II. CATEGORY A: CULTURALLY SENSITIVE INTERVENTIONS

Cultural Competence Education and Training

The majority of studies on cultural competence education and training were essentially descriptive, but some studies examined the impact on trainees and on care that was delivered.

Descriptive Studies

Studies primarily describe cultural competence training in different educational settings, including nursing, social work, pediatric, and child psychology programs (Culhane-Pera et al., 2000; Flores, Gee, and Kastner, 2000; Freed, 1998; Gamble, 2000; Lindquist, 1990; Rankin and Kappy, 1993; Ricardo and Holden, 1994; Salcido and Garcia, 1997; Sublette and Trappler, 2000). Some discussed different educational techniques and course development, duration of training, content, and cross cultural skill modules. Various teaching strategies were discussed.

Training content described in the literature included a range of topics, such as an examination of issues pertinent to specific multicultural populations, cultural awareness and sensitivity, cross-cultural communication, use of language assistance services, culturally specific patient assessment and management, epidemiological assessment, and multicultural resource identification and utilization.

Impact on Trainees

The literature documented two applied study designs to assess impact: pre- and post- self reported change and quantifiable change. Studies that used self-assessment measurements of change in cultural knowledge with no comparison groups reported that participants felt their level of competency had increased significantly (Allison et al., 1996; Culhane-Pera et al., 1997; Edwards, 1997; Gany and de Bocanegra, 1996; Kurtz, 1999; Napholz, 1999), although one study reported a single instance of a trainees' negative attitudes intensifying as a result of an intervention (Sachdev, 1997). Some studies reported that change occurred in some areas of awareness and sensitivity, while not in others (Copeman, 1989; Farnill et al., 1997). While one study that compared a group of trainees to a group that did not receive training showed an impact in some aspects of cross-cultural adaptability (Majumdar, Keystone, and Cuttress, 1999), another study that compared "culture school" students with those who received alternative training found no difference in knowledge gains between the two groups (Smith, 1998).

Some of these studies examined the impact of variations in presentation and training content. The literature described a wide range of cultural competence training methods, including lecture, clinical contacts, videotaped consultations, student log-books, community medicine projects, and affective methods. One study found that the affective approach led to higher scores in the areas of awareness and cultural competency than a more knowledge-based approach to teaching (Edwards, 1997). Kurtz (1999) described a structured, psycho-educational group format, using supportive self-help components. Salcido and Garcia (1997) found greater impacts demonstrated by trainees who used a video-training model over a helping skills or culture-specific model. Not all studies found differences in the impact of interventions they examined. Naphotz (1999) found both innovative and traditional cultural sensitivity improved nursing students' skill assessment scores. Pruegger and Rogers (1994) found no differences demonstrated in pre- and post-tests between the experiential approach and the lecture approach, although qualitative data from personal documents indicated significantly greater effects of the experiential treatment.

Impact on Care

Few studies went beyond examining the impact of training on trainees to see what impact trained clinicians have on patients. Wade and Bernstein (1991) found that counseling 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. Norman (1999) reported that patients of experienced counselors who had received cross-cultural psycho-educational intervention on counseling graduate students reduced two of five measured symptoms of borderline personality disorder diagnosis, compared to patients of experienced counselors who did not receive the training.

Lefley (1984) found that cross-cultural training of mental health clinicians and administrator led to a significant increase in minority use of services and reductions of drop-out rates.

Thom and Tirado (2000) are in the process of looking at the impact of a cultural competence training intervention on measures of cultural competency, patient trust and satisfaction, adherence to treatment, and control of diabetes and hypertension.

There is a need to define which are the most desirable outcomes from the patient-provider relationship, and which are the most reliable indicators of positive improvements that result from training. Measuring satisfaction may have more to do with a response to someone's personality than the effect of training.

Research Considerations

Across all the studies there are fundamental problems with the myriad definitions of training: since there is no universal standard for training, nor a standard definition of cultural competence, there can be no comparability from one study to another of the "cultural competence" of subjects participating in different training programs. This suggests that first we must study what behaviors and attitudes have an impact on the delivery of care, then we need to study what teaching methods work best to improve them.

The content of training described in these studies varied widely, and was not always thoroughly described. It is difficult to discern whether different approaches to content resulted in better post-training scores, and impossible to make a link to improved behavior.

The vast majority of studies relied on pre-post self-assessments, did not utilize control groups appropriately or at all, and did not measure impact on trainees' behavior or on patients. The training interventions studied were mostly aimed at students, not providers, making it impossible to assess changes in behavior or service delivery.

The following additional research questions emerge from the literature.

- Are different educational techniques such as videotaping and experiential training significantly more effective than didactic training? Do some have a greater impact on behaviors and actions?
- Is there a certain level of improvement in knowledge or awareness that needs to be obtained before it can effectively translate into action? Can variations in behavior be attributed to level of knowledge, awareness or sensitivity?
- Do the effects of training vary in student populations versus provider populations?

- Are site/geographic-specific training modules more effective than general training? How are site needs determined and how effective are site-specific modules when population demographics change? Do patient-based outcomes shift?
- Are outcome differences associated with individuals who already have an interest in cultural issues?
- Does the potential exist for reinforcing negative perceptions and attitudes as a result of different training formats?
- Further research should examine provider behaviors and client perceptions and outcomes.
- Further quantitative and qualitative examinations are needed to assess cultural competence predictors (e.g., motivation for attending training, level of education, participation motivation, race, diversity of client contacts and experience).
- Can education on cultural issues translate into changes in behavior and service delivery in the absence of skills training?
- Are the effects of training sustainable?

Descriptive			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Culhane-Pera KA, Like RC, Lebensohn-Chialvo P, Loewe R (2000)	To identify the current status and content of the curricula and determine facilitating and impeding factors to multicultural curricula.	 58% of responding family practice residency 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 evaluation techniques, and feel more successful than programs with an informal curriculum. Factors that facilitate curricula: cultural diversity of communities and residents, multicultural interests of faculty and residents, and faculty's multicultural expertise. There was a marked increase in the prevalence of multicultural curricula in family practice residencies from 1985 to 1998. 	Study Participants: Family practice residency programs
Flores G, Gee D, Kastner B (2000)	To determine the number of U.S. and Canadian medical schools conducting courses on cultural issues and to examine course format, content and timing.	 Few had separate courses addressing cultural issues (8% U.S./0% Canadian). Significantly more Canadian than U.S. schools provided no instruction on cultural issues. Few taught about specific cultural issues of largest geographic minority group present. 	Survey Study Participants: U.S. and Canadian medical schools
Freed JR (1998)	To determine the effectiveness of a multicultural dental education program that teaches dental students, faculty and practitioners how to effectively communicate with a culturally diverse population. Module includes six videotapes and accompanying instructor's manuals. The module is currently being used in a 20-hour "Culture and Health" required course at UCLA School of Dentistry, at the University of Colorado and University of Michigan.	This Robert Wood Johnson Foundation project is in progress.	Study methods not reviewed

	Descriptive			
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Gamble VN (2000)	To help medical schools assess and develop curricula related to cultural competency by providing guidelines on what should be taught, how it should be taught, and how students are to be evaluated.	This Commonwealth Fund project is in progress.	Study design not reviewed	
Lindquist GJ (1990)	Describes process to integrate international and transcultural content into undergraduate nursing curriculum.	Demographics of student body were assessed. Mapping of educational content in required courses relative to cultural difference, health care delivery systems in other countries, nursing in other countries, and international health organizations and issues.	Survey Study Participants: Undergraduate nursing curriculum	
Ricardo IB, Holden EW (1994)	To determine the extent of multi- cultural training in pediatric and clinical psychology predoctoral in- ternship programs.	 75% indicated frequent presence of multicultural issues at training sites. 35% of the sites reported formal mechanisms for addressing issues. Ratings of the importance of multicultural training and minority interns presence directly associated with presence of minority faculty. Didactic seminars provided. Conflict resolution mechanisms weak. 	Survey Study Participants: Directors of training of pediatric and clinical child psychology predoctoral internships	
Salcido RM, Garcia JA (1997)	To compare the efficacy of 3 social work cross-cultural awareness training modules: video training, helping skills, culture specific.	Video training had greatest impact.	Pre-/post-test <u>Study Participants:</u> Master's of social work students	
Sublette E, Trappler B (2000)	To examine cultural and religious issues arising in the treatment of Orthodox Jewish inpatients and describes the integration of religious practices into policies and procedures.	Cultural and religious practices of Orthodox Jewish inpatients were accommodated by a health care system. Cross-cultural therapeutic goals included the integration of non-medical-compromising religious practices, increasing the cultural sensitivity of medical staff through training and understanding the role of religion in patient-provider communication.	Descriptive Study Participants: Orthodox Jewish inpatients	

Impact on Trainees			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Allison KW, Echemendia RJ, Crawford I, Robinson WL (1996)	To determine the factors and variables associated with self-rated competence in providing services to multicultural groups.	 Most therapists reported competence in working with different client groups. Levels of self-perceived competence varied with different client groups. Exposure to culturally diverse clients was important in predicting therapists' perceived confidence. Most respondents reported accessing education and training experiences in order to assist in serving diverse client groups. A small number reported low levels of self-competence while still treating clients from diverse backgrounds. 	Survey Study Participants: PhDs in counseling and clinical psychology
Copeman RC (1989)	To determine the impact of a teaching program aimed at improving knowledge of, and attitudes towards Aboriginal and migrant patients.	 Modest improvement in some attitudes. Knowledge improved in some areas but not in others. 	Pre-/post-test Study Participants: 4th year medical students
Culhane-Pera KA, Reif C, Egli E, Baker NJ, Kassekert R (1997)	To determine the impact of a 3- year curriculum to increase knowl- edge, skills, and attitudes in mul- ticultural medicine.	Participants exhibited a signifi- cant increase level of cultural competence, communication and cultural knowledge.	Pre-/post-test, Faculty evaluations Study Participants: Medical residents
Edwards SL (1997)	To evaluate the effectiveness of a cultural competency educational model and to examine the impact of different educational models.	 Findings indicated significant differences between types of education provided. Significant improvements in the competency area of awareness were noted. 	Pre-/post-test with comparison group Study Participants: Graduate students of social work
Farnill D, Todisco J, Hayes SC, Bartlett D (1997)	To evaluate an educational innovation designed to teach interviewing skills to pre-clinical medical students with the assistance of volunteers of non-English-speaking backgrounds.	Volunteers and students indicated high satisfaction with methods and outcomes. Students gained self-confidence in cross-cultural interviewing skills. Students achieved satisfactory reliabilities and indicated significant gains in inquiry skills and the communication of positive attitudes. Skills in communicating empathy and using simple language did not improve measurably.	Post-test <u>Study Participants:</u> Pre-clinical medical students

