Chapter 3

The Social Environment

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Social environments lacking basic resources—healthy food, safe housing, living-wage jobs, decent schools, supportive social networks, access to health care and other public and private goods and services—present the highest public health risk for serious illness and premature death.1,2 Understanding why this happens requires an ecologic approach to population health, one that recognizes that individuals and communities interact with their physical and social environments.3 Conceptualizing health as a product, in part, of social conditions facilitates the identification of relationships between social determinants and health outcomes that may be amenable to community interventions.4

*Insufficient evidence means that we were not able to determine whether or not the intervention works.

The Task Force approved the recommendations in this chapter in 2000–2001. The research on which the findings are based was conducted from 1966 to 2000. This information has been previously published in the American Journal of Preventive Medicine [2003; 24(suppl 3):12–79] and the MMWR Recommendations and Reports series [2002; 51(no. RR-1):1–8].
The fundamental premise of the Community Guide’s social environment and health model (Figure 3–1) is that access to societal resources determines community health outcomes. Standard of living, culture and history, social institutions, built environments, political structures, economic systems, and technology are all societal resources that a population draws upon to sustain health. Patterns of exposure to risk vary among socioeconomic groups and are associated with a fundamental access to resources. Prosperity, whether at the community, family, or personal level, provides such resources as knowledge, money, power, and prestige, which can be used to avoid or buffer exposure to health risks. Poverty, on the other hand, with all of its attendant burdens, also powerfully influences health status. An impoverished social environment is a potential source of stressors (e.g., high-crime neighborhood or job scarcity) as well as resources (e.g., after-school programs or homeless shelters).

In this chapter, we focus on three broad areas of the social environment that affect health: early childhood development, affordable housing, and culturally competent health care. These three topics, covering broad and essential areas, represent just a small beginning of the review of evidence that interventions can effectively address the social conditions that influence health.

**OBJECTIVES AND RECOMMENDATIONS FROM OTHER ADVISORY GROUPS**

Table 3–1 shows the goals and objectives outlined in Healthy People 2010 for all three topics covered in this chapter: early childhood education, housing,
### Table 3–1. Selected Healthy People 2010 Goals and Objectives Directly Relevant to the Social Environment

<table>
<thead>
<tr>
<th><strong>Objective</strong></th>
<th><strong>Population</strong></th>
<th><strong>Baseline</strong></th>
<th><strong>2010 Objective</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Childhood Development: Maternal and Child Health</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase the proportion of pregnant women who receive early and adequate prenatal care (Objective 16–6b)</td>
<td>Pregnant women</td>
<td>74% (1998)</td>
<td>90%</td>
</tr>
<tr>
<td>Reduce:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• low birthweight (LBW) (16–10a)</td>
<td>Infants</td>
<td>(Both 1998)</td>
<td>7.6%</td>
</tr>
<tr>
<td>• very low birthweight (VLBW) (16–10b)</td>
<td></td>
<td></td>
<td>1.4%</td>
</tr>
<tr>
<td>Reduce the occurrence of developmental disabilities per 10,000 people:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Mental retardation (16–14a)</td>
<td>All</td>
<td>(Both 1991–94)</td>
<td>131&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Cerebral palsy (16–14b)</td>
<td></td>
<td></td>
<td>32.2&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Autism spectrum disorder (16–14c)</td>
<td>Developmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Epilepsy (16–14d)</td>
<td>Developmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Early Childhood Development: Educational and Community-Based Programs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase high school completion among 18- to 24-year-olds (7–1)</td>
<td>Adolescents/ young adults</td>
<td>85% (1998)</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Housing: Educational and Community-Based Programs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase the proportion of Tribal and local health service areas or jurisdictions that have established a community health promotion program that addresses multiple Healthy People 2010 focus areas (7–10)</td>
<td>American Indian communities</td>
<td>Developmental</td>
<td></td>
</tr>
<tr>
<td><strong>Culturally Competent Health Care: Educational and Community-Based Programs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase the proportion of patients who report that they are satisfied with the patient education they receive from their healthcare organization (7–8)</td>
<td>All</td>
<td>Developmental</td>
<td></td>
</tr>
<tr>
<td>Increase the proportion of local health departments that have established culturally appropriate and linguistically competent community health promotion and disease prevention programs (7–11)</td>
<td>Health departments</td>
<td>Vary by condition</td>
<td></td>
</tr>
</tbody>
</table>
and culturally competent health care. Objectives and recommendations specific to each topic are listed below.

