete a set of questionnaires, which included a demographic questionnaire, culture and work subscale, and the mental health portion of the Health Behavior Scale of the Survey of Chinese American Mental Health (NRCAAMH, 1993). Pearson product-moment correlations and regression analysis were used to analyze the quantitative data. Content analysis found that the cultural value placed on the avoidance of shame, pragmatism that results in the use of both Western and traditional Chinese practitioners and treatments, and the inadequacy of Western-type services to meet the needs of the Chinese American immigrant population act as barriers to utilization of these services. These results are cross-validated by the quantitative findings. The importance of culture in determining the pathway to care was supported by the finding that higher levels of acculturation are related to greater use of mental health services.

Zubek, E. M. (1994). Traditional Native healing: alternative or adjunct to modern medicine? *Canadian Family Physician, 40*, 1923-1931.

OBJECTIVE: To ascertain the extent to which family physicians in British Columbia agree with First Nations patients' using traditional Native medicines. **DESIGN:** Randomized cross-sectional survey. **SETTING:** Family medicine practices in British Columbia. **PARTICIPANTS:** A randomized volunteer sample of 79 physicians from the registry of the BC Chapter of the College of Family Physicians of Canada. Of 125 physicians contacted, 46 did not reply. **MAIN OUTCOME MEASURES:** Physicians' demographic variables and attitudes toward patients' use of traditional Native medicines. **RESULTS:** Respondents generally accepted the use of traditional Native medicines for health maintenance,

palliative care, and the treatment of benign illness. More disagreement was found with its use for serious illnesses, both for outpatients and in hospital, and especially in intensive care. Many physicians had difficulty forming a definition of traditional Native medicine, and were unable to give an opinion on its health risks or benefits. A significant positive correlation appeared between agreement with the use of traditional Native medicines and physicians' current practice serving a large First Nations population, as well as with physicians' knowing more than five patients using traditional medicine. **CONCLUSIONS:** Cooperation between traditional Native and modern health care systems requires greater awareness of different healing strategies, governmental support, and research to determine views of Native patients and healers.

General

Brach, C., and Fraser, I. (2000). Can cultural competency reduce racial and ethnic disparities? a review and conceptual model. *Medical Care Research and Review, 57*(Supp 1), 181-217.

This article develops a conceptual model of cultural competency's potential to reduce racial and ethnic health disparities, using the cultural competency and disparities literature to lay the foundation for the model and inform assessments of its validity. The authors identify nine major cultural competency techniques: interpreter services, recruitment and retention policies, training, coordinating with traditional healers, use of community health workers, culturally competent health promotion, including family/community members, immersion into another culture, and administrative and organizational accommodations. The conceptual model shows how these techniques could theoretically improve the ability of health systems and their clinicians to deliver appropriate services to diverse populations, thereby improving outcomes and reducing disparities. The authors conclude that while there is substantial research evidence to suggest that cultural competency should in fact work, health systems have little evidence about which cultural competency techniques are effective and less evidence on when and how to implement them properly.

Cross, T. L., Bazron, B. J., Dennis, K. W., and Isaacs, M. R. (1989). *Towards a culturally competent system of care: a monograph on effective services for minority children who are severely emotionally disturbed*. Washington, DC: CASSP Technical Assistance Center, Georgetown University Child Development Center.

This monograph was developed in order to assist states and communities in addressing one of the primary goals of the Child and Adolescent Service System Program (CASSP) — that of appropriateness of care. The monograph provides a philosophical framework and practical ideas for improving service delivery to children of color who are severely emotionally disturbed. It defines cultural competence and puts forth the thesis that actions can be taken at the practitioner, agency, and system level which could greatly impact on improved services to minority children, youth, and families.

Language Assistance: Language Barriers, Bilingual Services and Oral Interpretation, and Translated Written Materials

Baker, D. W., Hayes, R., and Fortier, J. P. (1998). Interpreter use and satisfaction with interpersonal aspects of care for Spanish-speaking patients. *Medical Care, 36*(10), 1461-1470.

OBJECTIVES: Many patients have limited English proficiency and require an interpreter. The authors evaluated the effect of current interpreting practices on Spanish-speaking patients' satisfaction with the patient-provider relationship. **METHODS:** A cross-sectional survey was conducted of 457 patients seen in a public hospital emergency department. Measures were satisfaction with the provider's friendliness, respectfulness, concern, ability to make the patient comfortable, and time spent for the exam. **RESULTS:** A total of 237 patients communicated adequately

with their provider without the use of an interpreter (group 1), 120 patients communicated through an interpreter (88% of whom were ad hoc interpreters; group 2), and 100 patients communicated directly with the provider but said an interpreter should have been called (group 3). Compared with patients in group 1, patients who communicated through an interpreter (group 2) rated their provider as less friendly, less respectful, less concerned for the patient as a person, and less likely to make the patient comfortable. Patients who said an interpreter should have been called (group 3) had the lowest satisfaction ratings; compared with group 2, they were less satisfied with their provider's friendliness, concern for the patient as a person, efforts to make

the patient comfortable, and amount of time spent. **CONCLUSIONS:** Patients who communicated through an interpreter or who did not have an interpreter when they thought one was necessary were less satisfied with the patient-provider relationship. Further efforts are needed to ensure interpreter availability and proper interpretation technique.

Baker, D. W., Parker, R. M., Williams, M. V., Coates, W. C., and Pitkin, K. (1996). Use and effectiveness of interpreters in an emergency department. *Journal of the American Medical Association, 275(10), 783-788.*

OBJECTIVE: To determine how often interpreters were used for Spanish-speaking patients, patients' perceived need for an interpreter, and the impact of interpreter use on patients' subjective and objective knowledge of their diagnosis and treatment. **DESIGN:** Cross-sectional survey. **SETTING:** Public hospital emergency department. **PATIENTS:** A total of 467 native Spanish-speaking and 63 English-speaking Latino patients presenting with nonurgent medical problems. **MAIN OUTCOME MEASURES:** Patients' report whether an interpreter was used, whether one was needed, self-perceived understanding of diagnosis and treatment, and objective knowledge of discharge instructions. **RESULTS:** An interpreter was used for 26% of Spanish-speaking patients. For 52%, an interpreter was not used but was not thought to be necessary by the patient. A total of 22% said an interpreter was not used but should have been used. When both the patient's English and the examiner's Spanish were poor, an interpreter was not called 34% of the time, and 87% of the patients who did not have an interpreter thought one should have been used. Nurses and physicians interpreted most frequently (49%), and professional interpreters were used for only 12% of patients. Patients who said an interpreter was not necessary rated their understanding of their disease as good to excellent 67% of the time, compared with 57% of those who used an interpreter and 38% of those who thought an interpreter should have been used ($P < .001$). For understanding of treatment, the figures were 86%, 82%, and 58%, respectively ($P < .001$). However, when objective measures of understanding diagnosis and treatment were used, the differences between these groups were smaller and generally not statistically significant. There were no differences between English-speaking Latinos and native Spanish-speakers who said they did not need an interpreter. **CONCLUSIONS:** Interpreters are often not used despite a perceived need by patients, and the interpreters who are used usually lack formal training in this skill. Language concordance and interpreter use greatly affected patients' perceived understanding of their disease, but a high proportion of patients in all groups had poor knowledge of their diagnosis and recommended treatment.

Bernstein, J., Bernstein, E., Dave, A., Hardt, E., James, T., Linden, J., Mitchell, P., Oishi, T., and Safi, C. (2000). Does the use of trained medical interpreters affect ED services, reduce subsequent charges and improve follow-up. *Academic Emergency Medicine, 7(5), 523.*

OBJECTIVES: To study the impact of trained interpreters on ED services and subsequent hospital/clinic visits and charges. **Methods:** ED records were correlated with an institutional database at an urban Level I trauma center to retrieve data for an index ED visit and for 30 days after. A dataset was created of 503 patients

with chest pain/shortness of breath, headache, abdominal pain, or pelvic pain/vaginal bleeding (non-pregnant). Spanish, French Creole, English and Portuguese Creole speakers were culled from among 26,573 ED patients (seen July-Nov. 1999). Professionally interpreted patients (IPs) were matched with English speaking patients (ESPs) for chief complaint (CC), gender and age. All non-interpreted patients (NIPs) who met CC criteria were included without matching. Chi-square, Kruskal Wallis and OLS regression were used (SPSS). **Results:** The data set included 63 IPs, 374 NIPs, and 66 ESPs. In bivariate analysis, NIPs had the shortest ED stay ($p < .001$), and received the fewest tests ($p < .04$) and prescriptions ($p < .03$); ESPs received the most ED services and had the greatest length of ED stay. ED return visit charges were lower for IPs ($p = .052$), and subsequent clinic utilization was less for NIPs than IPs and ESPs ($p < .03$). In a second analysis limited to patients not admitted at the index visit, return visit ED charges and total 30 day charges were reduced for IPs compared to NIPs and ESPs. Regression analysis did not demonstrate interpretation effects. **Conclusions:** Use of trained interpreters can increase clinic utilization, decrease 30 day total and ED return charges, and reduce disparities between ESPs and NIPs in number of services at the index ED visit. Professional interpretation time did not increase length of stay beyond that of ESPs.

Binder, L., Nelson, B., Smith, D., Glass, B., Haynes, J., and Wainscott, M. (1988). Development, implementation, and evaluation of a medical Spanish curriculum for an emergency medicine residency program. *Journal of Emergency Medicine(6), 439-441.*

A 45-hour medical Spanish curriculum for an emergency medicine residency program was implemented in response to a need for "functionally bilingual" physicians in our practice setting, and to reduce reliance on translation assistance from nursing and clerical personnel. Course goals were to achieve a vocabulary level of 5,000-10,000 words for participants, and to achieve sufficient language capabilities for basic information exchange, obtaining uncomplicated medical histories, conducting unassisted physical examinations, and giving patient discharge instructions. Feedback obtained from post course interviews and instructor assessment indicated that the curriculum employed resulted in the attainment of the above goals for fully participating physicians.

Carrasquillo, O., Orav, E. J., Brennan, T. A., and Burstin, H. R. (1999). Impact of language barriers on patient satisfaction in an emergency department. *Journal of General Internal Medicine, 14(2), 82-87.*

OBJECTIVE: To examine patient satisfaction and willingness to return to an emergency department (ED) among non-English speakers. **DESIGN:** Cross-sectional survey and follow-up interviews 10 days after ED visit. **SETTING:** Five urban teaching hospital EDs in the Northeastern United States. **PATIENTS:** We surveyed 2,333 patients who presented to the ED with one of six chief complaints. **MEASUREMENTS AND MAIN RESULTS:** Patient satisfaction, willingness to return to the same ED if emergency care was needed, and patient-reported problems with care was measured. Three hundred fifty-four (15%) of the patients reported English was not their primary language. Using an overall measure of patient satisfaction, only 52% of non-English-

speaking patients were satisfied as compared with 71% of English speakers ($p < .01$). Among non-English speakers, 14% said they would not return to the same ED if they had another problem requiring emergency care as compared with 9.5% of English speakers ($p < .05$). In multivariate analysis adjusting for hospital site, age, gender, race/ethnicity, education, income, chief complaint, urgency, insurance status, Medicaid status, ED as the patient's principal source of care, and presence of a regular provider of care, non-English speakers were significantly less likely to be satisfied (odds ratio [OR] 0.59; 95% confidence interval [CI] 0.39, 0.90) and significantly less willing to return to the same ED (OR 0.57; 95% CI 0.34, 0.95). Non-English speakers also were significantly more likely to report overall problems with care (OR 1.70; 95% CI 1.05, 2.74), communication (OR 1.71; 95% CI 1.18, 2.47), and testing (OR 1.77; 95% CI 1.19, 2.64). **CONCLUSIONS:** Non-English speakers were less satisfied with their care in the ED, less willing to return to the same ED if they had a problem they felt required emergency care, and reported more problems with emergency care. Strategies to improve satisfaction among this group of patients may include appropriate use of professional interpreters and increasing the language concordance between patients and providers.