Impact on Trainees			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Gany F, de Bocanegra HT (1996)	To determine the impact of learner-centered training program designed to enhance crosscultural sensitivity and communication skills.	 Statistically significant improvements in knowledge and attitudes. Improvements in patient care. 	Pre-/post-test Study Participants: All staff levels at clinic site
Kurtz AP (1999)	To determine the impact of education provided to foster parents of transcultural placements.	Participants' skills in providing culturally respectful care for their foster children were en- hanced.	Pre-/post-test Study Participants: Foster parents
Lefley HP (1984)	To present research results from the University of Miami's Cross-Cultural Training Institute for Mental Health Professionals cross-cultural training program.	 Impact of training on trainees, their agencies and clients. A data based 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. Evaluating the effects of crosscultural evaluation/long-range evaluation values and world views. 	Descriptive Target Population: Mental health professionals
Majumdar B, Keystone JS, Cuttress LA (1999)	To examine the effectiveness of culture sensitivity training for for-eign-trained medical graduates.	Statistical significance was found in three subscales demonstrated in the experimental group.	Pre-/post-test with comparison group Study Participants: Foreign medical graduates vs. medical residents
Napholz L (1999)	To determine the impact of an in- novative cultural sensitivity inter- vention as compared to traditional cultural diversity education.	Both trainings significantly impacted the post-test scores for both groups.	Pre-/post-test <u>Study Participants:</u> Nursing students
Pruegger VJ, Rogers TB (1994)	To determine the impact of two cross-cultural sensitivity training modules: experiential vs. didactic approach.	Quantitative measurement indicated no differences between approaches. Qualitative analysis of personal documents indicated greater effects of experiential treatment.	Randomized controlled trial, post- test. <u>Study Participants:</u> Undergraduate students
Sachdev P (1997)	To evaluate the impact of a cultural immersion experience as a cultural sensitivity technique.	 Three students demonstrated favorable changes in attitude and felt positive experiential gains. One student's negative attitude had intensified as a result of the experience. 	Pre-/post-test Study Participants: Four undergraduate social work students.

	Impact on Trainees			
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Salcido RM, Garcia JA (1997)	To determine the efficacy of 3 social work cross-cultural awareness training modules: video training, help skills, culture specific.	Video training had greatest impact.	Pre-/ post-test Study Participants: Master's of social work students	
Smith LS (1998)	To determine the impact of culture school as an educational intervention.	Experimental group demonstrated significantly greater cultural self-efficacy and cultural knowledge as compared to those who attended nursing informatics (control group).	Randomized controlled trial Study Participants: Registered nurses	
	Impact	on Care		
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Lefley HP (1984)	To present research results from the University of Miami's Cross-Cultural Training Institute for Mental Health Professionals cross-cultural training program.	 Impact of training on trainees, their agencies and clients. A data based 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. Evaluating the effects of crosscultural evaluation/long-range evaluation values and world views. 	Descriptive Target Population: Mental health professionals	
Norman DM (1999)	To examine the presence of bias toward the individuals with borderline personality disorder (BPD) and the effects of a cross-cultural psychoeducational intervention on counseling graduate students.	Pre-intervention scores indicated: • A more biased or negative counselor attitude toward the BPD condition existed. • Students who had prior cross-cultural education experience versus those who had no such experience had measurably equivalent levels of BPD bias. Post-intervention scores indicated: • No reduction of bias immediately after course completion. • Six weeks after receipt of intervention significant shift in bias occurred in two areas of the BPD factor categories: Threatening Gestures and Reactivity.	Pre-/post-test with 6-week follow-up Study Participants: Counselor education graduate students	

Impact on Care			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Thom D, Tirado M (2000)	To describe the implementation and evaluation of a program to measure and improve cultural competency in primary care. This research will assess the impact of cultural competency on outcomes of care for patients with hypertension or diabetes who are self-identified as members of an ethnic minority, in three settings: 10 community-based, primary care practices; two academic-based primary care practices; and one family practice residency program.	Research in process.	Study design not reviewed. Study Participants: Ethnic minority patients with hypertension or diabetes.
Wade P, Bernstein BL (1991)	To measure the effects of cultural sensitivity training and providers' race on clients' perceptions of providers characteristics and the counseling relationship, and on clients' satisfaction	Compared to clients assigned to experienced providers who did not receive training, clients assigned to experienced providers who had received training: Rated providers higher on credibility and relationship measures, Had better follow-up compliance, Expressed greater satisfaction. Racial concordance resulted in less attrition, yet factor did not influence client perceptions of counselors and process.	Randomized controlled trial Study Participants: Counselors and their clients

Racial, Ethnic, and Linguistic Concordance

It is theorized that successful delivery of health services to different racial and ethnic populations requires an understanding of the cultural milieu of each distinct community, as well as the trust of communities and individual patients. This understanding and trust can be obtained by securing staffing patterns that mirror the targeted service population, although this can be difficult to achieve, especially for management positions (Glover, Shi, and Samuels, 1997). Saha and colleagues (2000) found that black and Hispanic Americans sought care from physicians of their own race or ethnicity because of personal preference and language. Language concordance achieved through teaching of "medical Spanish" is discussed in Category B of this appendix.

Impact on Service Utilization

Most of the research in this area has been conducted in the mental health field. Studies have reported that client-therapist language or ethnic match positively affected participation in treatment and increased the number of sessions of mental health treatment (Blank et al., 1994; Flaskerud, 1986; Flaskerud and Hu, 1994; Flaskerud and Liu, 1990, 1991; Takeuchi, Sue, and Yeh, 1995; Wade and Bernstein, 1991). Combined ethnic and language match has been shown to be associated with reduced emergency room visits by mental health patients (Snowden, Hu, and Jerrell, 1995), and language match alone has been associated with lower hospital admission rates (Lee and Rosenberg, 1998). However, evidence of concordance's impact on drop out rates is decidedly mixed. One study found a decrease in the drop-out rate for only ethnic match (Flaskerud and Liu, 1991), while another study found no ethnic match effect but language match for one particular subpopulation (Cambodians) increased drop-out rates (Flaskerud and Liu, 1990). A third study found that language and ethnic matches increased drop-out rates (Flaskerud, 1986).

Impact on Health Outcomes

Most studies that examined concordance's impact on health outcomes did not document improvements in health status of functioning (Flaskerud and Hu, 1994; Flaskerud and Liu, 1990, 1991; 1994; Takeuchi, Sue, and Yeh, 1995. The one exception was Porter and Beuf (1994), who found that African-American patients with vitiligo (a disfiguring skin disease) show better adjustment after treatment in predominantly a black hospital than African-American patients treated at a hospital where staff was mostly white.

Impact on Satisfaction and Patient-physician Communication

Black Americans report higher satisfaction, and receipt of preventive and other medical services with physicians of their own race, and Hispanics were more likely to report being "very satisfied" with their health care when seeing Hispanic physicians (Saha et al., 1999). Porter and Beuf (1994) found that African Americans were more positive to concordant physicians and hospital settings. Similarly, Cooper-Patrick and colleagues (1999) found that patients rated race concordant physicians as having a more participatory decision-making style, which was correlated with satisfaction. In contrast, Handler and colleagues (1996) found that the race/ethnicity of the caregiver was the one characteristic that did not appear to affect satisfaction with prenatal services. Similarly, Rubin (1999) found no effect on satisfaction of racial match between parents and their children's case managers.

Research Considerations

More research is needed to document the effects of matching with greater attention to minority oriented programs. Numerous methodological complexities need to be considered when measuring the impact of

racial and ethnic concordance in health services. For example, Sawyer and colleagues (1995) identified conceptual issues for cultural matching in research projects that included: 1) what to match (e.g., ethnicity, geographic area and/or residence, language, social class, social values, gender, etc.), 2) when to match, and 3) feasibility of matching (availability and costs).

Descriptive			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Glover SH, Shi L, Samuels ME (1997)	To examine the role of community and migrant health centers in eliminating barriers that typically limit the professional advancement of minority and women health care professionals.	Community and migrant health centers have higher percentages of minorities in top management positions than general management, but do not necessarily reflect the minority compositions of the centers' service population.	Descriptive
Saha S, Taggart SH, Komaromy M, Bindman AB (2000)	To determine whether minority populations tend to utilize services from providers of their own race or ethnicity, and the reasons behind these health-seeking behaviors.	Minority patients sought care from physicians of their own race because of personal pref- erence or language concor- dance, not necessarily geo- graphically accessibility.	Survey Study Participants: Black and Hispanic Americans
	Utiliz	ation	
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Blank MB, Tetrick FL, Brinkley DF, Smith HO, Doheny V, (1994)	To examine the impact of racial matching on service utilization.	 Same race dyads demonstrated greater service utilization. Failure to keep follow-up appointments was more prevalent in African American dyads when compared to Caucasian dyads. 	Nonparametric statistical comparison of groups Study Participants: Consumers with a high degree of mental illness
Flaskerud JH (1986)	To determine the impact of a culture-compatible intervention on the utilization of mental health services.	Intervention increased utilization, but language match and ethnic/racial match increased drop-out rates.	Analysis of program data <u>Study Participants:</u> Minority mental health services consumers
Flaskerud JH, Hu LT (1994)	To determine the relationship of a culture-specific mental health services program, ethnic matching, and use of medication and professional therapists, to participation, treatment and outcomes in Asian American clients.	 Treatment with medication had a significant relationship to total number of treatment sessions and admission-discharge scores. Ethnic matching had a significant relationship to the number of treatment sessions, but not admission-discharge scores. No relationship was found between other covariates, participation or outcome. 	Analysis of program data Study Participants: Low-income Asian American mental health services clients