### Early Childhood Development

The National Education Goals panel (created in 1994 by the Goals 2000: Educate America Act) established a national priority for research in education: improve learning and development in early childhood so that all children can enter kindergarten prepared to learn and succeed in elementary and secondary school. Two goals of this panel are directly relevant here.

Goal 1 states that “By the year 2000, all children in America will start school ready to learn.” Two objectives toward achieving that goal are: (1) Children will receive the nutrition, physical activity experiences, and health care needed to arrive at school with healthy minds and bodies, and to maintain the mental alertness necessary to be prepared to learn, and the number of low-birthweight babies will be significantly reduced through enhanced prenatal health systems; and (2) All children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school. Goal 2 was to increase the high school graduation rate to at least 90% by the year 2000.

The Institute of Medicine’s Committee on Capitalizing on Social Science and Behavioral Research to Improve the Public’s Health issued corresponding
recommendations in 2000. Two of their nine recommendations apply to early childhood education interventions:

- **Recommendation 2**: Rather than focusing on a single or limited number of health determinants, interventions on social and behavioral factors should link multiple levels of influence (i.e., individual, interpersonal, institutional, community, and policy levels).
- **Recommendation 6**: High-quality, center-based early education programs should be more widely implemented. Future interventions directed at infants and young children should focus on strengthening other processes affecting child outcomes such as the home environment, school and neighborhood influences, and physical health and growth.

**Housing**

The FY 2000–2006 Strategic Plan of the U.S. Department of Housing and Urban Development included four goals related to housing programs whose aim is to reduce residential segregation by income. These goals and their corresponding objectives are:

**Goal 1**: Increase the availability of decent, safe, and affordable housing in American communities.

Objective: By 2005, the number of families with children, elderly households and persons with disabilities with worst-case housing needs will decrease by 30% from 1997 levels. (*Worst-case housing needs* are defined as the needs of unassisted very-low-income renters who pay more than half of their income for housing or live in severely substandard housing.)

**Goal 2**: Ensure equal opportunity in housing for all Americans.

Objective: Segregation of racial and ethnic minorities and low-income households will decline.

**Goal 3**: Promote housing stability, self-sufficiency, and asset development of families and individuals.

Objective: The annual percentage growth in earnings of families in public and assisted housing increases.

**Goal 4**: Improve community quality of life and economic vitality.

Objective: The share of households located in neighborhoods with extreme poverty decreases.

Among low- and moderate-income residents, the share with a good opinion of their neighborhood increases.

Residents of public housing are more satisfied with their safety. *(Note: For the purposes of this measure, a “good opinion” of the neighbor-
hood is defined as a response of 7–10 on a 10-point scale assessing “overall opinion of neighborhood.”

**Culturally Competent Health Care**

In March 2001, the Department of Health and Human Services’ Office of Minority Health published National Standards for Culturally and Linguistically Appropriate Services in Health Care (CLAS). The CLAS standards were developed to provide a common understanding and a consistent definition of culturally and linguistically appropriate healthcare services. Additionally, they were proposed as one means of correcting inequities in the provision of health services and making healthcare systems more responsive to the needs of all clients. Ultimately, the standards aim to eliminate racial and ethnic disparities in health status and improve the health of the entire population.

The interventions selected for this review complement the recommended CLAS standards for linguistic and cultural competency by examining the extent to which meeting some of these standards results in improved processes and outcomes of care.