Cooke, M. W., Wilson, S., Cox, P., and Roalfe, A. (2000). Public understanding of medical terminology: non-English speakers may not receive optimal care. *Journal of Accident & Emergency Medicine, 17*(2), 119-121.

INTRODUCTION: Many systems of telephone triage are being developed (including NHS Direct, general practitioner out of hours centers, ambulance services). These rely on the ability to determine key facts from the caller. Level of consciousness is an important indicator after head injury but also an indicator of severe illness. **AIMS:** To determine the general public's understanding of the term "unconscious." **METHODS:** A total of 700 people were asked one of seven questions relating to their understanding of the term "unconscious." All participants were adults who could speak sufficient English to give a history to a nurse. **RESULTS:** Correct understanding of the term "unconscious" varied from 46.5% to 87.0% for varying parameters. Those with English as their first language had a better understanding ($p < 0.01$) and there was a significant variation with ethnicity ($p < 0.05$). **CONCLUSIONS:** Understanding of the term "unconscious" is poor and worse in those for whom English is not a first language. Decision-making should not rely on the interpretation of questions using technical terms such as "unconscious," which may have a different meaning between professional and lay people.

Cooper-Patrick, L., Gallo, J. J., Gonzales, J. J., Vu, H. T., Powe, N. R., and Nelson, C. (1999). Race, gender, and partnership in the patient-physician relationship. *Journal of the American Medical Association, 282*, 583-589.

CONTEXT: Many studies have documented race and gender differences in health care received by patients. However, few studies have related differences in the quality of interpersonal care to patient and physician race and gender. **OBJECTIVE:** To describe how the race/ethnicity and gender of patients and physicians are associated with physicians' participatory decision-making (PDM) styles. **DESIGN, SETTING, AND PARTICIPANTS:**

Telephone survey conducted between November 1996 and June 1998 of 1816 adults aged 18 to 65 years (mean age, 41 years) who had recently attended 1 of 32 primary care practices associated with a large mixed-model managed care organization in an urban setting. Sixty-six percent of patients surveyed were female, 43% were white, and 45% were African American. The physician sample ($n = 64$) was 63% male, with 56% white, and 25% African American. **MAIN OUTCOME MEASURE:** Patients' ratings of their physicians' PDM style on a 100-point scale. **RESULTS:** African American patients rated their visits as significantly less participatory than whites in models adjusting for patient age, gender, education, marital status, health status, and length of the patient-physician relationship (mean [SE] PDM score, 58.0 [1.2] vs 60.6 [3.3]; $P = .03$). Ratings of minority and white physicians did not differ with respect to PDM style (adjusted mean [SE] PDM score for African Americans, 59.2 [1.7] vs whites, 61.7 [3.1]; $P = .13$). Patients in race-concordant relationships with their physicians rated their visits as significantly more participatory than patients in race-discordant relationships (difference [SE], 2.6 [1.1]; $P = .02$). Patients of female physicians had more participatory visits (adjusted mean [SE] PDM score for female, 62.4 [1.3] vs male, 59.5 [3.1]; $P = .03$), but gender concordance between physicians and patients was not significantly related to PDM score (unadjusted mean [SE] PDM score, 76.0 [1.0] for concordant vs 74.5 [0.9] for discordant; $P = .12$). Patient satisfaction was highly associated with PDM score within all race/ethnicity groups. **CONCLUSIONS:** Our data suggest that African American patients rate their visits with physicians as less participatory than whites. However, patients seeing physicians of their own race rate their physicians' decision-making styles as more participatory. Improving cross-cultural communication between primary care physicians and patients and providing patients with access to a diverse group of physicians may lead to more patient involvement in care, higher levels of patient satisfaction, and better health outcomes.

Crane, J. A. (1997). Patient comprehension of doctor-patient communication on discharge from the emergency department. *Journal of Emergency Medicine, 15*(1), 1-7.

An exit interview was conducted during March, 1994 on 314 patients treated and released from the Emergency Department at Kern Medical Center in Bakersfield, California. The questionnaire was designed to assess understanding of diagnosis, prescribed medications, additional instructions, and plans for follow-up care. The patients' own perceptions of the adequacy of communication and whom they considered the most important source of information were also determined. Overall, patients correctly identified 59% of their instructions. The performance of the English-speaking and the Spanish-speaking patients was compared. Spanish-speaking patients scored significantly lower on all questions. Most patients identified the physician as the source of the most information. The authors make recommendations for further study and use of professional interpreters in hospitals.

David, R. A., and Rhee, M. (1998). The impact of language as a barrier to effective health care in an underserved urban Hispanic community. *Mt Sinai Journal of Medicine, 65*(5-6), 393-397. **BACKGROUND:** Language barriers between patient and physi-

cian impact upon effective health care. This phenomenon is not well studied in the literature. **METHODS:** A survey was created in English and Spanish, and administered at the ambulatory site for medical housestaff and faculty at a teaching hospital. "Cases" were defined as patients who reported using a translator or as having poor English skills. Patients who reported not using a translator and having good English skills served as controls. Both groups were predominantly of Hispanic origin. **RESULTS:** Analysis revealed 68 cases and 193 controls. The survey completion rate was 96%. The data were predominantly categorical. Chi-square analysis was utilized. Both groups responded that understanding medication side effects corresponds to compliance (87% cases vs 93% controls, $p = 0.18$). More cases responded that side effects were not explained (47% vs 16%, $p < 0.001$). More controls reported satisfaction with medical care (93% vs 84%, $p < 0.05$). More controls agreed that their doctors understood how they were feeling, with statistical significance in Hispanic subset analysis (87% vs 72%, $p < 0.05$). Both groups felt they had enough time to communicate with their doctors (89% vs. 88%, $p = 0.86$). More cases than controls reported having had a mammogram within the last 2 years (78% vs. 60%, $p < 0.05$). **CONCLUSIONS:** Lack of explanation of side effects to medication appeared to correlate negatively with compliance with medication. The language barrier correlated negatively with patient satisfaction. Cases reported more preventive testing; test ordering may replace dialogue.

Derose, K. P., and Baker, D. W. (2000). Limited English proficiency and Latinos' use of physician services. *Medical Care Research & Review*, 57(1), 76-91.

Many Latinos have limited English proficiency and this may negatively affect their use of health care services. To examine this, the authors interviewed 465 Spanish-speaking Latinos and 259 English speakers of various ethnicities who presented to a public hospital emergency department with non-urgent medical problems to assess previous physician visits, sociodemographic characteristics, and level of English proficiency. The proportion of patients who reported no physician visit during the 3 months before study enrollment was not related to English proficiency. However, among the 414 patients who saw a physician at least once, Latinos with fair and poor English proficiency reported approximately 22 percent fewer physician visits ($p = 0.020$ and $p = 0.015$, respectively) than non-Latinos whose native language was English, even after adjusting for other determinants of physician visits. The magnitude of the association between limited English proficiency and number of physician visits was similar to that for having poor health, no health insurance, or no regular source of care.

Dias, M. R., and O'Neill, E. O. (1998). Examining the role of professional interpreters in culturally-sensitive health care. *Journal of Multicultural Nursing & Health*, 4(1), 27-31.

Multiple factors affect the client's ability to receive and use health care. Language barriers pose a significant threat to the nurse-client relationship. The hypothesis proposed is that health care professionals may overcome this barrier through the use of skilled, professional interpreters. The following paper analyzes existing studies regarding the use of both professional and informal interpreting services in various settings to determine their out-

come on patient care. When the studies were analyzed, two major outcomes were found to be consistent. First, patient access to health care was highly correlated with the availability of translators at health care sites. Second, health care professionals perceived that their efficacy in providing care improved significantly with the use of skilled interpreters. The accuracy of written translation tools is also examined. This review found that nursing can benefit greatly from the use of formal interpreters by promoting effective communication, trust, and positive relationships with clients. With careful supervision and training, interpreters can provide an invaluable link to improving health outcomes and meeting patient needs.

Drennan, G. (1996). Counting the cost of language services in psychiatry. *South African Medical Journal*, 86(4), 343-345.

OBJECTIVE: To document interpreter utilization at a major South African mental hospital over a two-month period in 1993. **DESIGN:** A survey was conducted by requesting clinicians to complete a questionnaire each time they required an interpreter. **SETTING:** Seven admission wards at a Western Cape mental hospital and an emergency psychiatric service at a general hospital. **PARTICIPANTS:** Twenty-nine clinical staff members. **MAIN OUTCOME MEASURES:** Number of patients requiring an interpreter, who provides interpreting services; interpreter availability; and duration of interview. **RESULTS:** One hundred and forty-eight predominantly Xhosa-speaking patients (20-30% of admissions) required interpreting. Interpreter services were available immediately in 69% of cases. Nursing staff provide 67% of the interpreter service, while cleaning staff provide 10%. There were 93.5 documented hours of interpreting. One person employed as an interpreter in two wards had longer interviews on average than the other staff members. The opportunity cost of using nurses and cleaners as interpreters amounts to R1 504 for the period of the study. **CONCLUSIONS:** Psychiatrically educated staff are clearly preferred as interpreters. A significant proportion of patients are being assessed through the use of family members, cleaners and other inappropriate people. The financial burden to the hospitals of not providing an interpreter service is small, but the impact on working conditions and service to patients is considerable.

Enguidanos, E. R., and Rosen, P. (1997). Language as a factor affecting follow-up compliance from the emergency department. *Journal of Emergency Medicine*, 15(1), 9-12.

We evaluated language (English vs. Spanish) as a variable in compliance with follow-up appointments from emergency department (ED) referrals and compared it with four other socioeconomic variables. Patients were interviewed on presentation to the ED. A follow-up interview was performed by phone eight weeks later, after the scheduled referral date. We find that language is not a significant variable influencing follow-up compliance. Having a primary medical doctor prior to the ED visit was positively correlated with follow-up compliance and was the only significant socioeconomic variable irrespective of language ability. There was no significant correlation between English speaking and any of the socioeconomic variables. Among Spanish speakers, having a primary medical doctor and having some form of medical insurance were significantly correlated to compliance with referrals.

Erzinger, S. (1991). Communication between Spanish-speaking patients and their doctors in medical encounters. *Culture, Medicine & Psychiatry, 15*(1), 91-110.

Little research in patient-doctor communication addresses the profound difficulties that emerge as Spanish-speaking patients seek medical services in the U.S. This study examines the interaction of language and culture in medical encounters between Spanish-speaking Latino patients and their doctors who have a range of Spanish language ability and a variety of cultural backgrounds. Initial ethnographic fieldwork investigated Spanish-speaking patients' perceptions of doctors' Spanish language skill as it relates to their medical service. To elaborate on these fieldwork findings, medical encounters were audiotaped for detailed conversational analysis. Data from the two methods illustrate how language and culture interact in accomplishing communicative tasks as doctors attend Spanish-speaking patients.

Eytan, A., Bischoff, A., and Loutan, L. (1999). Use of interpreters in Switzerland's psychiatric services. *Journal of Nervous and Mental Disease, 187*(3), 190-192.

A survey on medical interpretation in psychiatry was sent to all psychiatric hospitals and public psychiatric services in Switzerland in May 1997. Forty-five percent of psychiatric departments estimated that 1-5% of their patients did not speak, or spoke only poorly, the local language. 22% estimated that proportion to be 5-7%, and 9% estimated the proportion to be greater than 10%. Ninety-four percent of departments considered that difficulties, rated from moderate to considerable, existed in communicating with patients who did not speak or spoke poorly the local language. Six and a half percent of departments never used interpreters, 40% used interpreters rarely, and 50% used interpreters often. 85% of departments used health care staff and/or patients' relatives or friends as interpreters. 72% of departments used non-medical staff as interpreters, 49% used outside volunteers, and 59% used trained and paid interpreters.