	Utilization			
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Flaskerud JH, Liu PY (1991)	To examine the relationship of Asian client-therapist ethnicity, language and gender match on mental health services utilization and outcomes.	 Both client-therapist language and ethnicity match had a significant impact on the number of client sessions. Ethnic match had a significant effect on drop-out rate. Language match had no effect. Outcomes (admission-discharge scores) were not impacted. Gender match had no consistent effect. 	Analysis of program data Study Participants: Asian consumers of mental health services	
Flaskerud JH, Liu PY (1990)	To examine the relationship of client-therapist ethnicity and language match on three therapy outcomes: number of sessions, drop-out rates and admission-discharge differences.	Both therapist-client language and ethnicity match significantly increased the number of client sessions. Language match significantly affected dropout, however an increase in drop-out was found in the Cambodian sample. Ethnicity and language match did not impact admission-discharge differences.	Analysis of program data Study Participants: Southeast Asian consumers of mental health services	
Lee ED, Rosenberg CR (1998)	To determine whether a difference in the preferred language of communication was associated with greater probability of admission to the hospital.	Comparison of patients whose preferred language was different from that of their primary ED physician, (language disparate) with those whose preferred language was the same (language matched). • Disparate language adults were 70% more likely to be admitted to the hospital compared with matched language adults. • Risk of adult admission was decreased in the presence of an ad hoc interpreter (e.g. family, emergency medical technicians, hospital staff). • No differences were found in the pediatric group.	Survey of convenience sample Study Participants: Adult and pediatric emergency department patients and their physicians	

Utilization			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Snowden LR, Hu T, Jerrell JM (1995)	To determine the relationships between ethnic and language matching, program involvement and emergency room use.	 Matching was associated with fewer emergency service visits. Clients in programs serving a large proportion of minority clients had fewer emergency service visits than those who participated in programs serving smaller numbers of minority groups. 	Analysis of program data Study Participants: County-level mental health services data utilized
Takeuchi DT, Sue S, Yeh M (1995)	To examine the effects of ethnicity-specific mental health programs on return rates, length of treatment and treatment outcomes.	 Consumers who utilized services from an ethnicity-specific program had higher return rates and stayed in the treatment longer. Patient outcomes were inconclusive. 	Analysis of program data Study Participants: Racially and ethnically diverse consumers of mental health services
Wade P, Bernstein BL (1991)	To measure the effects of cultural sensitivity training and providers' race on clients' perceptions of providers characteristics and the counseling relationship and on clients' satisfaction.	Compared to clients assigned to experienced providers who did not receive training, clients assigned to experienced providers who had received training: Rated providers higher on credibility and relationship measures. Had better follow-up compliance. Expressed greater satisfaction. Racial concordance resulted in less attrition, yet factor did not influence client perceptions of counselors and process.	Randomized controlled trial Study Participants: Counselors and their clients

	Outcomes			
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Flaskerud JH, Hu LT (1994)	To determine the relationship of a culture-specific mental health services program, ethnic matching, and use of medication and professional therapists, to participation, treatment and outcomes in Asian American clients.	 Treatment with medication had a significant relationship to total number of treatment sessions and admission-discharge scores. Ethnic matching had a significant relationship to the number of treatment sessions, but not admission-discharge scores. No relationship was found between other covariates, participation or outcome. 	Analysis of program data Study Participants: Low-income Asian American mental health services clients	
Flaskerud JH, Liu PY (1991)	To examine the relationship of Asian client-therapist ethnicity, language and gender match on mental health services utilization and outcomes.	Both client-therapist language and ethnicity match had a significant impact on the number of client sessions. Ethnic match had a significant effect on drop-out rate. Language match had no effect. Outcomes (admission-discharge scores) were not impacted. Gender match had no consistent effect.	Analysis of program data Study Participants: Asian consumers of mental health services	
Porter JR, Beuf AH (1994)	To examine the impact of a racially consonant medical environment on reaction to physical disability stemming from disease.	 Patients in a racially consonant context demonstrated significantly better adjustment than those patients who received care in a primarily white context. Sub-analysis showed that patients related more positively to black physicians and a black hospital setting, and that informal support networks were established between patients of the same race. 	Interview with random sample Study Participants: African American patients with vitiligo	
Takeuchi DT, Sue S, Yeh M (1995)	To examine the effects of ethnic- ity-specific mental health pro- grams on return rates, length of treatment and treatment out- comes.	 Consumers who utilized services from an ethnicity-specific program had higher return rates and stayed in the treatment longer. Patient outcomes were inconclusive. 	Analysis of program data Study Participants: Racially and ethnically diverse consumers of mental health services	

Author(s)	Research Question(s)	Findings	Study Design/Methodology
Cooper-Patrick L, Gallo JJ, Gonzales JJ, Vu HT, Powe NR, and Nelson C (1999)	To describe how the race/ethnicity and gender of patients and physicians are associated with physicians' participatory decision-making (PDM) styles.	 Patients in race-concordant relationships with their physicians rated their visits as significantly more participatory than patients in race-discordant relationships. Patient satisfaction was highly associated with PDM score within all race/ethnicity groups. 	Survey
Handler A, Raube K, Kelley MA, Giachello A (1996)	To explore the characteristics of prenatal care that affect women's satisfaction.	No differences were found in aspects of care that affect satisfaction. Issues that affect satisfaction included: "art of care," practitioner's technical competence, continuity of caregiver, and the atmosphere and physical environment of care setting. Caregiver's ethnicity did not affect satisfaction.	Focus group study Study Participants: Low-income Mexican American Puerto Rican, African American and Caucasian women
Porter JR, Beuf AH (1994)	To examine the impact of a racially consonant medical environment on reaction to physical disability stemming from disease.	 Patients in a racially consonant context demonstrated significantly better adjustment than those patients who received care in a primarily white context. Sub-analysis showed that patients were more positive to black physicians and a black hospital setting and that informal support networks were established between patients of the same race. 	Interview of random sample Study Participants: African American patients with vitiligo

Satisfaction and Patient-Physician Communication			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Rubin DB (1999)	To examine parent satisfaction with case management mental health services (CMS) and parent's perceptions of the cultural competence of their children's case managers.	 Mothers of children who were employed were significantly more satisfied with CMS than those who were not employed. Other demographics were not significant. Parents receiving intensive CMS were more satisfied than those receiving traditional case management when controlling for demographic variables and functional status of the child and family. Cultural competency scores were significantly related to overall satisfaction scores and 	Survey Study Participants: Parents of children with extensive mental health needs
		 intervened in the relationship between type of case management and parent satisfaction. Racial match of the parent and case manager was significantly related to cultural competency but not satisfaction scores. 	
Saha S, Komaromy M, Koepsell TD, Bindman AB (1999)	To determine the impact of racial concordance on patient's satisfaction and use of health care.	Black respondents matched with black providers were more likely to rate their physicians as "excellent," to report receiving preventive care and requiring medical care during the previous year. Hispanic respondents were more likely to be very satisfied with their health care overall.	Survey Study Participants: White, black and Hispanic respondents

Community Health Workers

There is an abundance of descriptive literature on community health workers. Researchers have also examined the impact of community health workers on service utilization, health status, and satisfaction, although the volume of studies is considerably less.

Descriptive

The literature described the use of lay health advisors, content and structure of visitations, and how lay health advisors were utilized as part of a corrective strategy to supplement or modify existing programs. Buchanan (1999) described the successful use of *promotoras* in a teaching program aimed at increasing the number of health promoting behaviors among Hispanic adults. Earp and Flax (1999) reported documenting program process in terms of frequency of meeting times, group/individual encounters, and purpose/focus of meetings.

Impact on Utilization of Preventive Services

Studies indicated that the use of community health workers or lay health workers have a significant impact on the recruitment and utilization of preventive services. Burhansstipanov and colleagues (2000) reported that trained lay advisors were essential to gaining trust among American Indian women and were successful in increasing mammography screening utilization. Fernandez and colleagues (1999) reported increases in mammography screening among minority women and Weber and Reilly (1997) found the use of culturally sensitive case management increased screening rates nearly threefold. Bird and colleagues (1998) documented the increase in recognition, receipt and maintenance of breast and cervical cancer screening activities among an experimental group of Vietnamese women educated by indigenous lay health workers. The use of bicultural community health workers in the Hispanic population was found to improve completion rates of a diabetes education program as described by Corkery and colleagues (1997).

Impact on Health Status

Community health workers can impact health status by effectuating change in behavior, service utilization, and adherence, but few studies have examined those effects. For example, Corkery and colleagues (1997) found that although community health workers did not have a statistically significant independent effect on glycohemoglobin levels, they did improve completion rates of a diabetes education program which in turn improved glycemic control.

Barnes-Boyd, Norr, and Nacion (1996) found reductions in infant mortality correlated with home visits by teams of trained nurses and community health workers, although the reductions did not achieve statistical significance.

Impact on Satisfaction

A single study (Rodney et al., 1998) examined community health advocates' (CHA) impact on satisfaction. Researchers evaluated a community health advocacy program from three perspectives; management, health advocates and clients of health advocates. A subjective analysis revealed that all three groups were highly satisfied with the role and impact of CHAs, however, CHAs also described systematic barriers that prevent them from working effectively. The author postulate that the impact of CHAs on utilization and outcomes would be greater if these barriers were addressed.

Research Considerations

Future research needs to assess both program outcomes and health status outcomes, if arguments for incorporating lay worker outreach efforts into programs are to be validated. Process evaluation questions that need to be examined include:

- What proportion of the targeted population is successfully reached by community health workers?
- Who is the program failing to reach, and why?
- Do community health workers bridge gaps between what people in the community know, think, or understand, and what they need to maximize health utilization and outcomes?