**METHODS**

Methods used for the reviews are summarized in Chapter 10. Specific methods used in the systematic reviews of the social environment have been described elsewhere and are available at www.thecommunityguide.org/social. The logic framework depicting the conceptual approach used in reviews of interventions in the social environment to improve community health is presented in Figure 3–1.

**ECONOMIC EFFICIENCY**

A systematic review of economic evaluations was conducted for all recommended interventions (i.e., those shown to be effective), and a summary of each economic review is presented with the related intervention. The methods used to conduct these economics reviews are summarized in Chapter 11.

**RECOMMENDATIONS AND FINDINGS**

This section presents a summary of the findings of the systematic reviews conducted to determine the effectiveness of the selected interventions in this topic area. Three areas were reviewed: early childhood development, housing, and culturally competent health care.
Early Childhood Development

Infancy and early childhood are periods of opportunity for growth as well as vulnerability to harm.\textsuperscript{15} Living in poverty can affect a child’s cognitive and behavioral development, which, in turn, affects readiness for school.\textsuperscript{16,17} A child’s readiness when starting school is related to motivation and intellectual performance in subsequent years and is therefore critical to establishing a trajectory for successful educational attainment. Educational attainment, in turn, is related to a wide range of adult disease outcomes.\textsuperscript{18,19}

Early childhood development programs are designed to promote social competence and school readiness among children three to five years old. Publicly funded programs such as Head Start target preschool children disadvantaged by poverty. These programs address cognitive, social, emotional, and physical development, as well as the ability of the child’s family to provide a home environment appropriate for healthy development.

Comprehensive, Center-Based, Early Childhood Development Programs for Low-Income Children: Recommended (Strong Evidence of Effectiveness)

Comprehensive early childhood development programs are designed to improve the cognitive, social, and emotional functioning of preschool children, which, in turn, influence readiness to learn in the school setting. School readiness, particularly among poor children, may help prevent the cascade of consequences of early academic failure and school behavioral problems: dropping out of high school, delinquency, unemployment, and psychological and physical problems in young adulthood.

Effectiveness

- These programs are effective in improving children’s cognitive and social development.

Applicability

- Our findings should be applicable to all preschool children in the United States, especially those disadvantaged by poverty.

The findings of our systematic review are based on assessment of four different aspects of early childhood development: cognitive, social, health, and family. We identified a total of 90 effect measures for the four outcomes, with over 70\% of the reported effects measuring cognitive outcomes.

In terms of cognitive change, consistent improvements were found in measures of intellectual ability (IQ), standardized academic achievement tests, standardized tests of school readiness, promotion to the next grade level, and decreased placement in special education classes because of learning prob-
lems. These results came from 12 studies (in 17 reports). The median effect size for improvement in academic achievement tests was 0.35 (the effect size is the difference between the means of the intervention and control groups divided by the standard deviation of the control group); for standardized tests to determine school readiness, 0.38; and for standardized tests measuring IQ, 0.43. The median reduction in students held back to repeat a grade was 13 percentage points; placement in special education programs because of various sources of learning difficulty showed a median reduction of 14 percentage points. Use of comprehensive, center-based early childhood development programs for low-income children is recommended on the basis of these improvements in cognitive outcomes.

Of the five studies (in six reports) reporting on social outcomes as measures of early childhood development, one year after the program two studies showed improved behavior and motivation in the classroom and one study showed a decline. Long-term social outcomes (e.g., increased employment, home ownership, decreased teen pregnancy, arrest) showed improvement in two studies, although no numbers were provided in the reports.

We found only one qualifying study that examined whether more children in early childhood development programs were being screened for general health and dental health than those not in programs. This study found a 44% increase in health screenings and a 61% increase in dental screenings.

Two studies examined whether enrollment of a child in an early childhood development program corresponded to an improvement in measures of education, employment, poverty, and public assistance among the household. One of these studies showed an increase in health screenings for siblings of children enrolled in early childhood development programs.

These results should apply to most preschool children from disadvantaged backgrounds. Study settings ranged from urban to rural, and the populations of different studies included people of African-American, Latino, Asian, Native American, and other ethnic or cultural backgrounds.