Flaskerud, J. H., and Liu, P. Y. (1991). Effects of an Asian client-therapist language, ethnicity and gender match on utilization and outcome of therapy. *Community Mental Health Journal, 27*(1), 31-42.

The purpose of this study was to examine the relationship of Asian client-therapist ethnicity, language and gender match on two measures of utilization: number of sessions with primary therapist and dropout from therapy; and one measure of client outcome: admission-discharge difference in Global Assessment Scale (GAS) scores. The sample consisted of 1746 Asian client episodes in Los Angeles County mental health facilities between January 1983 and August 1988. Various types of multiple regression analyses were used to investigate the relationship of language, ethnicity, and gender match to the three dependent variables and to eight socio-demographic variables. Either client-therapist language match or ethnic match significantly increased the number of client sessions with the primary therapist. However, only ethnicity match had a significant effect on dropout rate. Gain in GAS admission-discharge score was not affected by either a client-therapist ethnicity or language match. Gender match had no consistent effect on the dependent variables. Of the covariates examined, only therapist discipline (social worker) had a consistent effect on the dependent variables. It was con-

cluded that both client-therapist language and ethnicity match are important variables affecting the utilization of treatment. Further research will be needed to separate the effects of language and ethnicity on therapy utilization.

Flores, G., Laws, M., Mayo, S., Zuckerman, B., Abreu, M., Medina, L., and Hardt, E. J. (2003). Errors in medical interpretation and their potential clinical consequences in pediatric encounters. *Pediatrics, 111*(1), 6-14.

BACKGROUND: About 19 million people in the United States are limited in English proficiency, but little is known about the frequency and potential clinical consequences of errors in medical interpretation. **OBJECTIVES:** To determine the frequency, categories, and potential clinical consequences of errors in medical interpretation. **METHODS:** During a 7-month period, we audiotaped and transcribed pediatric encounters in a hospital outpatient clinic in which a Spanish interpreter was used. For each transcript, we categorized each error in medical interpretation and determined whether errors had a potential clinical consequence. **RESULTS:** Thirteen encounters yielded 474 pages of transcripts. Professional hospital interpreters were present for 6 encounters; ad hoc interpreters included nurses, social workers, and an 11-year-old sibling. Three hundred ninety-six interpreter errors were noted, with a mean of 31 per encounter. The most common error type was omission (52%), followed by false fluency (16%), substitution (13%), editorialization (10%), and addition (8%). Sixty-three percent of all errors had potential clinical consequences, with a mean of 19 per encounter. Errors committed by ad hoc interpreters were significantly more likely to be errors of potential clinical consequence than those committed by hospital interpreters (77% vs 53%). Errors of clinical consequence included: 1) omitting questions about drug allergies; 2) omitting instructions on the dose, frequency, and duration of antibiotics and rehydration fluids; 3) adding that hydrocortisone cream must be applied to the entire body, instead of only to facial rash; 4) instructing a mother not to answer personal questions; 5) omitting that a child was already swabbed for a stool culture; and 6) instructing a mother to put amoxicillin in both ears for treatment of otitis media. **CONCLUSIONS:** Errors in medical interpretation are common, averaging 31 per clinical encounter, and omissions are the most frequent type. Most errors have potential clinical consequences, and those committed by ad hoc interpreters are significantly more likely to have potential clinical consequences than those committed by hospital interpreters. Because errors by ad hoc interpreters are more likely to have potential clinical consequences, third-party reimbursement for trained interpreter services should be considered for patients with limited English proficiency.

Hampers, L. C., and McNulty, J. E. (2002). Professional interpreters and bilingual physicians in a pediatric emergency department. *Archives of Pediatrics and Adolescent Medicine, 156*(11), 1108-1113.

OBJECTIVE: To determine the impact of interpreters and bilingual physicians on emergency department (ED) resource utilization. **DESIGN:** Cohorts defined by language concordance and interpreter use were prospectively studied preceding and following the availability of dedicated, professional medical interpreters. **SETTING:** Pediatric ED in Chicago, Ill. **PARTICIPANTS:**

We examined 4146 visits of children (aged 2 months to 10 years) with a presenting temperature of 38.5 degrees C or higher or a complaint of vomiting or diarrhea; 550 families did not speak English. In 170 cases, the treating physician was bilingual. In 239, a professional interpreter was used. In the remaining 141, a professional medical interpreter was unavailable. **MAIN OUTCOME MEASURES:** Incidence and costs of diagnostic testing, admission rate, use of intravenous hydration, and length of ED visit. **RESULTS:** Regression models incorporated clinical and demographic factors. Compared with the English-speaking cohort, non-English-speaking cases with bilingual physicians had similar rates of resource utilization. Cases with an interpreter showed no difference in test costs, were least likely to be tested (odds ratio [OR], 0.73; 95% confidence interval [CI], 0.56-0.97), more likely to be admitted (OR, 1.7; 95% CI, 1.1-2.8), and no more likely to receive intravenous fluids, but had longer lengths of visit (+16 minutes; 95% CI, 6.2-26 minutes). The barrier cohort without a professional interpreter had a higher incidence (OR, 1.5; 95% CI, 1.04-2.2) and cost (+\$5.78; 95% CI, \$0.24-\$11.21) for testing and was most likely to be admitted (OR, 2.6; 95% CI, 1.4-4.5) and to receive intravenous hydration (OR, 2.2; 95% CI, 1.2-4.3), but showed no difference in length of visit. **CONCLUSION:** Decision making was most cautious and expensive when non-English-speaking cases were treated in the absence of a bilingual physician or professional interpreter.

Hampers, L. C., Cha, S., Gutglass, D., Binns, H., and Krug, S. (1999). Language barriers and resource utilization in a pediatric emergency department. *Pediatrics*, 103(6 Pt 1), 1253-1256. **BACKGROUND:** Although an inability to speak English is recognized as an obstacle to health care in the United States, it is unclear how clinicians alter their diagnostic approach when confronted with a language barrier (LB). **OBJECTIVE:** To determine if a LB between families and their emergency department (ED) physician was associated with a difference in diagnostic testing and length of stay in the ED. **DESIGN:** Prospective cohort study. **METHODS:** This study prospectively assessed clinical status and care provided to patients who presented to a pediatric ED from September 1997 through December 1997. Patients included were two months to ten years of age, not chronically ill, and had a presenting temperature ≥ 38.5 degrees C or complained of vomiting, diarrhea, or decreased oral intake. Examining physicians determined study eligibility and recorded the Yale Observation Score if the patient was < 3 years old, and whether there was a LB between the physician and the family. Standard hospital charges were applied for each visit to any of the 22 commonly ordered tests. Comparisons of total charges were made among groups using Mann-Whitney U tests. Analysis of covariance was used to evaluate predictors of total charges and length of ED stay. **RESULTS:** Data were obtained about 2467 patients. A total of 286 families (12%) did not speak English, resulting in a LB for the physician in 209 cases (8.5%). LB patients were much more likely to be Hispanic (88% vs. 49%), and less likely to be commercially insured (19% vs. 30%). These patients were slightly younger (mean 31 months vs. 36 months), but had similar acuity, triage vital signs, and Yale Observation Score (when applicable). In cases in which a LB existed, mean test charges were significantly higher: \$145 versus \$104, and ED stays were significantly longer: 165 minutes versus 137 minutes. In an analysis of covariance

model including race/ethnicity, insurance status, physician training level, attending physician, urgent care setting, triage category, age, and vital signs, the presence of a LB accounted for a \$38 increase in charges for testing and a 20 minute longer ED stay. **CONCLUSION:** Despite controlling for multiple factors, the presence of a physician-family LB was associated with a higher rate of resource utilization for diagnostic studies and increased ED visit times. Additional study is recommended to explore the reasons for these differences and ways to provide care more efficiently to non-English-speaking patients.

Hayes, R. P., and Baker, D. W. (1998). Methodological problems in comparing English-speaking and Spanish-speaking patients' satisfaction with interpersonal aspects of care. *Medical Care*, 36(2), 230-236.

OBJECTIVES: The authors examine the reliability and validity of English and Spanish versions of a patient satisfaction measure, the Interpersonal Aspects of Care (IAC) Examiner Scale. **METHODS:** The examiner scale was administered to 234 Spanish-speaking and 250 English-speaking patients seen in the emergency department of a large public hospital. Reliability and validity coefficients were calculated for both administrations. Differences in item and scale response distributions were compared using two methods of response dichotomization. **RESULTS:** In general, the examiner scale was reliable and valid. However, the Spanish version of the scale was significantly less reliable and valid. Depending on the method of item response dichotomization, significant differences between Spanish-speaking and English-speaking patients were found for the majority of the individual scale items. This was due primarily to a tendency for Spanish-speaking patients to respond "good" to items more frequently than did English-speaking patients. **CONCLUSIONS:** The results bring into question the use of certain types of response formats and the practice of dichotomizing responses when evaluating patient satisfaction in Spanish-speaking patients.

Hornberger, J., Itakura, H., and Wilson, S. R. (1997). Bridging language and cultural barriers between physicians and patients. *Public Health Rep*, 112(5), 410-417.

OBJECTIVE: This study explored a group of primary care physicians' use of various methods to bridge language and cultural barriers between themselves and their patients and the physicians' perceptions of the availability and quality of these methods. **METHODS:** The authors mailed a questionnaire to 495 primary care physicians in the Greater Bay Area of northern California, an area chosen for its ethnically diverse population. Respondents were asked to estimate how many patients they saw per week, how many encounters they had per week with non-English-speaking patients, and how often they used each of six interpretation methods. They were also asked to assess the availability and quality of interpretation services. **RESULTS:** Physicians reported that, on average, 21% of visits were with non-English-speaking patients. Trained medical interpreters or the AT&T Language Line were used, on average, in fewer than 6% of these encounters, and no interpreters were used in 11%. In 27% of encounters with non-English-speaking patients, the physician could speak the patient's language, in 20% interpretation was done by a staff member who had no formal interpretation training, and in 36% a family member or companion of the patient

interpreted. Physicians who had access to trained interpreters reported a significantly higher quality of patient-physician communication than physicians who used other methods ($P < 0.0001$). **CONCLUSIONS:** In an area of great ethnic diversity where physicians who had access to the services of trained interpreters reported a significantly higher quality of patient-physician communication, the low rates of use of trained interpreters suggest that factors other than quality, such as costs, preclude greater use of these services.

Hornberger, J. C., Gibson, C. D., Wood, W., Dequeldre, C., Corso, I., Palla, B., and Bloch, D. A. (1996). Eliminating language barriers for non-English-speaking patients. *Medical Care*, 34(8), 845-856.