The strength of scientific evidence linking community health workers directly to health outcomes is limited. Unfortunately, scientific studies linking community health workers to health outcomes will be somewhat difficult to conduct because the changing dynamics of targeted communities can also influence targeted outcomes. Outcome questions that need to be examined include:

- What components of the community health worker's role are effective in meeting community-based needs?
- Which of these can be linked with behavioral change?
- Which changes can be linked to improvements in utilization and health outcomes?

	Descr	riptive	
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Buchanan TJ (1999)	To determine the impact of promotoras (lay advisors) on the number of health promoting behaviors practices by Mexican-American adults.	 The promotoras teaching pro- gram was found to have a posi- tive effect on the number of health promoting behaviors practiced by Mexican Ameri- cans. 	Pre-/post-test Study Participants: Mexican American adults
Earp JA, Flax VL (1999)	To describe the activities of lay health advisors participating in a program to increase mammography screening in older African American women and describe lessons learned.	Lay health advisors made approximately one group presentation every 3 months and one to three individual contacts per week. Group presentations were typically in churches and homes, and focused on who needed a mammogram and the information necessary to receive one. During individual encounters, advisors encouraged women to get mammograms or discussed fears.	Periodic self-examination testing Study Participants: Lay health advisors
	Utilization of Pre	ventive Services	
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Bird JA, McPhee SJ, Ha NT, Le B, Davis T, Jenkins CN (1998)	To determine the impact 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.	Trained Vietnamese lay health workers significantly increased Vietnamese women's recognition, receipt, and maintenance of breast cancer and cervical cancer. Recognition of screening: • CBE increased from 50-85%. • Mammography increased from 59-79%. • Pap smear increased from 22-78% Receipt of screening: • CBE screening from 44 to 70%. • Mammography screening from 54-69%.	Pre-/post-test Study Participants: Vietnamese American women
		• Pap smear screening from 46-66%.	

Utilization of Preventive Services			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Burhansstipanov L, Dignan MB, Wound DB, Tenney M, Vigil, G (2000)	To determine the impact of community health workers on the mammography screening practices of Native American women.	"Native Sisters," a trained lay health advisors program, was found to have a significant impact on recruitment.	Interrupted time series Study Participants: American Indian women in the Denver, Colorado area
Fernandez ME, DeBor M, Candreia MJ, Wagner AK, Stewart KR (1999)	To assess the effectiveness of a health promotion program that provides outreach in promoting mammography and Pap test screening among non-adherent women.	 Over half the women were racial and ethnic minorities. 75% reported annual incomes under \$15,000. 49% reported having no insurance. Greater than 40 years of age: 67% were non-adherent to Pap test screening. Greater than 18 years of age: 68.9% were non-adherent to Pap test screening. Program was successful in increasing screening of non-adherent participants. 57.8% received mammo-grams, 36.5% received Pap tests. 	Pre-/post-survey Study Participants: Minority women
Weber BE, Reilly BM (1997)	To improve mammography completion rates for urban women aged 52-77 years who had not received a mammogram in at least 2 years, using culturally-sensitive community health workers.	Women in the intervention group (culturally-sensitive case management) were nearly 3 times as likely to receive a mammogram. Benefit persisted after controlling for age, race and prior screening behavior.	Randomized controlled trial Study Participants: Urban non-compliant women

Health Status			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Barnes-Boyd C, Norr KF Nacion KW (1996)	To describe an interagency home visiting program designed to reduce preventable causes of morbidity among normal socioeconomically disadvantaged infants at risk for adverse outcomes due to social factors.	 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, (statistically nonsignificant) positive effects on physical health. The postneonatal mortality rate among program infants was 4.7/1000. Rates for non-participants ranged from 5.2 to 10.9/1000. 	Descriptive program evaluation Study Participants: African American mothers and their infants
Corkery E, Palmer C, Foley ME, Schechter CB, Frisher L, Roman SH (1997)	To determine the effect of a bicultural community health worker on completion of diabetes education in an inner-city Hispanic patient population and to evaluate the impact of the program on patient education, self-care behaviors, and glycemic control.	 General findings: 63% completed the study and 37% dropped out. Dropouts were young. Drop-out rates showed no significant relationship to education or literacy-level. Patients with intervention: 80% completed the education program. The effect on completion was statistically significant. The effect on knowledge, selfcare behavior or glycohemoglobin outcome was not statistically significant. All program completers: Knowledge levels and selected self-care practices significantly improved. Glycohemoglobin levels improved from 11.7% to 9.9% by program completion. 	Study Participants: Hispanic patients

Rodney M, Clasen C, Goldman G, Markert R, Deane D (1998) To determine the effectiveness of community health advocates (CHA) from three perspectives. * Directors/ managers of community sites at which CHA worked reported that CHAs were constituted.	Satisfaction				
Markert R, Deane D (1998) Community health advocates (CHA) from three perspectives. CHA (CHA) were considered a positive force in meeting client needs and facilitating independence and were effective in the coordination of resources and outreach.	Author(s)	Research Question(s)	Findings	Study Design/Methodology	
	Rodney M, Clasen C, Goldman G,	To determine the effectiveness of community health advocates	 Directors/ managers of community sites at which CHA worked reported that CHAs were considered a positive force in meeting client needs and facilitating independence and were effective in the coordination of resources and outreach. CHAs indicated that the training program prepared them adequately for their roles and functions, yet identified systematic barriers that hindered their work. CHA clients revealed an overwhelmingly positive response to 	Survey Study Participants: Directors/managers, CHAs, and	

Culturally Competent Health Promotion

In addition to many articles describing various culturally competent health promotion interventions, a number of studies looked at the impact of these interventions on satisfaction, knowledge increase, behavior, utilization of preventive services, and health status. These studies, by and large, did not measure the additional impact of implementing a culturally competent health promotion intervention beyond the impact of implementing a health promotion intervention that was not specifically designed to be culturally competent. Instead they demonstrated that culturally competent health promotion interventions could be effective with minority populations.

Descriptive Studies

A number of articles described the process of designing programs and the methods and process of interventions used (Blackford and Street, 1999; Chen et al., 1992; Edwards et al., 1992; Gilliland et al., 1998; Griffin et al., 1999; Jackson et al., 1997; McPhee et al., 1997; Miano, Rojas, and Trujillo, 1996; Michielutte et al., 1994; Nevid, Javier, and Moulton, 1996; Shapiro and Simonsen, 1994; Soto Mas et al., 2000; Stillman et al., 1993). These interventions were largely developed in response to research showing a relationship between cultural beliefs and health behavior and service utilization (e.g., Bailey, Erwin and Belin (2000)).

Impact on Satisfaction

Griffin and colleagues (1999) found that participants responded positively to Native American Diabetes Project's culturally competent education program. Mattson and Lew (1992) found that a majority of clients of the culturally competent Southeast Asian Health Project were satisfied with the prenatal care they received. Neither study employed comparison groups. Rubin (1999) measured parents' satisfaction with their children's case managers and found that parents' perceptions of the case managers' cultural competence were related to those assessments.

Impact on Knowledge Increase

Flaskerud and Nyamathi (1990) described the impact of standard health promotion interventions on minority populations, and some evidence that cultural norms need to be taken into account was produced (Flaskerud, Nyamathi, and Uman, 1997). Several articles describing culturally competent health promotion interventions reported increases in knowledge among the target population. Some of them used control or comparison groups to control for secular trends (Alcalay et al., 1999; Dignan et al., 1998; Ferguson, 1996; Litrownik et al., 2000; Marin and Perez-Stable, 1995), while others only conducted pre- and post-tests (Duffy et al., 1994; Marin et al., 1990) or cross-sectional analyses (Marin and Perez-Stable, 1995). Not all studies found evidence of knowledge increases (Flaskerud and Akutsu 1993).

Only Stevenson and colleagues (1995) examined the difference in impact between a culturally sensitive and culturally dissimilar intervention, a video education on HIV for African-American teenagers, and found that while both approaches were effective in increasing AIDS knowledge scores, only the culturally sensitive intervention was effective with adolescents who claimed to "know a lot about AIDS." This last study in particular suggests that interventions may need to be highly specific and targeted to subgroups and subcultures as well as ethnicity in order to be optimally effective.

Impact on Behavior

Research results on culturally competent health promotion interventions' impact on behavior are mixed. Ferguson (1996) demonstrated that while knowledge increased as a result of peer counseling in a culturally-specific pregnancy program for African-American females, there was no difference between experimental and comparison groups in their use of effective methods of contraception nor delays in initiating sexual intercourse. Marin and colleagues (1990) found that although knowledge of cessation services increased after a media-based community intervention, smoking among Hispanics did not decrease.

On the other hand, Davis and colleagues (1995), showed reductions in tobacco use and increases in exercise as a result of cardiovascular education program for Navajo and Pueblo elementary school students. Studies have also found that a culturally competent cancer education program increased breast self-examination (Erwin et al., 1999; Erwin et al., 1996; Sung et al., 1997).

One study with no comparison group showed improvements in diet among African-American women who participated in a culturally-sensitive dietary intervention (Barnhart et al., 1998). Another study, also with no comparison group, found increases of breast-feeding among Navajo women after implementation of a culturally competent breastfeeding promotion program (Wright et al., 1997).

Impact on Utilization of Preventive Services

Research has shown that culturally sensitive health promotion can increase utilization preventive services such as mammography and pap smears (Dignan et al., 1998; Erwin et al., 1999; Erwin et al., 1996) and some researchers have gone on to explore what methods are most effective with particular populations. Bell and colleagues (1999) examined the response to different types of interventions to increase breast cancer screening among different ethnic minority women groups, and found that translated literature, a physician endorsement letter, and language support by outreach workers were most beneficial, but Urdu- and Gujaratispeaking groups were more likely to respond than Bengali and Somali speakers. McAvoy and Raza (1991) compared the effect of different methods of education on cervical cancer screening rates among Asian women and found that personal visits were most effective regardless of the health materials used, but videos may have been most effective with the hardest-to-reach group, Urdu speaking Moslem women. Yancey and colleagues (1995) found that videos shown in a clinic waiting room were also very effective in increasing cervical cancer screening among Blacks and Hispanics in both New York City and Los Angeles, and that similarity of results in both sites suggests that standard Spanish-language tapes may appeal to Latinos of different nationalities.