No additional harms or benefits from these programs were identified during the review.

The findings of our systematic review of economic evaluations are based on one study, conducted in a low-income area in Ypsilanti, Michigan, which modeled the costs and benefits of the Perry Preschool program. The study was conducted in preschool facilities and homes throughout the community. The population consisted of 128 African-American three-year-olds of low socioeconomic status from a single school attendance area. The study had a follow-up of 24 years, but lifetime benefits were factored in. The net benefit of the program (in 1997 US$) was $108,516 for males and $110,333 for females.
The Perry Preschool program differs from other programs, however, in terms of the degree of support and quality of implementation. Its results, therefore, cannot necessarily be generalized to less intensive programs, such as Head Start. Nevertheless, careful consideration of the program is valuable because of the importance of the outcomes, long-term effects, consistency of findings across numerous measures, and the strong quality of the research design.

Our systematic review identified no barriers to implementing these programs.

In conclusion, the Task Force recommends early childhood development programs on the basis of strong evidence that they improve intermediate cognitive and social outcomes, which in some cases are markers of improved long-term health outcomes. Specifically, participants scored higher on cognitive skills tests, were less likely to be retained in grade in school, and were less likely to require placement in special education classes. Long-term follow-up of the Perry Preschool program, in particular, indicates that the benefits of an early childhood development program may extend to adulthood. That study showed a correlation between participation in early childhood development programs and improved educational and economic outcomes.

**Housing**

Among the most prevalent community health concerns related to family housing are the inadequate supply of affordable housing for low-income families and the increasing segregation of households into unsafe neighborhoods based on income, race, ethnicity, or social class. When affordable housing is not available to low-income households, family resources needed for food, medical or dental care, and other necessities are diverted to housing costs. We reviewed two housing programs intended to provide affordable housing and, concurrently, reduce the residential segregation of low-income families into unsafe neighborhoods of concentrated poverty: tenant-based rental assistance programs and the creation of mixed-income housing developments.

**Tenant-Based Rental Assistance Programs: Recommended (Sufficient Evidence of Effectiveness)**

Tenant-based rental assistance programs subsidize the cost of housing secured by low-income households within the private rental market through the use of vouchers or direct cash subsidies. The Section 8 program of the U.S. Department of Housing and Urban Development (HUD) is administered by local and state housing agencies under contract to the federal government. The Section 8 program subsidizes rental costs for families with incomes
below 50% of area median income. Families contribute 30% of their monthly income to housing costs, and the Section 8 subsidy provides the remainder for rental costs up to a locally defined standard. Figure 3–2 is the conceptual model (analytic framework) we used to conduct this review.

The success of Section 8 vouchers and certificates in moving assisted families to less impoverished or less racially segregated areas is dependent on several factors, including housing market discrimination, the inexperience of program participants as housing “consumers,” the desire of many to remain near established social ties and the conveniences of the urban core, the time and transportation constraints that hinder such households in conducting housing searches in suburban locations, and administrative and programmatic shortcomings of local housing authorities. In light of this, some rental voucher programs are augmented with housing search counseling, employment and transportation assistance, community networking, landlord outreach, or post-placement services.

**Effectiveness**

- These programs are effective in reducing individuals’ likelihood of being a victim of crime; in reducing neighborhood social disorder (e.g., trash, graf-
fiti, abandoned buildings, public drinking); in improving the quality of housing; in decreasing behavioral problems among youth, both at home and in school; and in improving the physical and psychological health of heads of household.

Applicability

- The findings of our review should be applicable to most low-income families in urban areas, regardless of race or ethnic origin.