OBJECTIVES: More than 31 million persons living in the United States do not speak English, therefore language discordance between the clinician and patient may hinder delivery of cost-effective medical care. A new language service was developed in which interpreters are trained in the skills of simultaneous interpretation commonly used at international conferences. The interpreters are linked from a remote site to headsets worn by the clinician and patient through standard communication wires. The service is called "remote-simultaneous interpretation," to contrast it with a traditional method of an interpreter being physically present at the interview and interpreting consecutively "proximate-consecutive interpretation." The aim of this study is to assess in a randomized protocol the quality of communication, interpretation, and level of patient, interpreter, and physician satisfaction with these two language services. **METHODS:** The first postpartum visit with each of 49 mothers and their new born babies was assigned randomly to proximate-consecutive interpretation (control) or to remote-simultaneous interpretation (experimental). Main outcome measures included (1) the number of physician and mother utterances in the visit, (2) the quality of the interpretation, and (3) physician, interpreter, and mother preferences between the two services. **RESULTS:** The remote-simultaneous interpreter service averaged 8.3 (10%) more physician utterances (95% confidence interval [CI] 4.3, 12.4) and 9.1 (28%) more mother utterances (95% CI 6.1, 12.1). On average, there were 2.8 (12%) fewer inaccuracies of physician utterances in experimental visits compared with control visits (95% CI -5.9, 0.4) and 3.0 (13%) fewer inaccuracies of mother utterances in experimental visits compared with control visits (95% CI -5.4, -0.6). Mothers and physicians significantly preferred the remote-simultaneous service to proximate-consecutive interpretation service. Interpreters stated that they thought mothers and physicians better understood each other using the remote-simultaneous service, although the interpreters preferred to work with the proximate-consecutive service. **CONCLUSIONS:** Using remote-simultaneous interpretation to improve the quality of communication in discordant-language encounters promises to enhance delivery of medical care for the millions of non-English-speaking patients in the United States.

Hu, D. J., and Covell, R. M. M. (1986). Health care usage by Hispanic outpatients as a function of primary language. *Western Journal of Medicine* 144(4), 490-493.

Three groups of Hispanic patients at five outpatient clinics in San Diego County, California, participated in a survey question-

naire concerning health care usage according to whether they were Spanish-speaking only, bilingual with Spanish as a primary language, or primarily English-speaking. Although the three groups were similar in age and income distribution, the use of health services (regular source of health care, health insurance, admission to hospital, and frequency of general physical, eye, and dental examinations) was positively correlated with the increased use of English. Likewise, respondents whose primary language was English were more likely to describe their health care as more than adequate and their own health as excellent than were those whose primary language was Spanish.

Jackson, J. C., Rhodes, L. A., Inui, T., and Buchwald, D. (1997). Hepatitis B among the Khmer: issues of translation and concepts of illness. *Journal of General Internal Medicine*, 12, 292-298.

OBJECTIVE: To assess the comprehensibility of hepatitis B translations for Cambodian refugees, to identify Cambodian illnesses that include the symptoms of hepatitis, and to combine these observations with critical theoretical perspectives of language to reflect on the challenges of medical translations generally. **DESIGN:** Open-ended, semistructured interviews, and participant-observation of a refugee community in Seattle, Washington. **SETTING:** Homes of Cambodian residents of inner-city neighborhoods. **PARTICIPANTS:** Thirty-four adult Cambodian refugees who had each been educated about hepatitis B through public health outreach. **RESULTS:** Medical interpreters translated hepatitis B as *rauk tlaam*, literally "liver disease." Unfortunately, while everyone knew of the liver (*tlaam*), *rauk tlaam* was a meaningless term to 28 (82%) of 34 respondents and conveyed none of the chronicity and communicability intended by refugee health workers for 34 (100%) of the respondents. In contrast, all respondents knew illnesses named after symptom complexes that include the symptoms of acute and chronic hepatitis, but do not refer to diseased organs. The Cambodian words chosen to translate hepatitis B reflect the medical thinking and medical authority that can unintentionally overwhelm attempts at meaningful communication with non-English-speaking patients. **CONCLUSIONS:** To improve comprehension of hepatitis B translations for the Khmer, translators must choose between medical terminology focused on the liver and Khmer terminology which identifies recognizable experiences, but represents important Khmer health concepts. A critical linguistic view of this situation suggests that for these translations to be meaningful clinicians and health educators must first analyze and then monitor the contextual significance of medical language. In cross-cultural settings, this means a partnership with medical interpreters to pay close attention to the experience of illness and social context of the translation.

Jacobs, E. A., Lauderdale, D. S., and Meltzer, D., Shorey, J. M., Levinson, W., and Thisted, R. A. (2001). Impact of interpreter services on delivery of health care to limited-English-proficient patients. *Journal of General Internal Medicine*, 16(7), 468-474.

OBJECTIVE: To determine whether professional interpreter services increase the delivery of health care to limited-English-proficient patients. **DESIGN:** Two-year retrospective cohort study during which professional interpreter services for Portuguese

and Spanish-speaking patients were instituted between years one and two. Preventive and clinical service information was extracted from computerized medical records. SETTING: A large HMO in New England. PARTICIPANTS: A total of 4,380 adults continuously enrolled in a staff model health maintenance organization for the two years of the study, who either used the comprehensive interpreter services (interpreter service group [ISG]; N = 327) or were randomly selected into a 10% comparison group of all other eligible adults (comparison group [CG]; N = 4,053). MEASUREMENTS AND MAIN RESULTS: The measures were change in receipt of clinical services and preventive service use. Clinical service use and receipt of preventive services increased in both groups from year one to year two. Clinical service use increased significantly in the ISG compared to the CG for office visits (1.80 vs. 0.70; $P < .01$), prescriptions written (1.76 vs 0.53; $P < .01$), and prescriptions filled (2.33 vs. 0.86; $P < .01$). Rectal examinations increased significantly more in the ISG compared to the CG (0.26 vs. 0.02; $P = .05$) and disparities in rates of fecal occult blood testing, rectal exams, and flu immunization between Portuguese and Spanish-speaking patients and a comparison group were significantly reduced after the implementation of professional interpreter services. CONCLUSION: Professional interpreter services can increase delivery of health care to limited-English-speaking patients.

Jacobs, E. A., Suaya, J., Stone, E. L., and Shepard, D. S. (2001). *Overcoming language barriers to access to medical care: the costs and benefits of interpreter services: Collaborative Research Unit, Cook County Hospital, Chicago, IL; Schneider Institute for Health Policy, Brandeis University, Waltham, MA; Division of Medical Assistance, Commonwealth of Massachusetts, Boston, MA.*

BACKGROUND: Many US residents face language barriers that reduce access to medical care. Despite a growing focus on this problem many health care organizations provide inadequate interpreter services. A principal reason is the concern that uncertain benefits do not justify the costs of adequate services. The objective of this study was to assess the impact of an interpreter service program on the utilization and cost of health care services at a staff model HMO. METHODS: We conducted a two-year cohort study of continuously enrolled adult members of a staff model HMO where new comprehensive interpreter services for Spanish and Portuguese-speaking ambulatory patients were implemented in year two of the study. Two groups were studied: an interpreter service group (ISG, n=380) consisting of members who used the new interpreter services and a comparison group (CG, n=4119) consisting of a 10% random sample of all other members who received ambulatory care in year two. We abstracted demographic information and utilization of primary health care services (preventive services and outpatient services) and hospital-based services (ED visits and hospitalizations) from the HMO's administrative database. We calculated the unit cost per interpretation based on the cost of the services (salaries, fringe benefits, supervision, and overhead) and reported volume of use of services. We calculated induced costs of interpreter services by multiplying the change in utilization for each health care service by its 1997 fee-for-service reimbursement rate from the Massachusetts' Division of Medical Assistance. RESULTS: Utilization of primary health care increased in both groups after

implementation of interpreter services. The changes (yr2-yr1) in utilization of primary care services ($p < 0.05$), utilization of office visits ($p < 0.01$), prescriptions filled ($p < 0.01$) and prescriptions written ($p < 0.01$) were significantly greater in the ISG compared to the CG. Utilization of hospital-based services remained the same for both groups, except for a reduction in ED use by the ISG. The change in rate of ED use (yr2-yr1) was not significant when compared to the CG. The net cost of providing interpreter services in 1997 prices was \$79/per interpretation x 2.95 visits per person/ per year in the ISG. The net induced cost of the increased care delivered to the ISG compared to the CG was \$22 per person per year. The overall cost impact was an increase of \$256 per person per year in the ISG or \$2.41 per HMO member per year. CONCLUSIONS: We found that professional interpreter services improve the delivery of health care to LEP patients, increasing the delivery of preventive and all primary care and possibly reducing the use of ED services. The net first-year cost was \$256 per person using the interpreter services or \$2.41 per HMO member per year.

James, C. E. (1998). *Cultural interpretation services within a multicultural context: an exploration of the problematic and ethical issues facing social service institutions. Canadian Journal of Community Mental Health, 17(2), 51-66.*

This paper explores the challenges for social service agencies which offer cultural interpretation services in their bid to meet dire needs of service seekers and recipients from linguistic minorities. The author argues that cultural interpretation is provided by institutions that have done little more than add a service for clients from cultural minorities, while leaving intact their service structures-structures that have historically viewed language and "cultural differences" as problems. This orientation will need to change if these services are to be accessible and equitable for Canadians from linguistic and ethnic minorities. While cultural interpreters remain critical to service delivery, they need to work within institutions where service providers and administrators understand language as a cultural, social, and political instrument through which individuals articulate their identities, realities, and understandings of their cultural contexts and service needs. This paper concludes by identifying some of the ethical dilemmas and questions that attend the needed institutional changes.

Kirkman-Liff, B., and Mondragon, D. (1991). *Language of interview: relevance for research of southwest Hispanics. American Journal Of Public Health, 1991(81), 1399-1404.*

BACKGROUND: This paper reports the results of a survey investigating health status, access, satisfaction with care, and barriers to care in Arizona. The major focus is on the association between languages of the interview and of the dependent measures; interviews were conducted in English and Spanish. METHODS: The differences between groups were tested using chi-square statistics for each independent categorical variable; the significance of all the independent variables on each of the dependent variables was tested simultaneously using a maximum likelihood logistical regression models. RESULTS: Language of interview for Hispanic children was a significant variable, more important than ethnicity itself, in determining health status, access, satisfaction with care, and barriers to care; language of the

interview for Hispanic adults was not a significant measure, but neither was ethnicity. Instead, income affected access to care for adults. **CONCLUSIONS:** This pattern of results suggests that in the southwestern United States, studies on health status and access to care that use only ethnicity and do not include language of the interview may fail to identify populations of Hispanic children who are remarkably more vulnerable. **PUBLIC HEALTH:** The research of Hispanic populations can be more instrumental toward policy improvement if it increases its specificity with this heterogeneous group. Analysis of language of the interview has a low cost and a high benefit toward this specification.

Kravitz, R. L., Helms, L. J., Azari, R., Antonius, D., and Melnikow, J. (2000). Comparing the use of physician time and health care resources among patients speaking English, Spanish, and Russian. *Medical Care*, 38(7), 728-738.

BACKGROUND AND OBJECTIVES: The number of US residents with limited English proficiency (LEP) is 14 million and rising. The goal of this study was to estimate the effects of LEP on physician time and resource use. **DESIGN:** This was a prospective, observational study. **SETTING AND SUBJECTS:** The study included 285 Medicaid patients speaking English ($n = 112$), Spanish ($n = 62$), or Russian ($n = 111$) visiting the General Medicine and Family Practice Clinics at the UC Davis Medical Center in 1996-1997 (participation rate, 85%). Bilingual research assistants administered patient questionnaires, abstracted the medical record, and conducted detailed time and motion studies. **MAIN OUTCOME MEASURES:** We used seemingly unrelated regression models to evaluate the effect of language on visit time, controlling for patient demographics and health status, physician specialty, visit type, and resident involvement in care. We also estimated the effect of LEP on cross-sectional utilization of health care resources and adherence to follow-up with referral and testing appointments. **RESULTS:** The three language groups differed significantly by age, education, and reason for visit but not gender, number of active medical conditions, physical functioning, or mental health. Physician visit time averaged 38 \pm 20 minutes (mean \pm SD). Compared with English-speaking patients and after multivariate adjustment, Spanish and Russian speakers averaged 9.1 and 5.6 additional minutes of physician time, respectively ($P < 0.05$). The language effect was confined largely to follow-up visits with resident physicians (house staff). Compared with English speakers, Russian speakers had more referrals ($P = 0.003$) and Spanish speakers were less likely to follow-up with recommended laboratory studies ($P = 0.031$). **CONCLUSIONS:** In these academic primary care clinics, some groups of patients using interpreters required more physician time than those proficient in English. Additional reimbursement may be needed to ensure continued access and high-quality care for this special population.