Impact on Health Status

Brown and Hanis (1999) described a diabetes education and support program developed with significant focus group and community input that was successful in significantly improving metabolic control in the target population. Jackson and colleagues (2000) described a health-care program culturally adapted to meet the needs of elderly Chinese residents, which resulted in reducing declines in health status. Nevid and Javier (1997) compared a multi-component, culturally-specific smoking cessation intervention with a self-help control group, and found that abstinence rates were significantly higher for the culturally-specific group at post treatment, with gradual declines in abstinence at six- and 12-month follow-ups but no long-term benefit was found for either method. Shintani and colleagues (1994) found that a traditional Hawaiian diet program resulted in weight loss, although long-term impacts need to be studied. Wang and Abbott (1998) showed that a disease management program operated in collaboration with the Chinese community in Hawaii resulted in decreases in blood pressure and maintenance of glucose levels by Chinese with hypertension

and diabetes. A study in progress of a patient-centered, culturally tailored, education and activation intervention with active follow-up by a depression case manager for African American patients suffering from depression is expected to produce further findings regarding interventions' impact on health status (Cooper, 2001).

Other Research Considerations

Virtually all studies compared cultural competent health promotion activities with no intervention, rather than comparing them to standard interventions. Research to establish the marginal benefit of modifying standard interventions to diverse populations need to be undertaken, although the sample size required to detest statistically significant differences is very large. Studies to date have also not isolated elements of multicomponent interventions to determine which elements or combinations of elements are responsible for results. Finally, questions remain as how to generalize the successful elements of interventions, both across types of programs, and/or across or among ethnicities.

Descriptive			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Bailey EJ, Erwin DO, Belin P (2000)	To describe how qualitative focus group data informed a culturally competent community-based cancer education program for American-American women.	 Analysis of quantitative and qualitative data revealed a di- rect relationship between cul- tural beliefs and patterns with mammography utilization. 	Quantitative and qualitative methodologies Study Participants: African American women
Blackford J, Street A (1999)	To describe a problem-based learning approach to support nurses working in a multicultural community in Melbourne, Australia, designed to assist nurses in their care for children and families of non-English speaking backgrounds.	Problem-based educational packages were developed to assist providers in overcoming cultural and communication barriers in clinical areas and professional training programs.	Descriptive Target Population: Non-English-speaking families
Chen MS, Zaharlick A, Kuun P, Li WL, Guthrie R (1992)	To describe the implementation of the indigenous model for health education programming among Asian minorities.	Explains the theoretical basis of the Indigenous Model that was targeted toward Southeast Asian minorities: Cambodians, Laotians, and Vietnamese. Lessons related to implementing the model for minorities are suggested.	Descriptive Target Population: Asian minorities
Edwards N, Ciliska D, Halbert T, Pond M (1992)	To describe a health promotion and advocacy project aimed at immigrants enrolled in English as a second language classes.	Project was designed to facilitate the entry of new immigrants into the Ontario health care system and equip them with knowledge and skills to strengthen their preventive and promotive health practices.	Descriptive Target Population: Immigrants enrolled in English as a second language classes
Gilliland SS, Carter JS, Perez GE, Two Feathers J, Kenui CK, Mau MK (1998)	To present recommendations for development and adoption of culturally competent community health interventions in minority populations with type 2 diabetes mellitus.	Experiences from the Native American Diabetes Project and the Native Hawaiian Diabetes Intervention Program are described.	Descriptive Target Population: Native Americans Native Hawaiians with diabetes
Griffin JA, Gilliland SS, Perez G, Helitzer D, Carter JS (1999)	To describe participant satisfaction with the Native American Diabetes Project.	 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 were 81% for group sessions and 91% for individual sessions. 	Survey Study Participants: 8 Pueblo communities

Descriptive			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Jackson J, Kennedy BL, Mandel D, Carson M, Cherry BJ, Fanchiang SP, Ding L, Zemke R, Azen SP, Labree L, Clark F (2000)	To describe methods used to adapt a health care program so that it would better meet the needs of a group of elder Mandarin-speaking Chinese residents.	 Program was found to be effective in reducing health-related declines among the target population. 	Qualitative research Study Participants: Elder Mandarin-speaking Chinese residents
McPhee SJ, Bird JA, Davis T, Ha NT, Jenkins CN, Le B (1997)	To determine the barriers to breast and cervical cancer screening among Vietnamese women in San Francisco and Sacramento, California.	 In both communities only about one half of Vietnamese women had ever had routine checkups, clinical breast examinations, mammograms and papsmear tests. Only about one third were upto-date for these screening examinations. Among women 40+, 35% had never contemplated a mammogram. Negative predictors of test recognition included low levels of education and not having a regular physician. Negative predictors of test receipt included low levels of education, not having a regular physician, short duration of U.S. residency, and never having been married. 	Survey Study Participants: Vietnamese women
Miano LY, Rojas MS, Trujillo M (1996)	To describe the impact of a health promotion program entitled Platicas Y Merienda which was designed to meet the needs of the Hispanic population.	The program is coordinated and facilitated by Spanish-speaking social workers and uses other professionals to promote a multidisciplinary approach to providing support services for Spanish-speaking cancer patients.	Descriptive Target Population: Spanish-speaking cancer patients
Michielutte R, Sharp PC, Dignan MB, Blinson K (1994)	To examine the concept of cultural sensitivity in the context of developing cancer control programs for American Indian populations.	Explores the differences in beliefs, behaviors and values between American Indian and majority cultures. Examples of culturally sensitive health education programs are presented and highlights from the North Carolina Native American Cervical Cancer Prevention Project.	Descriptive Target Population: American Indians

Descriptive			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Nevid JS, Javier RA, Moulton JL (1996)	To examine the factors predicting participant attrition in a community-based, culturally specific smoking-cessation program.	Program non-completers: Had lower incomes. Expressed greater initial confidence in their ability to stop smoking (statistically significant). Perceived themselves to be in poor general health, particularly in relation to peers, when compared to program completers (statistically significant). Were more likely to report cardiovascular problems (statistically significant) significant).	Study Participants: Hispanic smokers
Shapiro J, Simonsen D (1994)	To describe educational support for Latino families of children with Down Syndrome.	Describes the experiences and observations based on an on- going parent education-sup- port group for Mexican-origin Latino parents of children with Down Syndrome.	Descriptive
Soto Mas FG, Kane WM, Going S, Ford ES, Marshall JR, Staten LK, Smith JE (2000)	To describe Camine con Nosotros, a program that promotes physical activity among Hispanic women.	Describes a theory-based physical activity program for Hispanic women, and explains the process of selecting the theoretical framework for the program and connecting theory and practice.	Descriptive
Stillman FA, Bone LR, Rand C, Levine DM, Becker DM (1993)	To provide 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.	 Pastors of all churches were directly involved in all aspects of the planning and implementation process. Lay smoking–cessation specialists were trained and successfully implemented the intensive interventions in churches. 	Descriptive Target Population: Urban African Americans in East Baltimore

Satisfaction			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Griffin JA, Gilliland SS, Perez G, Helitzer D, Carter JS (1999)	To describe participant satisfaction with the Native American Diabetes Project.	 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 were 81% for group sessions and 91% for individual sessions. 	Survey Study Participants: 8 Pueblo communities
Mattson S, Lew L (1992)	To evaluate the success of the Southeast Asian Health Project in terms of client satisfaction with prenatal care and other services.	The majority of women were satisfied with the program, particularly the interpretation and education in native languages. Women also encouraged others to seek care from the program.	Survey <u>Study Participants:</u> Southeast Asian women
Rubin DB (1999)	To examine parent satisfaction with case management mental health services (CMS) and parent's perceptions of the cultural competence of their children's case managers.	Mothers of children who were employed were significantly more satisfied with CMS than those who were not employed. Other demographics were not significant. Parents receiving intensive CMS were more satisfied than those receiving traditional case management when controlling for demographic variables and functional status of the child and family. Cultural competency scores were significantly related to overall satisfaction scores and intervened in the relationship between type of case management and parent satisfaction. Racial match of the parent and case manager was significantly related to cultural competency but not satisfaction scores.	Survey Study Participants: Parents of children with extensive mental health needs

Knowledge			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Alcalay R, Alvarado M, Balcazar H, Newman E, Huerta E (1999)	To describe a Latino cardiovascular disease prevention and outreach model.	 Results showed that the participants were substantially more aware of risk factors for cardiovascular disease and had increased their knowledge of ways to prevent heart disease. 	Pre-/post-test <u>Study Participants:</u> Program participants
Dignan MB, Michielutte R, Wells HB, Sharp P, Blinson K, Case LD, Bell R, Konen J, Davis S, McQuellon RP (1998)	To determine the impact of a National Cancer Institute-funded health education program conducted among the Lumbee tribe in North Carolina, designed to increase the proportion of women, age 18 and older, who receive Papsmear screening.	Compared to the control group, women who received the education program: • Were more likely to have knowledge of the Pap smear test. • To report a pap smear test in the past year at the post-test. • Women most likely to respond to the education program were also likely to have reported that they receive an annual physical exam. • Women with better knowledge of the Pap smear test tended to have more education, higher income and greater identification with Native American culture than those with less knowledge.	Pre-/post-test Study Participants: Women in Lumbee tribe
Duffy SA, Bonino K, Gallup L, Pontseele R (1994)	To determine the educational needs of Native American women whose infants were at risk for infant mortality and assess the use of a culturally-based intervention to meets these needs (community baby shower).	 At the conclusion of the community baby shower, all participants were able to demonstrate the use of the health information taught by nursing students. The intervention also demonstrated an increase in mothers' self confidence and provided them with culturally sensitive care. 	Solomon Four Group research design Study Participants: Native American mothers