The findings of our systematic review are based on 12 studies (in 23 papers) on the effectiveness of tenant-based rental assistance (or voucher) programs in improving community health outcomes. These 12 studies represent four broad groups of federal housing evaluation efforts: (1) the Housing Allowance Experiment; (2) HUD’s Section 8 Rental Certificate and Voucher program; (3) the Gautreaux program, in which rental vouchers were provided to African-American families in racially segregated public housing in Chicago; and (4) Moving to Opportunity for Fair Housing research, implemented in five large cities, which combines rental vouchers with household counseling to help low-income families move from public housing to nonpoverty neighborhoods.

Five studies reported measures of neighborhood safety and found that household victimization, measured, on average, six months after the intervention took place, decreased by a median of 6 percentage points. Four studies examined changes in neighborhood social disorder and found a median decrease of 15.5 percentage points. One study compared murder rates in the neighborhood to which households relocated with rates in their neighborhood of origin and reported a decrease. One study reported decreases in health and safety risks including peeling paint, inadequate plumbing, rodent infestation, and broken or missing locks on housing unit doors.

Three studies reported on youth risk behaviors, measured between 1 and 5 years (mean, 2.9 years) after the intervention took place. The median difference was a decrease in behavioral problems of 7.8 percentage points. Two studies examined self-reported symptoms of depression and anxiety by heads of households and found a median decrease of 8 percentage points. The same two studies reported self-rated health status and found a median increase of 11.5 percentage points among people rating their health as “good” or “excellent” compared with “fair” or “poor.” One study reported on diverse child health outcomes. A median decrease of 4.5% was observed in the need for acute medical care for injuries or asthma episodes, although a median decrease of 5.5% was also observed for use of child preventive services for children (e.g., well-child check-ups and vaccinations).

Overall, these results provide sufficient evidence of the effectiveness of tenant-based rental assistance programs in improving household safety through
reducing exposure to crimes against person and property and decreasing neighborhood social disorder.

These findings should be applicable to most low-income families in urban areas. Studies were conducted among white, Latino, and African-American populations, and effects were similar for all of these groups. We did not examine housing programs that targeted the elderly or people with special health needs.

Two unintended effects of these programs are common. When families move from one neighborhood to another, social ties and supports are disrupted. And, if families move to weak or declining neighborhoods because that is where they can find affordable housing, new areas of concentrated poverty can be created. A third postulated effect might be found in the Moving to Opportunity program. The very name implies that residents must move to find opportunities, and could make those who stay in the old neighborhoods feel that the neighborhoods are undesirable.

We did not find any economic evaluations of tenant-based rental assistance programs.

Barriers to implementing tenant-based rental assistance programs are described in the literature. Families may be limited in their search for housing in better neighborhoods if they lack transportation, lack money for apartment application fees, fear discrimination, or fear encountering landlords who refuse to accept them as tenants. Local housing market conditions may also inflate rents above what rental voucher recipients can afford to pay.

In conclusion, the Task Force recommends tenant-based rental assistance programs to improve household safety, on the basis of sufficient evidence of effectiveness in reducing exposure to crimes against person and property and decreasing neighborhood social disorder. This recommendation should be applicable to all low-income urban families. A conclusion about the effectiveness of these programs in reducing housing hazards, youth risk behaviors, and psychological and physical morbidity could not be made because only a few studies reported these outcomes.

Mixed-Income Housing Developments: Insufficient Evidence to Determine Effectiveness

In our systematic review, we defined a mixed-income housing development as a publicly subsidized multifamily rental housing development in which the deliberate mixing of income groups is a fundamental part of the development’s operating and financial plans. A portion of a development’s units must be reserved for, and made affordable to, households whose incomes are
at least below 60% of the area median, although the income levels of all residents and the relative representation of each income group may vary among developments. These developments can be created either through new construction or conversion of existing developments, but must exist within neighborhoods where over 20% of households have income below the federal poverty level.

**Effectiveness**

- We found insufficient evidence to determine the effectiveness of mixed-income housing developments in improving an array of family and neighborhood conditions.
- Evidence was insufficient because no qualifying studies could be found.
- Insufficient evidence means that we were not able to determine whether or not the intervention works.