Lee, E. D., and Rosenberg, C. R. (1998). Does a physician-patient language difference increase the probability of hospital admission? *Academic Emergency Medicine*, 5(1), 86-89.

OBJECTIVE: To determine whether a difference in the preferred language of communication between the patient and the emergency physician was associated with a greater probability of admission to the hospital. **SETTING:** The study was carried out

in 1995 in the emergency department (ED) of the New York Hospital Medical Center of Queens in Flushing, NY. **METHODS:** A convenience sample of 1,000 patients registered in the ED over a 2-month period was classified as either adult or pediatric. Subjects were prospectively evaluated as to whether their preferred language of communication was different from that of their primary ED physician, and were classified either as "language disparate" (if different) or "language matched" (if the language was the same). A data collection form was completed for each patient by the physician, and included information on patient age, sex, acuity of injury or illness (high, moderate, or low), and whether an interpreter was present. Physicians were blinded to the study purpose and told that the ED was doing a "needs assessment" for interpreter services. Univariate comparison between the language disparate and language matching groups were assessed for significance using Fisher's exact test for nominal categorical variables and the two-sample Kolmogorov-Smirnov test for ordered categorical variables. Cox proportional hazards model was used for multivariate data analysis. **RESULTS:** Of the 653 adult study subjects, 557 (85.30%) spoke English as a preferred language. Non-professional interpreters were present in 80 cases (52%) of the disparate language group. Twenty-nine (36%) of these were family members, eight (10%) were emergency medical technicians, seven (9%) were hospital staff other than physicians (clerks, nurses, nurse's aides, or volunteers), one (1%) was a physician, and 26 (33%) were undescribed. The rate of admissions from the pediatric language disparate group was not increased (13% vs. 13% for the matched group). For adult patients in the disparate language group, the risk of admission to hospital was found to be significantly increased (35% vs. 21% in the matching group). Risk of admission to the hospital increased with increasing age and acuity level, and decreased in the presence of an interpreter. The chance of being admitted to the hospital approximately 70% greater for disparate language patients than matched language patients.

Lee, S. M., and Pope, C. R. (2001). *Final report: patients who don't speak English: improving language minorities' health care with professional interpreters*. Washington, DC: U.S. Department of Health and Human Services Office of Minority Health.

This paper reports findings from a study of the effects of interpreter services on utilization of health care by limited English proficient (LEP) patients. Data are based on administrative records on visits to health providers collected by a large health maintenance organization, Kaiser Permanente/Northwest (KPNW) in the Portland, Oregon, metropolitan area and its contractor for interpreter services, Pacific Interpreters (PI). The data cover a four-year period, from June 1995 to August 1999. Around July 1997, or about mid-way through the four-year study period, KPNW implemented a centralized professional interpreter service for its LEP members. We compare LEP members' use of health care two years before, and after, the implementation of the interpreter service. The sample consists of 1,037 LEP members of KPNW. The sample was continuously enrolled for four years, thus allowing an analysis of the effects of interpreter services. The main research objective is to observe and analyze change in the outcome variables before and after July 1997. The outcome variables include: total visits by LEP members to health provid-

ers; total visits to emergency and urgent care facilities; percent of failures to show up for scheduled visits; length of stay in emergency facilities; level of care provided in emergency facilities; and consistency between complaint and diagnosis codes in emergency facilities. We expect total visits to increase after interpreter services are introduced in July 1997 because interpreters enable greater access to health care for LEP patients. The percent of failures to show up for scheduled visits, use of emergency facilities, and length of stay in emergency facilities are expected to show declines after interpreters are available. For these three outcome measures, interpreters are expected to facilitate LEP patients' ability to: cancel and reschedule appointments, replace visits to emergency and urgent care facilities with routine visits, and reduce amount of time in emergency facilities through more effective communication with health providers. Finally, level of care in emergency facilities and consistency between complaint and diagnosis are expected to increase, again because interpreters facilitate effective communication between LEP patients' and health providers. We also examine how changes in the outcome measures vary by gender, language group, age, and type of health care coverage of LEP members. Over 60 percent of the sample are women. Four language groups make up about 85 percent of the sample: 26 percent are Spanish-speakers, 28 percent are Vietnamese speaking, 16 percent are Russian speaking, and 15 percent are Chinese speakers. Language is used as a proxy for observing cultural differences in the impact of interpreter services. We are also able to compare LEP patients who are on Medicaid or the Oregon Health Plan (for low income patients) with patients who have private health insurance. We discuss the findings with reference to how interpreter services as a form of health care service affects the health care utilization of LEP patients who experience language and related cultural barriers in accessing health care. We recognize that our study is a limited examination of this increasingly important issue in the U.S. health care system, given increases in the foreign-born population and federal guidelines on compliance with Title VI of the Civil Rights Act of 1964 with respect to LEP individuals. In spite of data limitations, the findings can help inform health providers, patients, advocacy groups, and policy makers on how interpreter services can facilitate better access to, and more effective use of, health care by the growing LEP population.

Leman, P. (1997). Interpreter use in an inner city accident and emergency department. *Journal of Accident & Emergency Medicine, 14*(2), 98-100.

OBJECTIVE: To determine the extent of communication problems that arose from patients whose primary language was non-English presenting to an inner city accident and emergency (A&E) department. **METHODS:** A prospective survey over seven consecutive days during September 1995. All adult patients other than those directly referred by their general practitioner to an inpatient team had a questionnaire completed by the A&E doctor first seeing the patient. The doctor recorded language ability and form of interpreter used, and estimated any prolongation of the consultation and ability to improve communication by the use of additional services. **RESULTS:** 103 patients (17%) did not speak English as their primary language; 55 patients (9.1% of the study population) had an English language ability rated as other than good, and 16 (29%) of these consultations could have been

improved by the use of additional interpreter services; 28 patients overall (4.6% of the study population) required the use of an interpreter, who was usually a relative. **CONCLUSIONS:** A significant number of patients presenting to A&E have difficulty in communicating in English. These consultations could often have been improved by the use of additional interpreter services. Telephone interpreter services may provide the answer for use in A&E departments because of their instant and 24 hour availability.

Manson, A. (1988). Language concordance as a determinant of patient compliance and emergency room use in patients with asthma. *Medical Care, 26*(12), 1119-1128.

To test the hypothesis that the ability of physicians to speak the same language as asthmatic patients promotes patient compliance and the use of scheduled office appointments in preference to emergency services, the charts of 96 Spanish-speaking patients with asthma were reviewed. Of these patients, 65 were cared for by seven Spanish-speaking bilingual physicians and 31 were cared for by 23 non-Spanish speaking physicians. Compared with patients with language concordant physicians, patients with language discordant physicians were only slightly more likely to omit medication, to miss office appointments, and to make at least one emergency room visit. Subgroup analysis showed that, with extended follow-up, patients cared for by a language discordant physician were more likely to omit medication (rate ratio: 3.24; $p = 0.08$), more likely to miss office appointments (rate ratio: 3.06; $P = 0.01$), and were slightly more likely to make an emergency room visit (rate ratio: 2.07; $P = 0.12$) than patients with language concordant physicians. Cox regression analyses taking account of differences in follow-up time, age, gender, pay-status, and severity of disease confirmed these findings. These data suggest that patient compliance and more cost-effective use of ambulatory care services may be associated with the ability of physicians to speak the same language as their patients.

Marcos, L. R. (1979). Effects of interpreters on the evaluation of psychopathology in non-English-speaking patients. *American Journal of Psychiatry, 136*(2), 171-174.

Non-English-speaking patients in need of psychiatric services are usually evaluated with the help of an interpreter. Discussions with psychiatrists and lay hospital interpreters who had experience in these interviews and content analysis of eight audiotaped interpreter-mediated psychiatric interviews suggested that clinically relevant interpreter-related distortions could lead to misevaluation of the patient's mental status. The author notes that pre- and post-interview meetings of clinicians and interpreters have been found useful in minimizing these distortions.

Mazor, S. S., Hampers, L. C., Chande, V. T., and Krug, S. E. (2002). Teaching Spanish to pediatric emergency physicians: effects on patient satisfaction. *Archives of Pediatrics and Adolescent Medicine, 156*(7), 693-695.

BACKGROUND: Language barriers are known to negatively affect patient satisfaction. **OBJECTIVE:** To determine whether a course of instruction in medical Spanish for pediatric emergency department (ED) physicians is associated with an increase in

satisfaction for Spanish-speaking-only families. **DESIGN, SETTING, PARTICIPANTS, AND INTERVENTION:** Nine pediatric ED physicians completed a 10-week medical Spanish course. Mock clinical scenarios and testing were used to establish an improvement in each physician's ability to communicate with Spanish-speaking-only families. Before (preintervention period) and after (postintervention period) the course, Spanish-speaking-only families cared for by these physicians completed satisfaction questionnaires. Professional interpreters were equally available during both the preintervention and postintervention periods. **MAIN OUTCOME MEASURES:** Responses to patient family satisfaction questionnaires. **RESULTS:** A total of 143 Spanish-speaking-only families completed satisfaction questionnaires. Preintervention ($n = 85$) and postintervention ($n = 58$) cohorts did not differ significantly in age, vital signs, length of ED visit, discharge diagnosis, or self-reported English proficiency. Physicians used a professional interpreter less often in the postintervention period (odds ratio [OR], 0.34; 95% confidence interval [CI], 0.16-0.71). Postintervention families were significantly more likely to strongly agree that "the physician was concerned about my child" (OR, 2.1; 95% CI, 1.0-4.2), "made me feel comfortable" (OR, 2.6; 95% CI, 1.1-4.4), "was respectful" (OR, 3.0; 95% CI, 1.4-6.5), and "listened to what I said" (OR, 2.9; 95% CI, 1.4-5.9). **CONCLUSIONS:** A 10-week medical Spanish course for pediatric ED physicians was associated with decreased interpreter use and increased family satisfaction.

Meyers, C. (1992). Hmong children and their families: consideration of cultural influences in assessment. *American Journal of Occupational Therapy*, 46(8), 737-744.

Occupational therapists assessing young Hmong children with developmental problems must consider their families' cultural beliefs as they affect the design of assessment procedures and practices. Choices that families make about health and educational services are influenced by their beliefs. Developmental status can be affected by unresolved medical problems and the child's general health condition. Assessment components based on cultural awareness may improve the effectiveness of early identification of Hmong children with developmental delay. Appropriate use of interpreters, creation of the most beneficial assessment environment, parental report, and observation of functional skills and play provide needed information when determining the child's eligibility for early intervention services. The author has found that trained interpreters provide the most reliable communication between family members and the therapist. Assessments in the home environment are encouraged due to the child's age and the need for family support and interaction. Parents are an excellent source of information about the child's current and past functional abilities. Observations of the child's interaction with family members, with objects and toys during play, and during functional daily living activities provides the therapist with valuable information about the child's need for intervention.

Morales, L. S., Cunningham, W. E., Brown, J. A., Liv, H., and Hays, R. D. (1999). Are Latinos less satisfied with communication by health care providers? *Journal of General Internal Medicine*, 14(7), 409-417.