Knowledge			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Ferguson SL (1996)	To determine the effects of peer counseling in a culturally-specific pregnancy prevention program for African American females.	None became pregnant within 3 months of implementing the study. No delay in sexual intercourse for the sexually-experience participants. No statistically significant difference was reported in the use of effective methods of contraception by the sexually-experienced participants. Experimental group: The majority of sexually-experienced participants in this group reported having no sexual intercourse within the last 4 weeks at both pretest and 3-month post-test. Statistically significant increase in knowledge of reproduction, sexually-transmitted diseases, and contraceptives occurred when comparing pretest and 8-week post-test scores	Pre-/post-test with comparison group Study Participants: African American women
Flaskerud JH, Akutsu PD (1993)	To examine the possible influence of treatment in Asian programs on the clinical diagnoses of Asian outpatients.	Asian American clients seen at 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.	Analysis of program data Study Participants: Asian American mental health patients

Knowledge			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Flaskerud JH, Nyamathi AM (1990)	To test the effects of an AIDS education program on the knowledge, attitudes and practices of low-income black and Latino women.	 The experimental group made significant gains over the control group on pre-/test-posttest measures of knowledge and attitudes. Both control and experimental groups made significant changes in practice. Changes in knowledge were retained on retest. Blacks and Latinas differed on pretest knowledge and attitudes but not practices. Blacks had more knowledge and positive attitudes on pre-/test, however, post-/test improvement scores were greater in Latinas than in blacks. 	Pre-/post-test with comparison group Study Participants: African American adolescent females
Flaskerud JH, Nyamathi AM, Uman GC (1997)	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	Experimental group made significant improvements in HIV knowledge and reported condom use practices from pre-test to post-test that were retained on retest. Comparison group did not make significant pre-test-post-test improvements on these measures.	Experimental design with pre- and post-test and retest at one year
Litrownik AJ, Elder JP, Campbell NR, Ayala GX, Slymen DJ, Parra- Medina D, Zavala FB, Lovato CY (2000)	To determine the effectiveness of a culturally sensitive program aimed at preventing tobacco and alcohol among adolescents by improving parent-child communication skills.	The program was found to be effective in increasing per- ceived parent-child communica- tion in families with fewer chil- dren.	Randomized controlled trial with pre-/post test Study Participants: Hispanic migrant families
Marin G, Marin BV, Perez-Stable EJ, Sabogal F, Otero-Sabogal R (1990)	To determine the effect of a 7 month, media-based community intervention among Hispanics designed to change levels of information on the damaging effects of cigarette smoking and on the availability of culturally appropriate cessation services.	Results demonstrated that changes in the level of awareness of cessation services had occurred after implementation of the intervention. Changes took place primarily among the less acculturated Spanish-speaking Hispanics who were the target of the intervention.	Pre-/post-test Study Participants: Low income Black and Latina women

	Know	rledge	
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Marin G, Perez-Stable EJ (1995)	To evaluate the effectiveness of the Programa Latino Para Dejar de Fumar (PLDF) in disseminating smoking-cessation information in San Francisco's Latino community.	 Outcomes significantly associated with year of survey: Awareness of Hispanic smoking cessation program. Awareness of PLDF specifically. Awareness of available printed information to help smokers quit and having a copy of Guia Para Dejar de Fumar. Same variable associated with a lower acculturation score. Women were more likely than men to report: Awareness of Hispanic smoking-cessation program. Awareness of PLDF. Awareness of available printed information. Cigarette-smoking prevalence decreased from 1986 through 1990, stabilized in 1991 and appeared to increase among less acculturated respondents. 	Survey Study Participants: Hispanic community members
Stevenson HC, Gay KM, Josar L (1995)	To investigate the impact of a culturally-relevant HIV/AIDS video education on African American youth.	Teenagers were randomly assigned to view a culturally sensitive (CSV) or culturally dissimilar video education intervention. • 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 CSV. • Only the CSV intervention was effective with adolescent who claimed to "know a lot" about AIDS. • Students in both groups who were worried about getting AIDS demonstrated higher AIDS risk knowledge at post-assessment.	Randomized controlled trial Study Participants: Hispanic teenagers

Behavior				
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Barnhart JM, Mossavar-Rahmani Y, Nelson M, Raiford Y, Wylie- Rosett J (1998)	To determine the impact of a culturally-sensitive dietary intervention to increase fruit and vegetable intake among African American women.	 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. 	Pre-/post-test <u>Study Participants:</u> African American women	
Davis SM, Lambert LC, Gomez Y, Skipper B (1995)	To determine the impact of a multidisciplinary school-based program to promote cardiovascular health behavior change in fifth grade Navajo and Pueblo students.	Participating schools were randomly assigned to curriculum or control conditions. When compared to the control group, students in the curriculum group: • Showed significant increases in knowledge. • Reported a decrease in the frequency of salt and butter use. • Of the students who had tried smoking at baseline, boys and Pueblo students, reported using less smokeless tobacco at the post-test. • 70% reported increasing the amount they exercised since baseline.	Randomized control trial Study Participants: Fifth grade Navajo and Pueblo students	
Erwin DO, Spatz TS, Stotts RC, Hollenberg JA (1999)	To examine the effectiveness of the Witness Project, a culturally competent cancer education pro- gram that trains cancer survivors to promote early detection and increased breast self-examina- tion and mammography in a popu- lation of rural, underserved, Afri- can American women.	Witness Project participants significantly increased their practice of breast self-exami- nation and mammography com- pared with women in the con- trol group.	Pre-/post- test with comparison group <u>Study Participants:</u> Rural, underserved, African American women	
Erwin DO, Spatz TS, Stotts RC, Hollenberg JA, Deloney LA (1996)	To examine 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 population of rural, underserved, African American women.	Witness Project participants significantly increased their practice of breast self-examination and mammography. There was no significant difference between the pre- and postintervention scores for scaled items for the health-belief model and locus of control.	Pre-/post-test Study Participants: Rural, underserved, African American women	

Behavior				
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Ferguson SL (1996)	To determine the effects of peer counseling in a culturally-specific pregnancy prevention program for African American females.	Results in both groups: None became pregnant within 3 months of implementing the study. No delay in sexual intercourse for the sexually-experience participants. No statistically significant difference was reported in the use of effective methods of contraception by the sexually-experienced participants. Experimental group: The majority of sexually-experienced participants in this group reported having no sexual intercourse within the last 4 weeks at both pretest and 3-month post-test. Statistically significant increase in knowledge of reproduction, sexually-transmitted diseases, and contraceptives occurred when comparing pretest and 8-week post-test scores.	Post-test with comparison group Study Participants: African American adolescent females	
Sung JF, Blumenthal DS, Coates RJ, Williams JE, Alema-Mensah E, Liff JM (1997)	To determine if an in-home educational intervention conducted by lay health workers could increase adherence among low-income, inner-city, African American women to breast and cervical cancer screening.	 Increase in Pap smear screening was similar for both groups. For clinical breast exams, there was a modest increase in the intervention group. For mammography screening, there was a 10-12% increase. Among women who were not on recommended schedules at baseline, the improvement was substantial and greater in the intervention group. 	Pre-/post-test with comparison group Study Participants: Low-income, inner-city, African Americans	
Wright AL, Naylor A, Wester R, Bauer M, Sutcliffe E (1997)	To describe a culturally appropriate breastfeeding promotion program conducted on a Navajo reservation.	 Components of the program include: 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 and after intervention, the program was determined to be extremely successful. 	Pre-/post-review of medical records <u>Study Participants:</u> Navajo Indian women	

	Utilization of Preventive Services			
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Bell TS, Branston LK, Newcombe RG, Barton GR (1999)	To determine the effectiveness of interventions (i.e., translated literature, general practitioner letter of endorsement, interpreter services and free transportation) aimed at improving uptake of breast screening among ethnic minorities.	 50.7% of the invited women attended screening, a statistically significant increase of 15.5%. The provision of free transportation was ineffective and under utilized. Uptake was highest among Urdu- and Gujarati-speaking groups and lowest for Bengali and Somali speakers. 	Pre-/post-intervention comparison of screening rates Study Participants: Ethnic minorities: Urdu, Gujarati, Bengali and Somali speakers	
Bird JA, McPhee SJ, Ha NT, Le B, Davis T, Jenkins CN (1998)	To determine the impact 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.	Trained Vietnamese lay health workers significantly increased Vietnamese women's recognition, receipt, and maintenance of breast cancer and cervical cancer. Recognition of screening: • CBE increased from 50 to 85%. • Mammography increased from 59 to 79%. • Pap smear increased from 22 to 78% Receipt of screening: • CBE screening increased from 44 to 70%. • Mammography screening increased from 54 to 69%. • Pap smear screening increased from 46 to 66%.	Pre-/post-test survey design Study Participants: Vietnamese American women	
Dignan MB, Michielutte R, Well HB, Sharp P, Blinson K, Case LD, Bell R, Konen J, Davis S, McQuellon RP (1998)	To determine the impact of a National Cancer Institute-funded health education program conducted among the Lumbee tribe in North Carolina, designed to increase the proportion of women, age 18 and older, who receive Papsmear screening.	Compared to the control group, women who received the education program were more likely: To have knowledge of the Pap smear test. To report a pap smear test in the past year at the post-test. Women most likely to respond to the education program were also likely to have reported that they receive an annual physical exam. Women with better knowledge of the Pap smear test tended to have more education, higher income and greater identification with Native American culture than those with less knowledge.	Solomon Four Group research design Study Participants: Lumbee tribe women	