We could not determine the effectiveness of mixed-income housing developments in providing affordable housing in safe neighborhood environments, because we found no studies comparing families who had moved to such developments with families who stayed in their old neighborhoods.

Because we could not establish the effectiveness of mixed-income housing developments in improving neighborhood conditions or family safety or achievement, we did not examine situations in which such programs would be applicable, information about economic efficiency, or possible barriers to implementation.

In conclusion, the Task Force found insufficient evidence to determine the effectiveness of mixed-income housing developments because no qualifying studies were found.

**Culturally Competent Health Care**

When a healthcare provider speaks one language and the client speaks a different language, how is the quality of health care affected? When the provider bases his or her actions on one set of beliefs and the client on another, what kind of communication can be expected? The solution to this and other cross-cultural challenges in health care may lie in developing culturally competent health care. The goal of culturally competent care is to ensure that appropriate services are provided and to reduce medical errors resulting from misunderstandings caused by differences in language or culture. Cultural competence has the potential to improve the efficiency of care by reducing unnecessary diagnostic testing or inappropriate use of services. A culturally competent healthcare setting includes an appropriate mix of a culturally diverse staff.
that reflects the community(ies) served, providers or translators who speak the clients’ language(s), training for providers about the culture and language of the people they serve, signage and instructional literature in the clients’ language(s) and consistent with their cultural norms, and culturally specific healthcare settings.

An inability to communicate with a healthcare provider not only creates a barrier to accessing health care but also undermines trust in the quality of medical care received and decreases the likelihood of appropriate follow-up. Furthermore, lack of a common language between client and provider can result in diagnostic errors and inappropriate treatment. According to the Current Population Reports, in March 2000 the foreign-born population of the United States was estimated to be 28.4 million—a substantial increase from the population of 9.6 million foreign-born in 1970, reflecting the high level of immigration over the past three decades.

Differences in referral and treatment patterns of providers (after controlling for medical need) are associated with a client’s racial or ethnic group. Whether conscious or unconscious, negative social stereotypes shape behaviors and influence decisions made by providers and their clients. For example, differences between African Americans and whites in referral for cardiac procedures, analgesic prescribing patterns for ethnic minorities compared with nonminority clients, racial differences in cancer treatment, receipt of the best available treatments for depression and anxiety by ethnic minorities compared with nonminority clients, and differences in HIV treatment modalities are just a few ways in which race and ethnicity can affect care. Clients’ delay or refusal to seek needed care can result from mistrust, perceived discrimination, and negative experiences in interactions with the healthcare system. In 2002, the Institute of Medicine report on unequal medical treatment noted: “The sources of these disparities are complex, are rooted in historic and contemporary inequities, and involve many participants at several levels, including health systems, their administrative and bureaucratic processes, utilization managers, healthcare professionals, and patients.”

Programs to Recruit and Retain Staff Who Reflect the Cultural Diversity of the Community Served: Insufficient Evidence to Determine Effectiveness

Workforce diversity in the healthcare setting can be a means of providing relevant and effective services. Workforce diversity programs can go beyond hiring practices to include identification of barriers that prevent employees from full participation and success. Achieving diversity at all levels of healthcare organizations could influence the manner and extent to which the needs of
clients of various cultural and linguistic backgrounds are met. In our systematic review, we searched for healthcare system interventions to recruit or retain diverse staff.

**Effectiveness**

- We found insufficient evidence to determine the effectiveness of programs to recruit and retain staff who reflect the cultural diversity of the community served in improving health care.
- Evidence was insufficient because no qualifying studies could be found.
- Insufficient evidence means that we were not able to determine whether or not the intervention works.

No comparative studies evaluated these programs. Therefore, evidence was insufficient to determine the effectiveness of healthcare system interventions to recruit and retain diverse staff.

Because we could not establish the effectiveness of these programs, we did not examine situations in which such programs would be applicable, information about economic efficiency, or possible barriers to implementation.

In conclusion, the Task Force found insufficient evidence to determine the effectiveness of programs to recruit and retain staff who reflect the cultural diversity of the community served in improving health care because no qualifying studies were found.