OBJECTIVE: To examine association of patient ratings of com-

munication by health care providers with patient language (English vs. Spanish) and ethnicity (Latino vs. white). **METHODS:** A random sample of patients receiving medical care from a physician group association concentrated on the West Coast was studied. A total of 7,093 English and Spanish language questionnaires were returned for an overall response rate of 59%. Five questions asking patients to rate communication by their health care providers were examined in this study. All five questions were administered with a seven-point response scale. **MAIN RESULTS:** We estimated the associations of satisfaction ratings with language (English vs. Spanish) and ethnicity (white vs. Latino) using ordinal logistic models, controlling for age and gender. Latinos responding in Spanish (Latino/Spanish) were significantly more dissatisfied compared with Latinos responding in English (Latino/English) and non-Latino whites responding in English (white) when asked about: (1) the medical staff listened to what they say (29% vs. 17% vs. 13% rated this "very poor," "poor," or "fair"; $p < .01$); (2) answers to their questions (27% vs. 16% vs. 12% $p < .01$); (3) explanations about prescribed medications (22% vs. 19% vs. 14% $p < .01$); (4) explanations about medical procedures and test results (36% vs. 21% vs. 17% $p < .01$); and (5) reassurances and support from their doctors and the office staff (37% vs. 23% vs. 18% $p < .01$). **CONCLUSION:** This study documents that Latino/Spanish respondents are significantly more dissatisfied with provider communication than Latino/English and white respondents. These results suggest Spanish-speaking Latinos may be at increased risk of lower quality of care and poor health outcomes. Efforts to improve the quality of communication with Spanish-speaking Latino patients in outpatient health care settings are needed.

Rivadeneira, R., Elderkin-Thompson, V., Silver, R. C., and Waitzkin, H. (2000). Patient centeredness in medical encounters requiring an interpreter. *American Journal of Medicine*, 108(6), 470-474.

PURPOSE: Patient-centered interviewing is associated with greater patient satisfaction and better medical outcomes than traditional encounters, but actively seeking patients' views of their illnesses and encouraging patients to express expectations, thoughts, and feelings is difficult in encounters that require an interpreter. We sought to examine physicians' use of the patient-centered approach with patients who required the assistance of an interpreter. **SUBJECTS AND METHODS:** A cross-sectional sample of patients was video recorded during visits with physicians at a multi-ethnic, university-affiliated, primary care clinic. Nineteen medical encounters of Spanish-speaking patients who required an interpreter and 19 matched English-speaking encounters were coded for frequency that patients mentioned symptoms, feelings, expectations, and thoughts (collectively called "offers"). Physicians' responses were coded as ignoring, closed, open, or facilitative of further discussion. **RESULTS:** English-speaking patients made a mean (\pm SD) of 20 \pm 11 offers, compared with 7 \pm 4 for Spanish-speaking patients ($P = 0.001$). Spanish-speaking patients also were less likely to receive facilitation from their physicians and were more likely to have their comments ignored ($P < 0.005$). English-speaking patients usually received an answer or acknowledgment to their questions even if the physicians did not encourage further discussion on the topic. **CONCLUSION:** Spanish-speaking patients are at a double

disadvantage in encounters with English-speaking physicians: these patients make fewer comments, and the ones they do make are more likely to be ignored. The communication difficulties may result in lower adherence rates and poorer medical outcomes among Spanish-speaking patients.

Roger, P., Code, C., and Sheard, C. (2000). Assessment and management of aphasia in a linguistically diverse society. *Asia Pacific Journal of Speech, Language & Hearing*, 5(1), 21-34.

This paper reports the results of a survey conducted in metropolitan Sydney, Australia, which was designed to look at the assessment and treatment practices adopted by speech-language pathologists when working with individuals with aphasia from language backgrounds other than English. The results of the survey highlight a number of areas of concern for speech-language pathologists. These include the need for a range of appropriate assessment and treatment materials, as well as the need to improve the way that speech-language pathologists and interpreters work cooperatively in the assessment and treatment of aphasia in a linguistically diverse environment. The study also revealed that many speech-language pathologists wish to improve aspects of their own knowledge and skills relevant to their work with individuals who come from a variety of language and cultural backgrounds. These needs, some of the ways in which they might be addressed, and their implications in terms of further research are discussed in detail.

Sarver, J., and Baker, D. W. (2000). Effect of language barriers on follow-up appointments after an emergency department visit. *Journal of General Internal Medicine*, 15(4), 256-264.

OBJECTIVE: To determine whether patients who encountered language barriers during an emergency department visit were less likely to be referred for a follow-up appointment and less likely to complete a recommended appointment. **DESIGN:** Cohort study. **SETTING:** Public hospital emergency department. **PARTICIPANTS:** English- and Spanish-speaking patients (N = 714) presenting with nonemergent medical problems. **MEASUREMENTS AND MAIN RESULTS:** Patients were interviewed to determine sociodemographic information, health status, whether an interpreter was used, and whether an interpreter should have been used. The dependent variables were referral for a follow-up appointment after the emergency department visit and appointment compliance, as determined by chart review and the hospital information system. The proportion of patients who received a follow-up appointment was 83% for those without language barriers, 75% for those who communicated through an interpreter, and 76% for those who said an interpreter should have been used but was not (P = .05). In multivariate analysis, the adjusted odds ratio for not receiving a follow-up appointment was 1.92 (95% confidence interval [CI], 1.11 to 3.33) for patients who had an interpreter and 1.79 (95% CI, 1.00 to 3.23) for patients who said an interpreter should have been used (compared with patients without language barriers). Appointment compliance rates were similar for patients who communicated through an interpreter, those who said an interpreter should have been used but was not, and those without language barriers (60%, 54%, and 64%, respectively; P = .78). **CONCLUSIONS:** Language barriers may decrease the likelihood that a patient is given a follow-up appointment after an emergency department visit. However, pa-

tients who experienced language barriers were equally likely to comply with follow-up appointments.

Schur, C. L., and Albers, L. A. (1996). Language, sociodemographics, and health care use of Hispanic adults. *Journal of Health Care for the Poor & Underserved*, 7(2), 140-158.

This study examines the role of spoken language in access to health care for Hispanic adults. Analyzing the associations between personal characteristics and the use of Spanish as opposed to English reveals that monolingual Spanish speakers were more likely than others to be older, less educated, in poor health, uninsured, and in poverty. Further, Spanish speakers were less likely than English-speaking Hispanics to have a usual source of health care. Persons with no usual source of care were least likely to have seen a physician or to have had their blood pressure checked, whereas those with a regular doctor appeared to have the greatest access. The authors conclude that, whereas language is certainly associated with many barriers to health care, both economic well-being and having a usual source of care are of paramount importance for the Hispanic American population.

Takeuchi, D. T., Sue, S., and Yeh, M. (1995). Return rates and outcomes from ethnicity-specific mental health programs in Los Angeles. *American Journal of Public Health*, 85(5), 638-643.

OBJECTIVES. The present study compared the return rate, length of treatment, and treatment outcome of ethnic minority adults who received services from ethnicity-specific or mainstream programs. **METHODS.** The sample consisted of 1516 African Americans, 1888 Asian Americans, and 1306 Mexican Americans who used 1 of 36 predominantly White (mainstream) or 18 ethnicity-specific mental health centers in Los Angeles County over a 6-year period. Predictor variables included type of program (ethnicity specific vs mainstream), disorder, ethnic match (whether or not clients had a therapist of the same ethnicity), gender, age, and Medi-Cal eligibility. The criterion variables were return after one session, total number of sessions, and treatment outcome. **RESULTS.** The study indicated that ethnic clients who attended ethnicity-specific programs had a higher return rate and stayed in the treatment longer than those using mainstream services. The data analyses were less clear cut when treatment outcome was examined. **CONCLUSIONS.** The findings support the notion that ethnicity-specific programs seem to increase the continued use of mental health services among ethnic minority groups.

Tocher, T. M., and Larson, E. (1998). Quality of diabetes care for non-English-speaking patients: a comparative study. *Western Journal of Medicine* 168(6), 504-511.

To determine the quality of care provided to non-English-speaking patients with non-insulin-dependent (type 2) diabetes mellitus compared with English-speaking patients, we did a retrospective cohort study of 622 patients with type 2 diabetes, of whom 93 were non-English-speaking and 529 were English-speaking. They were patients at primary and specialty care clinics at a university and a county hospital, and the study was based on clinical and administrative database records with a 12-month follow-up. Professional interpreters were provided to all non-English-speaking patients. Patients were identified using interpreter services records, which reliably included all patients who did

not speak English. After adjusting for demographic differences, significantly more non-English-speaking patients received care that met the American Diabetes Association guidelines of 2 or more glycohemoglobin tests per year (odds ratio, 1.9; 95% confidence interval, 1.2-3.0) and 2 or more clinic visits per year (odds ratio, 2.6; 95% confidence interval, 1.2-5.4). More non-English-speaking patients had 1 or more dietary consultations (odds ratio, 2.8; 95% confidence interval, 1.3-6.1). No other significant differences were found in routine laboratory test use or in the number of ophthalmologic examinations. Outcome variables also did not differ, including standardized glycohemoglobin and other laboratory results, complication rates, use of health services, and total charges. At these institutions, the quality of diabetes care for non-English-speaking patients appear to be as good as, if not better than, for English-speaking patients. Physicians may be achieving these results through more frequent visits and laboratory testing.

Tocher, T. M., and Larson, E. B. (1999). Do physicians spend more time with non-English-speaking patients? *Journal of General Internal Medicine, 14*(5), 303-309.

OBJECTIVE: To determine whether physicians at a general internal medicine clinic spend more time with non-English-speaking patients. **DESIGN:** A time-motion study comparing physician time spent with non-English-speaking patients and time spent with English-speaking patients during 5 months of observation. We also tested physicians' perceptions of their time use with a questionnaire. **SETTING:** Primary care internal medicine clinic at a county hospital. **PATIENTS/PARTICIPANTS:** One hundred sixty-six established clinic patients, of whom 57 were non-English speaking and 109 were English speaking, and 15 attending physicians and 8 third-year resident physicians. **MEASUREMENTS AND MAIN RESULTS:** Outcome measures included total patient time in clinic, wait for first nurse or physician contact, time in contact with the nurse or physician, physician time spent on the visit, and physician perceptions of time use with non-English-speaking patients. After adjustment for demographic and comorbidity variables, non-English-speaking and English-speaking patients did not differ on any time-motion variables, including physician time spent on the visit (26.0 vs. 25.8 minutes). A significant number of clinic physicians believed that they spent more time during a visit with non-English-speaking patients (85.7%) and needed more time to address important issues during a visit (90.4%), (both $p < .01$). Physicians did not perceive differences in the amount they accomplished during a visit with non-English-speaking patients. **CONCLUSIONS:** There were no differences in the time these physicians spent providing care to non-English-speaking patients and English-speaking patients. An important limitation of this study is that we were unable to measure quality of care provided or patients' satisfaction with their care. Physicians may believe that they are spending more time with non-English-speaking patients because of the challenges of language and cultural barriers.

Twinn, S. (1997). An exploratory study examining the influence of translation on the validity and reliability of qualitative data in nursing research. *Journal of Advanced Nursing, 26*(2), 418-423.

Although the complexity of undertaking qualitative research with non-English speaking informants has become increasingly rec-

ognized, few empirical studies exist which explore the influence of translation on the findings of the study. The aim of this exploratory study was therefore to examine the influence of translation on the reliability and validity of the findings of a qualitative research study. In-depth interviews were undertaken in Cantonese with a convenience sample of six women to explore their perceptions of factors influencing their uptake of Pap smears. Data analysis involved three stages. The first stage involved the translation and transcription of all the interviews into English independently by two translators as well as transcription into Chinese by a third researcher. The second stage involved content analysis of the three data sets to develop categories and themes and the third stage involved a comparison of the categories and themes generated from the Chinese and English data sets. Despite no significant differences in the major categories generated from the Chinese and English data, some minor differences were identified in the themes generated from the data. More significantly the results of the study demonstrated some important issues to consider when using translation in qualitative research, in particular the complexity of managing data when no equivalent word exists in the target language and the influence of the grammatical style on the analysis. In addition the findings raise questions about the significance of the conceptual framework of the research design and sampling to the validity of the study. The importance of using only one translator to maximize the reliability of the study was also demonstrated. In addition the author suggests the findings demonstrate particular problems in using translation in phenomenological research designs.