	Utilization of Preventive Services			
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Erwin DO, Spatz TS, Stotts RC, Hollenberg JA (1999)	To examine the effectiveness of the Witness Project, a culturally competent cancer education pro- gram that trains cancer survivors to promote early detection and increased breast self-examina- tion and mammography in a popu- lation of rural, underserved, Afri- can American women.	Witness Project participants significantly increased their practice of breast self-exami- nation and mammography com- pared with women in the con- trol group.	Pre-/post-test with comparison group Study Participants: Rural, underserved, African American women	
Erwin DO, Spatz TS, Stotts RC, Hollenberg JA, Deloney LA (1996)	To examine 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 population of rural, underserved, African American women.	Witness Project participants significantly increased their practice of breast self-examination and mammography. There was no significant difference between the pre- and post-/intervention scores for scaled items for the health-belief model and locus of control.	Pre-/post-test Study Participants: Rural, underserved, African American women	
McAvoy BR, Raza R (1991)	To determine the effects of three different methods of providing health education (i.e., leaflets, health education video, cervical cancer screening) on the uptake of cervical smear testing among Asian women.	Interventions, except mailed written translated materials, increased the uptake of cervical cytology. Personal visits were most effective irrespective of the health education materials used. Home viewed videos may be particularly effective in one of the most hard to reach groups: Urdu-speaking, Pakistani Moslems.	Randomly controlled trial Study Participants: Asian women aged 18-52 who had never been tested	
Sung JF, Blumenthal DS, Coates RJ, Williams JE, Alema-Mensah E, Liff JM (1997)	To determine if an in-home educational intervention conducted by lay health workers could increase adherence among low-income, inner-city, African American women to breast and cervical cancer screening.	 Increase in Pap smear screening was similar for both groups. For clinical breast exams, there was a modest increase in the intervention group. For mammography screening, there was a 10-12% increase. Among women who were not on recommended schedules at baseline, the improvement was substantial and greater in the intervention group. 	Pre-/post-test with comparison group Study Participants: Low-income, inner-city, African Americans	
Yancey AK, Tanjasiri SP, Klein M, Tunder J (1995)	To determine the impact of exposure to culturally sensitive health education videos on cervical cancer screening behavior.	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 2 separate sites.	Quasi-experimental Study Participants: Predominantly low income African American and Latina women	

Health Status			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Barnes-Boyd C, Norr KF, Nacion KW (1996)	To describe an interagency home visiting program designed to reduce preventable causes of morbidity among normal socioeconomically disadvantaged infants at risk for adverse outcomes due to social factors.	 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, (statistically nonsignificant) positive effects on physical health. The postneonatal mortality rate among program infants was 4.7/1000. Rates for non-participants ranged from 5.2 to 10.9/1000. 	Descriptive program evaluation Study Participants: African American mothers and their infants
Brown SA, Hanis CL (1999)	To describe the development process of a culturally competent diabetes education program for Mexican Americans.	Preliminary assessment indicated that the intervention was successful in significantly improving metabolic control in the target population.	Randomized controlled trial Study Participants: Mexican Americans
Cooper LA (2001)	To examine whether a patient-centered, culturally-tailored education and activation intervention with active follow-up by a depression case manager affects remission rates, depressive symptoms, functional status, treatment adherence, satisfaction with care, and attitude toward depression of African Americans with major depressive disorder.	This project is in progress.	Randomized controlled trial Study Participants: African Americans with major depressive disorder
Jackson J, Kennedy BL, Mandel D, Carson M, Cherry BJ, Fanchiang SP, Ding L, Zemke R, Azen SP, Labree L, Clark F (2000)	To describe methods used to adapt a health care program so that it would better meet the needs of a group of elder Mandarin-speaking Chinese residents.	Program was found to be effective in reducing health-related declines among the target population.	Randomized controlled pilot Study Participants: Elder Mandarin-speaking Chinese residents.

	Health	Status	
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Nevid JS, Javier RA (1997)	To compare a culturally specific, multicomponent behavioral smoking cessation program for Hispanic smokers with a low-intensity, enhanced self-help control condition.	 Cotinine-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. At the 12-month follow-up the rates declined to 8% and 7% for the groups respectively. 	Randomized controlled trial Study Participants: Hispanic smokers
Shintani T, Beckham S, O'Conner HK, Hughes C, Sato A (1994)	To describe the Waianae Diet Program, a 3-week community-based program of traditional Hawaiian diet and cultural teachings.	Demonstrated significant weight loss with no calorie re- striction, improvement in blood pressure, serum glucose and serum lipids.	Pre-/post-intervention measures Study Participants: Native Hawaiians
Wang CY, Abbott LJ (1998)	To determine the impact of a diabetes and hypertension preventive program in a Chinese community.	 80% of participants had decreased their diastolic blood pressure from above 95 mmHg to below 90 mmHg and systolic pressure from above 155 mmHg to below 140 mmHg. 95% 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. Glucose self-monitoring was found to be difficult for families. 	Survey Study Participants: Chinese community members with either Type 2 diabetes, hypertension or both

Family/Community Inclusion in Health Care Delivery

The underlying premise supporting inclusion is that family entities and community networks can act as agents to achieve improved social, behavioral and health outcomes in individuals more effectively than systems.

Family/Community Inclusion Related to Clinical Encounters

All studies used qualitative methods to inform family/community inclusion practices, but none evaluated the impact of family/community inclusion. Armenta (1993) conducted a descriptive study and found that educating community-based stakeholders, holding bilingual programs with flexible hours and attendance incentives and supports could increase Latino parents' participation in a parent training program. Shapiro (1999) analyzed videotaped clinical encounters to describe some of the essential components of a family orientation in the medical interview (e.g., more time, language concordance, clarification, and the provider's patient-centered style). Spiece and colleagues (2000) analyzed the content of focus groups with patients and providers to isolate issues of family-patient-doctor communication related to cancer, and the challenges related to family inclusion in the clinical encounter. Suarez and colleagues (2000) examined the relationship between social networks and cancer screening practices among different Hispanic groups.

Community Involvement in Program Planning Design, Implementation, Training and Research

Several studies on community involvement focused on collaborations between local groups and the medical establishment and researchers. One study described the collaboration of community elders with medical residents (Anonymous, 2000). Banner and colleagues (1995) described the collaborative development with the Korean-American community of a survey instrument. The authors concluded that this participation helped assure that the survey was accessible and culturally acceptable to participants in the community, although this acceptability appears to be presumed and not formally measured. Similarly, Amundson and Trotter (1991) attributed a high response rate on an evaluation survey to the community participation throughout a project to develop a network of mental health workers for Pacific Islands. Chen (1997) also described a process to develop a cooperative community intervention to improve cancer screening among Korean women. The study documented several different mechanisms of inclusion (advisory board, staff recruited from the community, and using participatory research methods). Inclusion of the community resulted in high survey response rates and access to information about the community that might not otherwise have been available.

Research Considerations

There are several questions that could be studied related to the merits of better integration of family members in the health-care encounter, treatment negotiation, and facilitation of adherence to treatment plans.

- How can providers determine at the beginning of an encounter to what extent family members present or not present should be involved in discussing diagnosis and treatment options?
- Is there a difference between allowing the passive listening of family members in the encounter and directly involving them by soliciting their insights and commitment to assist?
- What styles of provider-patient-family interaction can be developed and taught to providers that easily involve all parties without overly lengthening the encounter period?
- What kinds of instructions can be given to family members and patients by providers that would facilitate patient adherence to treatment plans?
- Control groups are needed to isolate the effect of inclusion vs. many other dynamics taking place in medical encounters.

Inclusion Related to Clinical Encounters			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Armenta F (1993)	To explore the factors that influence Latino parents' participation in parent training programs.	 Acculturation and social class had uneven effects on various factors. Stress did not impact program influence. Very low levels of awareness of parent training programs among Latino parents. Factors that would positively influence parent participation: Educating key community-based stakeholders. Bilingual programs with flexible hours and attendance incentives and supports (e.g., childcare, transportation). Demonstrating family-benefits as part of program promotion efforts. Achieving non-participating spouse buy-in. Demonstrated professional competence of instructors. 	Study Participants: Mexican and Mexican American mothers of children ages 5-9
Shapiro J (1999)	To investigate both frequency and correlates of family orientation in a residency-based practice.	Most common types of resident actions: Asking for medical information. Clarifying patient information. Giving medical information and explanations. Family orientation was associated with: Longer interviews. Non-interpreted interviews. More physician questions. Clarifying behaviors. Greater tendency to elicit patient's agenda.	Analysis of videotaped sessions Study Participants: Third year medical residents and a wide range of multiethnic patients

	Inclusion Related to	Clinical Encounters	
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Speice J, Harkness J, Laneri H, Frankel R, Roter D, Kornblith AB, Ahles T, Winer E, Fleishman S, Luber P, Zevon M, McQuellon R, Trief P, Finkel J, Spira J, Greenberg D, Rowland J, Holland JC (2000)	To determine important issues re- lated to doctor-patient communi- cation for cancer patients, and the strengths and difficulties associ- ated with family involvement. To examine the relationship be- tween social networks (social re- lationships) and cancer screening among Hispanic groups.	Comments support the need for explicit conversations be- tween providers, patients, and family in order to negotiate needs.	Focus groups Study Participants: Cancer patients and medical providers
Suarez L, Ramirez AG, Villarreal R, Marti J, McAlister A, Talavera GA, Trapido E, Perez-Stable EJ (2000)	To examine the relationship between social networks (social relationships) and cancer screening among Hispanic groups.	Independent of socioeconomic factors, social integration appears to influence cancer screening participation of Hispanic women. The effect, however, is not universal across different groups. For Pap smear screening: Social integration had the strongest effect among Mexican-American women. Some effect on Cuban and Central American women. Had no effect on Puerto Rican women. Social integration had no effect on mammography screening among Puerto Rican women.	Survey Study Participants: Mexican, Cuban, Central American and Puerto Rican women
		Design, Implementation	
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Amundson MJ, Trotter CM (1991)	To describe the community participation in a project to develop a network of mental health workers for Pacific Islands.	 Participants were involved in trainee selection, curriculum development and modification and negotiation of clinical practicum and evaluation. High success rate of returns resulted from the evaluators' careful sensitivity to the culture and the adaptation of the Western research process. 	