Wardin, K. (1996). A comparison of verbal evaluation of clients with limited English proficiency and English-speaking clients in physical rehabilitation settings. *American Journal of Occupational Therapy, 50*(10), 816-825.

OBJECTIVES: Recent literature has emphasized collaborative goal setting between therapists and clients and has sought to increase therapists' awareness of treating in cross-cultural settings. How occupational therapists verbally evaluate clients with limited English proficiency (LEP) is important to these topics and underdeveloped in the literature. **METHOD:** Seventy-four occupational therapists working with adult clients with LEP in physical rehabilitation settings in large U.S. metropolitan areas were surveyed to discover the time taken, methods used, and themes surrounding verbal evaluation, including use of translators and respondents' linguistic abilities. A follow-up telephone interview of 12 survey respondents clarified these discoveries. **RESULTS:** Respondents reported taking 11.5 min more to verbally evaluate clients with LEP than for English-speaking clients and reported understanding the treatment needs of clients with LEP after verbal evaluation less well. Respondents with higher abilities in second languages reported better understanding of clients' needs than monolingual respondents. **CONCLUSION:** Methods for cross-lingual verbal evaluation need to be identified so that therapists can collaborate with clients with LEP in planning culturally sensitive treatment.

Woloshin, S., Bickell, N. A., Schwartz, L., Gany, F., and Welch, H. G. (1995). Language barriers in medicine in the United States. *Journal of the American Medical Association, 273*(9), 724-728.

Review of 1995 status of interpreter services in U.S. health care

system, the clinical impact of inadequate interpretation, and the legislative responses to the language needs of patients with limited English proficiency.

Woloshin, S., Schwartz, L. M., Katz, S. J., and Welch, H. G. (1997). Is language a barrier to the use of preventive services? *Journal of General Internal Medicine, 12(8), 472-477.*

OBJECTIVE: To isolate the effect of spoken language from financial barriers to care, we examined the relation of language to use of preventive services in a system with universal access. **DESIGN:** Cross-sectional survey. **SETTING:** Household population of women living in Ontario, Canada, in 1990. **PARTICIPANTS:** Subjects were 22,448 women completing the 1990 Ontario Health Survey, a population-based random sample of households. **MEASUREMENTS AND MAIN RESULTS:** We defined language as the language spoken in the home and assessed self-reported receipt of breast examination, mammogram and Pap testing. We used logistic regression to calculate odds ratios for each service adjusting for potential sources of confounding: socio-economic characteristics, contact with the health care system, and measures reflecting culture. Ten percent of the women spoke a non-English language at home (4% French, 6% other). After adjustment, compared with English speakers, French-speaking women were significantly less likely to receive breast exams or mammography, and other language speakers were less likely to receive Pap testing. **CONCLUSIONS:** Women whose main spoken language was not English were less likely to receive important preventive services. Improving communication with patients with limited English may enhance participation in screening programs.

Xuo, D., and Fagan, M. J. (1999). Satisfaction with methods of Spanish interpretation in an ambulatory care clinic. *Journal of General Internal Medicine, 14(9), 547-550.*

OBJECTIVE: To describe the utilization of various methods of language interpretation by Spanish-speaking patients in an academic medical clinic and to determine patients' and physicians' satisfaction with these methods. **METHODS:** Survey administered to medical residents and Spanish-speaking patients asking about their experience and satisfaction with various methods of language interpretation. **MAIN RESULTS:** Both patients and residents had the highest level of satisfaction for professional interpreters (92.4% vs. 96.1% reporting somewhat or very satisfactory, $p = .17$). In contrast, patients were significantly more satisfied than residents with using family members and friends (85.1% vs. 60.8%, $p < .01$). Physicians and patients agreed that accuracy, accessibility, and respect for confidentiality were highly important characteristics of interpreters (>90% of both groups reporting somewhat or very important). However, patients were more concerned than residents about the ability of the interpreter to assist them after the physician visit (94% vs. 45.1%, $p < 0.01$). **CONCLUSIONS:** Using family members and friends as interpreters for Spanish-speaking patients should be more seriously considered; however, in order to optimize patient satisfaction, differences between patients and providers should be taken into account when using interpretation in medical settings.

Organizational Supports for Cultural Competence

Agger-Gupta, N. (2001). *From "making do" to established service, the development of health care interpreter services in Canada and the United States of America: a grounded theory study of health organization change and the growth of a new profession.* Unpublished Ph.D. Dissertation, The Fielding Graduate Institute, Santa Barbara.

This interdisciplinary grounded theory qualitative study was about the necessary organizational contexts and decision-making processes leading to the creation of professional healthcare interpreter services in Canada and the United States. The study developed theoretical frameworks from an analysis of audio-taped on-site interviews from a convenience sampling of health care executives and managers, health care clinicians, and health interpreting experts in 14 health organizations in Calgary, Vancouver, Seattle, Chicago, Boston, Worcester, Oakland. The stories about the development of interpreter services in their site, were transcribed and analyzed. A complex variety of compelling reasons for establishing dedicated interpreter services were found. Details differed, particularly between American and Canadian sites, but common patterns of obstacles, challenges, essential prerequisite conditions, and catalysts, were identified. While the prerequisite conditions by themselves were inadequate, specific catalysts appear to have created the necessary initial momentum for the organization to launch an interpreter service, including legal, legislative and "trouble case" situations. The elements

determining the course of this change process in the health organizations appears to occur within a matrix of at least five structural and contextual domain layers. A four-stage model of interpreter services development emerged from participants' stories. Development typically moved from a stage of "making do" without interpreters, to a "launch" stage, followed by a longer period of "normative growth and maturation" of the interpreter service. A number of established interpreter services included in this study appeared to be highly successful. At these sites, the organization's executives championed the interpreter service's leadership, for the entire organization, toward what appears to be a fourth stage of "culturally competent health care," characterized by a number of indicators.

Armenta, F. (1993). *Latinos and group parent training: a research study with implications for increasing parental participation in group parent training programs.* Unpublished Ph.D. Dissertation, University of California Los Angeles.

Parent training is now considered an important community intervention to prevent and treat problems like child abuse and juvenile delinquency. This descriptive study explored factors that are believed to be influential in the participation of Latino parents in parent training programs. Hypotheses about the potential influence of acculturation, social class and parental stress were tested in terms of their relationship to a variety of potential

influencing forces (prior parental knowledge about training programs, recruitment procedures, and program, group and instructor characteristics). Ninety Mexican and Mexican-American mothers of children ages five to nine participated. Results showed that acculturation and social class had uneven effects on various factors. Stress did not influence program interest; however, Latinos reported higher parental stress than Anglo norms. The results showed a very low level of awareness of parent training programs among Latino parents, suggesting the need for extensive education about parent training in Latino communities. Based on factors that parents indicated would most positively influence their participation, a cooperative, systemic involvement approach is most likely to be successful. The approach would include educating such valued community agents as teachers, doctors, social workers and clergy to personally promote participation, possibly using simply written materials like pamphlets and flyers; holding programs in Spanish and English at schools, colleges and community centers at flexible hours for five to seven weeks for 30-60 minutes per session; using a variety of attendance incentives and such necessary supports as the provision of child care and transportation; appealing to child and family benefits in the titles of the programs; and working to insure that non-participating spouses are supportive of the participating parent. Instructor educational background was found to be highly important, as was instructor's knowledge of program content, respectful attitude toward parents and being a parent themselves. Results are discussed in conjunction with models of health service utilization and culturally competent service delivery.

Banner, R. O., DeCambra, H., Enos, R., Gotay, C., Hammond, O. W., Hedlung, N., Issell, B. F., Matsunaga, D. S., and Tsark, J. A. (1995). A breast and cervical cancer project in a Native Hawaiian community: Wai'anae Cancer Research Project. *Preventive Medicine, 24*(5), 447-453.

BACKGROUND: This article describes a breast and cervical cancer control project in a Native Hawaiian community and presents preliminary findings from its first year. The project is community driven, with Native Hawaiian community investigators and advisors involved in all phases of the research project. Its purpose is to test the effectiveness of a culturally appropriate intervention as a means of increasing breast and cervical cancer screening practices among Native Hawaiian women. **METHODS:** This article discusses the process of community participation in the development of a baseline survey as well as selected findings from that survey. A baseline telephone survey was conducted to obtain an initial assessment of community knowledge, attitudes, and behavior related to cancer. Community representatives were an integral part of the research team that planned and implemented the survey. **RESULTS:** A total of 1,260 women drawn equally from the study and the control communities participated in the survey. A majority of those surveyed in both communities indicated adherence to cancer screening recommendations. Seventy-three percent of the women reported having obtained a Pap test during the past two years. Fifty-nine percent of women over 40 years of age reported having had a mammogram during the past two years. Twenty-eight percent reported having used Hawaiian remedies within the past year. Thirty-six percent of the women reported encouraging others to obtain cancer screening services. **DISCUSSION:** Though a majority of the target popula-

tion are following cancer screening guidelines, a significant minority are not. While the project intervention aims to change the screening behavior of women not currently getting cancer screening, it plans to do so by enlisting the women already in compliance to reach others in their social networks who are currently not getting cancer screening. The involvement of community representatives, working alongside researchers, in baseline survey planning helped assure the survey was acceptable to the participants and the community as a whole. This process is illustrative of a participatory research commitment which underlies success in the early phase of this Native Hawaiian research project.

Dimas, J. M. (2003). A systematic approach to implementing cultural competence assessment and training of providers in a managed care setting. Paper presented at the Third national conference on quality health care for culturally diverse populations: advancing effective health care through systems development, data, and measurement, Chicago, IL.

This study examines the feasibility and effectiveness of implementing cultural competency assessment and training for providers as part of a systems approach to deal with culturally competent health care in a managed care setting. The Alameda Alliance for Health will conduct assessments of health care providers' cultural competency, provide training, examine whether level of cultural competency is related to processes and outcomes of care, examine business-related considerations in effective implementation of assessment and training, and institutionalize ongoing assessment and training.

Frayne, S. M., Burns, R. B., Hardt, E. J., Rosen, A. K., and Moskowitz, M. A. (1996). The exclusion of non-English-speaking persons from research. *Journal of General Internal Medicine, 11*(1), 39-43.

OBJECTIVE: We sought to determine how often non English-speaking (NES) persons are excluded from medical research. **DESIGN:** Self-administered survey. **PARTICIPANTS:** We identified all original investigations on provider-patient relations published in major U.S. journals from 1989 through 1991, whose methodology is involved in direct interaction between researcher and subject (N = 216). Each study's corresponding author was surveyed; 81% responded. **MEASUREMENTS AND MAIN RESULTS:** Of the 172 respondents, 22% included NES persons; among these inclusions, 16% had not considered the issue during the study design process, and 32% thought including the NES had affected their study results. Among the 40% who were excluded the NES (excluders), the most common reason was not having thought of the issue (51%), followed by translation issues and recruitment of bilingual staff. The remaining 35% (others) indicated that there were no NES persons in their study areas. **CONCLUSIONS:** Many persons are commonly excluded from provider-patient communication studies appearing in influential journals, potentially limiting the generalizability of study findings. Because they are often excluded through oversight, heightened awareness among researchers and granting institutions, along with the development of valid instruments unvaried languages, may increase representation of the non-English-speaking subjects in research.

Giacomelli, J. (1997). A review of health interpreter services in a rural community: a total quality management approach. *Australian Journal of Rural Health, 5*(3), 158-164.

The current focus in health care is on total quality management (TQM), a process that involves ongoing quality improvement and benefits both internal and external customers. In order to comply with the values of TQM, the Griffith Murrumbidgee Health Service set up a team to review the use of interpreters in a healthcare setting. Staff from a number of wards/units filled out a survey sheet regarding interpreter services for each patient/client presenting for service during a one-month period. The results showed that (i) there was a marked tendency by staff to use non-accredited interpreters; and (ii) staff who used non-accredited interpreters tended to inappropriately assess patient/client interpreting needs and to be unfamiliar with the Health Care Interpreter Policy. The TQM team subsequently devised several strategies for change.

Glover, S. H., Shi, L., and Samuels, M. E. (1997). African American administrators in community/migrant health centers. *Journal of Health Care for the Poor & Underserved, 8*(2), 153-169.

Community and migrant health centers (CHC/MHCs) play a secondary role as avenues for the development of minority and women health care professionals, groups traditionally underrepresented in administrative and managerial positions within the health care system. This paper focuses on the role of CHC/MHCs in eliminating the barriers that typically limit the professional advancement of these groups. In a survey of both rural and urban CHC/MHC administrators, it was found that CHC/MHCs have higher percentages of minorities in top management positions than general management but do not necessarily reflect the minority composition of those being served. Of the CHC/MHC administrators, 20 percent were African American, less than the population served (31 percent) but greater than the percentage of African Americans in the general U.S. population (12 percent). This suggests that CHC/MHCs have partially met the original goal of upward mobility and that there is room for improvement.

Hagland, M. M., Sabatino, F., and Sherer, J. L. (1993). New waves: hospitals struggle to meet the challenge of multiculturalism now - and in the next generation. *Hospitals, 67*(10), 22-31.

This article looks at two critical aspects of multiculturalism: hospitals as employers and as providers in a diverse society. Experts believe the most immediate priority on the labor front is encouraging minorities to enter health care administration and clinical care. Examples of how hospitals tackle the challenge of serving multicultural patients are given.

Johnson, A. E., and Baboila, G. V. (1996). Integrating culture and healing: meeting the health care needs of a multicultural community. *Minnesota Medicine, 79*(5), 41-45.

Delivering health care to culturally diverse patients is fast becoming an integral part of patient care—a change driven by shifting demographics in Minnesota and especially in the Twin Cities metro area. At United Hospital and Children's Health Care-St. Paul, ethnographic research is being used to create cross-cultural health care information systems that address the needs of providers and patients. These include an easy-to-use computer-

based information system, brown bag seminars, and cross-cultural skills training. This article discusses that hospital's efforts to identify provider needs, collect cultural information, and disseminate that information in a manner that supports quality and cost-effective health care delivery.

Kaufert, J. M., and Koolage, W. W. (1984). Role conflict among "culture brokers": the experience of Native Canadian medical interpreters. *Social Science & Medicine, 18*(3), 283-286.

An examination of role conflicts among Cree and Saukteau language speaking interpreters working in two urban hospitals providing tertiary medical care services to native Canadians from remote northern communities, based on 18 months of participant observation and analysis of 4,000 videotaped clinical consultations. An inventory of roles and situational contexts characterizing the interpreter's work in this setting is developed. Sources of role conflict were associated with cross-pressures in their work as language interpreters, culture brokers, and patient advocates.

Kaufert, J. M., Putsch, R. W., and Lavallec, M. (1998). Experience of Aboriginal health interpreters in mediation of conflicting values in end-of-life decision making. *International Journal of Circumpolar Health, 57*(Suppl 1), 43-48.

This paper examines the experience of Aboriginal medical interpreters working with terminally ill patients, family members, and care providers, and serving as mediators when cultural values and decision frameworks are in conflict. The discussion is based on a qualitative analysis of interaction in 12 patient encounters which were observed and for which transcripts were made of the discourse and interaction. Each case involved intervention by a professional interpreter. Interaction involved the signing of advance directives or other consent agreements in situations in which Aboriginal patients were terminally ill. Analysis will focus on the cultural dimension of value conflict situations, particularly in relation to issues of individual autonomy and biomedical emphasis on truth-telling in the communication of terminal prognosis.

Koseki, L. K. (1996). A study of utilization and satisfaction: implications for cultural concepts and design in aging services. *Journal of Aging & Social Policy, 8*(1), 59-75.

This article describes the utilization and satisfaction patterns of Native Hawaiian elders with the Ke Ola Pono No Na Kupuna ("Good Health and Living for the Elderly") project funded under Title VI-B of the Older Americans Act. Data were collected through a self-administered questionnaire. Its unique, one of a kind, culturally specific program, which includes traditional Native Hawaiian meals, has a number of implications for policy considerations in designing aging programs that can serve ethnic minority aged more effectively. Changes in current federal policy that would enable federally mandated aspects of programs to provide for greater flexibility in providing culturally relevant programs and services for ethnic minorities would help to surmount some of the current problems and barriers to service delivery and utilization by ethnic minority groups. Allowing for greater involvement of ethnic minorities in program design will help to assure culturally relevant and appropriate activities and services and may increase the likelihood of success due to a

sense of personal ownership and self-responsibility on the part of those involved.

Paez, K. (2002). *Planning culturally and linguistically appropriate services: a guide for managed care plans.* Baltimore: Centers for Medicare & Medicaid Services and Agency for Healthcare Research and Quality.

This guide is designed to assist health plans in 1) assessing the diversity of their population and their current level of cultural and linguistic competence, 2) identifying feasible priority areas for improvement of culturally and linguistically appropriate services (CLAS) based on the assessment, and 3) developing a plan to implement cost-effective and manageable interventions to address these priority areas. Part 1 of the guide addresses four aspects of the assessment process: 1) preparing the CLAS Assessment and Planning Team, 2) assessing the diversity of members and the community, 3) assessing the managed care plan, and 4) identifying gaps, determining priorities, and briefing senior leaders. Part 2 offers an overview of three areas of concentration for improving CLAS: 1) providing linguistic services (oral and written), 2) improving cultural competence, and 3) developing a diverse workforce. Appendices include reprints of cultural competence assessment tools.

Ratliff, S. S. (1999). *Waterfalls and geysers: the development of diversity awareness at Children's Hospital.* *Journal of Nursing Care Quality, 13(3), 36-46.*

The development of diversity awareness at Children's Hospital in Columbus, Ohio, has been a work in progress since the early 1980s. The interface of administration and individual initiatives ("waterfalls" and "geysers") has resulted in projects ranging from major international exchange programs to noontime Spanish language classes. This article recounts the journey from a parochial focus to a consciousness of multiculturalism in virtually all aspects of hospital interaction.

Resick, L. K., Taylor, C. A., Carroll, T. L., D'Antonio, J. A., and de Chesnay, M. (1997). *Establishing a nurse-managed wellness clinic in a predominantly older African American inner-city high rise: an advanced practice nursing project.* *Nursing Administration Quarterly, 21(4), 47-54.*

With funding from a U.S. Department of Housing and Urban Development contract awarded to a private university, advanced practice nurse faculty established a nurse-managed wellness clinic in an apartment building populated by predominantly African American older people. Ethnographic methods were used to ensure culturally competent care. The clinic provided nursing, pharmacy, and health sciences faculty and students with community-focused clinical experiences as interdisciplinary team members.

Salimbene, S. (1999). *Cultural competence: a priority for performance improvement action.* *Journal of Nursing Care Quality, 13(3), 23-35.*

An increase in diversity that has been accompanied by a sharp decrease in white Caucasian "mainstream" culture has made cultural competence a priority in nursing performance improvement. Each culturally diverse group defines health and illness differently. Most have a long and well-established tradition of folk

health beliefs and practices, which strongly impact members' reactions to American standards of care—an influence on both patient satisfaction and treatment compliance. This article describes the culture—health care relationship and lists 10 indicators for measuring cultural competency. It presents a practical, systemwide model for the improvement of nursing care quality through enhanced cultural competency and lists resources, which can be used to both support and improve cultural competency throughout an integrated health care system.

Simpson, E., Gawron, T., Mull, D., and Walker, A. P. (1994). *A Spanish-language prenatal family health evaluation questionnaire: construction and pilot implementation.* *Journal of Genetic Counseling, 3(1), 39-62.*

The Family Planning Council of America has constructed and implemented a genetic history questionnaire, the Family Health Evaluation, to elicit risk factors, to increase clients' knowledge about reproductive choices, and to improve access to genetic services. The objective of the present study was to improve access to genetic services. The objective of the present study was to develop and implement a Spanish-language version of the Family Health Evaluation for data collection and risk assessment. The content of the Family Health Evaluation was modified to more clearly reflect the risks, exposures, and medical needs of a Hispanic, largely Mexican-American, population. In the present study, the questionnaire was administered to women presenting for prenatal care. The data collected in this pilot study indicate that the questionnaire is effective in identifying individuals and families who would benefit from receiving additional information about a medical condition in their families, from genetic counseling or from a referral for high-resolution ultrasound or other diagnostic procedures.

Stanton, B., Black, M., Feigelman, S., Ricardo, I., Galbraith, J., Li, X., Kaljee, L., Keane, V., and Nesbitt, R. (1995). *Development of a culturally, theoretically and developmentally based survey instrument for assessing risk behaviors among African-American early adolescents living in urban low-income neighborhoods.* *AIDS Education & Prevention, 7(2), 160-177.*

The creation of developmentally and culturally appropriate data-gathering instruments is necessary as health researchers and interventionists expand their investigations to community-based minority adolescent populations. The creation of such instruments is a complex process, requiring the integration of multiple data-gathering and analytic approaches. Recent efforts have delineated several issues to be considered in survey design for minority populations: community collaboration; problem conceptualization; application of the presumed model of behavioral change; and dialect and format of delivery. This paper describes the process of creating a culturally and developmentally appropriate, theoretically grounded instrument for use in monitoring the impact of an AIDS educational intervention on the behavior and health outcomes of urban African-American pre-adolescents and early adolescents. Three phases of research were involved: preliminary (and ongoing) ethnographic research including extensive participant observation, as well as, focus group and individual interviews with 65 youths; construction and testing of the preliminary instrument involving two waves of pilot testing (N1 = 57; N2 = 45); and, finalization of the instru-

ment including reliability testing and assessment of tool constructs and selection of the mode of delivery (involving two additional waves of pilot testing (N3 = 91; N4 = 351). The essential role played by the community in all phases of instrument development is underscored.

Stolk, Y., Ziguras, S., Saunders, T., Garlick, R., Stuart, G., and Coffey, G. (1998). Lowering the language barrier in an acute psychiatric setting. *Australian & New Zealand Journal of Psychiatry*, 32(3), 434-440.

OBJECTIVES: The aim of this paper is to investigate the effectiveness of a training and policy strategy to improve communication opportunities in an acute inpatient unit for patients of non-English-speaking background (NESB) with low English proficiency. **METHOD:** A pre- and post-intervention design involved: (i) a survey of the multilingual skills of 80 clinical staff; (ii) recording of patients' ethnic background and proficiency; (iii) pre- and post-intervention data collection of the main outcome measure (communications with patients in a language other

than English [LOTE]); and (iv) staff training, and active encouragement, in interpreter use. English proficiency was assessed using the population census proficiency question. **RESULTS:** Of 257 admissions, 33% were of NESB and 19% preferred to speak a LOTE. The staff survey yielded a 49% return rate and showed that, of 11 LOTES spoken by patients, seven were also spoken by 17 of the staff. Twenty-nine percent of staff were not clinically proficient in these languages. Compared to the NESB population, a higher proportion of NESB patients rated low on proficiency. Following the intervention, interpreter bookings and booking duration increased significantly. **CONCLUSIONS:** A standard training package and a policy promoting interpreter use improved communication opportunities in an acute setting where language needs are typically poorly met. Failure to ensure effective communication raises risks of misdiagnosis and inappropriate treatment. By measuring patients' proficiency directly, the present study identified a higher level of need for interpreter services than estimated by past reports.