Community Involvement in Program Planning Design, Implementation Training and Research			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Anonymous (2000)	To introduce the concept of a "Council of Elders" as an educational innovation in which invited community elders function as "Senior Faculty" to whom medical residents present their challenges and dilemmas in caring for elder patients.	 The role of the Council and its members is to function as teachers and as 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. Meetings have been integrated into the primary care residency program. 	Descriptive Target Population: Community elders
Banner RO, DeCambra H, Enos R, Gotay C, Hammond OW, Hedlung N, Issell BF, Matsunaga DS, Tsark JA (1995)	To describe the process of community participation in the development of a baseline survey of Native Hawaiian women.	The involvement of community representatives working collaboratively with researchers, in baseline survey planning helped assure the survey was acceptable to the participants and the community as a whole.	Descriptive Target Population: Native Hawaiian women
Chen AM, Wismer BA, Lew R, Kang SH, Min K, Moskowitz JM, Tager IB (1997)	To describe a preliminary report from a research collaboration involving Korean Americans, community-based organizations, and the University of California. The intent of the project is to support a collaborative community intervention to improve breast and cervical cancer screening behavior among Korean women.	 The collaborative process yielded: A high survey response rate (79%). Baseline health information on Korean Americans. Broadening of the original research topic. Survey responses that will guide intervention design. Culturally competent strategies. Expanded Korean American community capacity for local action. 	Descriptive Target Population: Korean Americans

Coordination of Conventional Medicine and Traditional Practices/Healers

In many multicultural communities, illness and disease are often perceived to arise from a variety of causes, and may require the services of a traditional healer. Different terms to describe these healers are cited in the literature including, curandero, native healer, medicine man, shaman, spiritualist, herbal doctor, herbalist, etc. The practices of traditional healers are often categorized as alternative medicine. There is a plethora of published literature describing different alternative medicine practices. However, little scientific evidence exists that measures the impact of integration of traditional and conventional practices on health outcomes.

Several common themes were found among studies describing traditional practices in the context of health care: utilization of alternative practices, integration into conventional systems of care, impact on service utilization, and conflict with conventional methods.

Utilization of Traditional Practices and Healers

Several studies documented that there is substantial use of herbal or folk remedies and some use of traditional healers, and these are often used in conjunction with conventional medicine but relatively few patients inform their conventional medical practitioners (Bhopal, 1986; Elder, Gillcrist, and Minz, 1997; Kim and Kwok, 1998; Ma, 1999; Marbella et al., 1998; Skaer et al., 1996; Tabora and Flaskerud, 1997).

Conflict between Traditional and Conventional Medicine

Studies showed that conventional medical practitioners have generally accepted the use of traditional medicine and healers, but not universally or without restriction. Bhopal (1986) reported that at least half of the physicians surveyed felt that alternative practices should be encouraged unless shown to be harmful. Zubek (1994) reported that while family physicians accepted use of traditional treatments for benign illnesses or palliative care, many disagreed with their use for serious illnesses. Furthermore, conventional medical practitioners' limited knowledge of traditional practices and their potential merits or risks (Zubek, 1994) can present an obstacle to supporting or integrating approaches.

Studies of patients' perspectives of the compatibility of traditional and conventional medicine produced contradictory results. Marbella and colleagues (1998) found that more than a third of the patients seeing healers received different advice from their physicians and healers. In contrast, Kim and Kwok (1998) reported that perceived conflict between native healer advice and medical provider advice was rare.

Integration of Traditional and Conventional Approaches

No studies were located that reported on the impact of programs that integrate traditional and conventional medical care. Four descriptions of such programs (Del Castillo, 1999; Foster, 1996; Kahn and Delk, 1973; Reissland and Burghart, 1989) are testimony that such programs can be implemented.

Research Considerations

Future research needs to examine the service utilization and health outcomes associated with utilization of traditional healers and practices, along with comparisons between conventional and traditional approaches, and measurable outcomes associated with the integration of methodologies.

Utilization			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Bhopal RS (1986)	To examine the role of traditional medicine in the context of health care within the Asian community.	 Traditional medicine was used to treat common ailments such as abdominal discomfort, earache and toothache. Health professionals reported that awareness of Asian medicine was low. No health professionals had encountered morbidity resulting from utilization of alternative medicine and 50% felt that use should be encouraged. 	Survey Study Participants: Asian community members and health professionals
Elder NC, Gillcrist A, Minz R (1997)	To learn about the use of alternative medicine by family practice patients	 50% of patients were using some form of alternative medicine. 53% told their physician about their use of alternative methods. No significant differences were attributable to gender, educational level, age, race or clinic site. Main reason given for use of alternative medicine, alone or in combination with conventional methods, was that patients believed it worked. Patients who worked with their physician to integrate methodologies spoke of acceptance and control. Patients who did not inform their physicians spoke of narrow-mindedness. 	Survey Study Participants: Family practice patients

Utilization			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Kim C, Kwok YS (1998)	To determine the prevalence of native healer use, the reasons for use, cost of use, and the nature of any conflict with conventional medicine.	 62% of Navajo patients had used native healers, 39% on a regular basis. Those who used services were not distinguishable from nonusers by age, education, income, fluency in English, identification of primary provider or compliance, but Pentecostal patients used native healers less than patients of other faiths. Native healers were consulted for a variety of medical conditions such as arthritis, depression, diabetes mellitus and bad luck. Perceived conflict between traditional healers and physicians was rare. Cost was the main barrier to seeking native healer care. 	Survey Study Participants: Navajo patients
Ma GX (1999)	To examine the use of traditional and Western health services by Chinese immigrants, as well as the socioeconomic factors affecting health-seeking behaviors and health service utilization patterns.	 High rates of self-treatment and home remedies were used by Chinese immigrants. Medium rates of utilization of integrated conventional and traditional health services, including travel to country of origin for care. Low rates of exclusive utilization of either methodologies. 	Structured interviews and ethnographic data collection Study Participants: Chinese immigrants and conventional and traditional Chinese health care providers

Utilization			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Marbella AM, Harris MC, Diehr S, Ignace G, (1998)	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.	 38% of patients reported using a healer. Of those who had not used a healer, 86% indicated they would consider seeing one in the future. Healer often sought for spiritual reasons. 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 1/3 of patients seeing healers received different advice from their physicians and healers. 61.4% of patients rated their healer's advice higher than their physician's advice. 14.8% of patients seeing healers tell their physicians about their use. 	Semi-structured interviews Study Participants: Indian Health Service patients
Skaer TL, Robison LM, Sclar DA, Harding GH (1996)	To examine the use of folk healers and conventional medicine among foreign born, Mexican-American women attending migrant health clinics in rural, eastern Washington state.	 21.4% had sought care from curanderos within past 5 years. Statistically significant predictors of utilization include: Spanish language preference. Years resided in U.S. Having received medicine or medical care from Mexico within the prior 5 years. 	Survey Study Participants: Foreign born Mexican American women
Tabora BL, Flaskerud JH (1997)	To describe the mental health beliefs and practices of Chinese American immigrant women.	Barriers to the utilization of Western and traditional Chinese practitioners and treatments include: The inadequacy of conventional services to meet the needs of the population. The cultural value placed on the avoidance of shame.	Survey and focus groups Study Participants: Chinese American immigrant women

Author/s\		ventional Medicine	Chudy Degian Mathedalas
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Bhopal RS (1986)	To examine the role of traditional medicine in the context of health care within the Asian community.	 Traditional medicine was used to treat common ailments such as abdominal discomfort, earache and toothache. Health professionals reported that awareness of Asian medicine was low. No health professionals had encountered morbidity resulting from utilization of alternative medicine and 50% felt that use should be encouraged. 	Survey Study Participants: Asian community members and health professionals
Kim C, Kwok YS (1998)	To determine the prevalence of native healer use, the reasons for use, cost of use, and the nature of any conflict with conventional medicine.	 62% of Navajo patients had used native healers, 39% on a regular basis. Those who used services were not distinguishable from nonusers by age, education, income, fluency in English, identification of primary provider or compliance, but Pentecostal patients used native healers less than patients of other faiths. Native healers were consulted for a variety of medical conditions such as arthritis, depression, diabetes mellitus and bad luck. Perceived conflict between traditional healers and physicians was rare. Cost was the main barrier to seeking native healer care. 	Cross-sectional interview Study Participants: Navajo patients

	Conflict with Conventional Medicine			
Author(s)	Research Question(s)	Findings	Study Design/Methodology	
Marbella AM, Harris MC, Diehr S, Ignace G, (1998)	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.	 38% of patients reported using a healer. Of those who had not used a healer, 86% indicated they would consider seeing one in the future. Healer often sought for spiritual reasons. 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 1/3 of patients seeing healers received different advice from their physicians and healers. 61.4% of patients rated their healer's advice higher than their physician's advice. 14.8% of patients seeing healers tell their physicians about their use. 	Semi-structured interviews Study Participants: Indian Health Service patients	
Zubek EM (1994	To ascertain the extent to which family physicians in British Columbia agree with patients' use of traditional medicine.	 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. Many physicians had difficulty forming a definition of traditional Native medicine. Many were unable to form an opinion on its health risks or benefits. 	Cross-sectional survey Study Participants: Family medicine practitioners	

Integration into Conventional Systems of Care			
Author(s)	Research Question(s)	Findings	Study Design/Methodology
Del Castillo RR (1999)	To describe the incorporation of curanderismo into a public mental health system.	Management strategies that were effectively implemented and resulted in the institutionalization of curanderismo into the mental health system, both as a treatment modality and as an educational strategy include: • Building of a solid infrastructure	Descriptive Target Population: Hispanic mental health patients
		to support alternative mental health programming. • Demonstration of effective	
		leadership.	
		Strong minority voice.Introduction of intermediaries.	
		Thiroduction of intermedianes.	
Foster PM (1996)	To describe an African-centered model of psychotherapeutic intervention based on traditional African healing.	The model:	Descriptive
		Draws heavily from healing rituals and practices emanating from three African cultural and religious traditions.	Target Population: African mental health patients
		Integrates the use of culturally competent techniques drawn from Western models of psychotherapy.	
Kahn MW, Delk JL (1973)	To describe the establishment of a mental health facility serving the Papago Indian Tribe in Arizona.	The success of the program was based on several components: • Communication with other ser-	Descriptive Target Population: Papago Indian mental health
		vice agencies.	patients
		 Papago Indians were employed as staff members and given the opportunity for professional development. 	
		Papago medicine men were used as paid staff consultants on cases involving traditional beliefs.	
		Tribal approval and support viewed as essential. Mothers are delivered accord- ing to modern, clinical as well as local cultural practices.	
Reissland N, Burghart R (1989)	To describe the integration of modern and traditional obstetric practices in a provincial hospital in the area of southern Nepal.	Mothers are delivered according to modern, clinical as well as local cultural practices.	Descriptive Target Population: Maithili-speaking obstetrical patients