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**Use of Interpreter Services or Bilingual Providers for Clients with Limited English Proficiency:**

**Insufficient Evidence to Determine Effectiveness**

Clients should be able to understand the nature and purpose of the healthcare services they receive. Accurate, appropriate communication increases the likelihood of receiving appropriate care, both in terms of the best technical care for symptoms or conditions and in terms of client preferences. Language capacity varies: a person may understand enough English to complete an intake form, but may need considerable help to understand diagnosis and treatment options. Or an English-speaking provider may know basic vocabulary or medical terminology in the client’s language, but may lack understanding of the cultural nuances that affect the meaning of words or phrases. In the healthcare setting, non-English-speaking clients can be assisted by family members, by staff with other primary duties who act as interpreters, or by professionally trained interpreters (whose training in medical terminology and confidentiality may both prevent communication errors and protect privacy). Nonverbal communication also should be considered, as it too may be culturally bound.
Effectiveness

- We found insufficient evidence to determine the effectiveness of interpreter services or bilingual providers in improving health care.
- Evidence was insufficient because only one study, with limitations in the quality of execution, was available.
- Insufficient evidence means that we were not able to determine whether or not the intervention works.

The findings of our systematic review are based on one study that examined the effectiveness of using bilingual staff or providers or professionally trained interpreters. One other study did not meet our quality criteria and was excluded from the review. We searched for studies that examined the effectiveness of bilingual providers, bilingual staff members who serve as interpreters (in addition to their regular duties), and professionally trained interpreters in improving client satisfaction and health status and reducing racial or ethnic differentials in the use of healthcare services.

The reviewed study, conducted in an urban hospital emergency department serving predominantly Latino clients (74%), included subjects who were predominantly female (64%), between 18 and 60 years of age (92%), and uninsured (68%). Clients presenting with overt psychiatric illness and those too ill to complete an interview were not included. The study evaluated whether or not physicians and clients could use the same language or if an interpreter (both professionally trained and untrained) was needed. The need for an interpreter was determined by the physician or nurse. A comparison group consisted of clients who reported that an interpreter was needed but not used. Most interpreters (88%) were family members or hospital staff serving as ad hoc interpreters; only 12% of interpreters were professionally trained.

Clients who reported that an interpreter was needed but not used were more likely to be discharged without a follow-up appointment than clients who were able to communicate directly with their physicians in a common language (OR = 1.79, 95% CI 1.00–3.23). Similarly, clients who communicated through interpreters were more likely to be discharged without follow-up appointments than clients with language-concordant physicians (OR = 1.92, 95% CI 1.11–3.33).

The results of this one study provide insufficient evidence to determine if interpreters or bilingual providers are effective in improving health care. Because we could not establish the effectiveness of these programs, we did not examine situations in which such programs would be applicable, information about economic efficiency, or possible barriers to implementation.

In conclusion, the Task Force found insufficient evidence to determine the effectiveness of interpreter services or bilingual providers for clients with lim-
Cultural Competency Training for Healthcare Providers: 
Insufficient Evidence to Determine Effectiveness

A person’s health is shaped by cultural beliefs and experiences that influence the identification and labeling of symptoms; beliefs about causality, prognosis, and prevention; and choices among treatment options. Family, social, and cultural networks reinforce these processes. Cultural competence includes the capacity to identify, understand, and respect the values and beliefs of others.

Cultural competency training is designed to (1) enhance self-awareness of attitudes towards people of different racial and ethnic groups; (2) improve care by increasing knowledge about the cultural beliefs and practices, attitudes toward health care, healthcare-seeking behaviors, and burden of various diseases in different populations served; and (3) improve skills such as communication. We searched for studies that examined the effectiveness of cultural competency training programs for healthcare providers in improving the outcomes of client satisfaction, racial or ethnic differentials in use and treatment, and health status measures.

Effectiveness

- We found insufficient evidence to determine the effectiveness of cultural competency training for healthcare providers in improving health care.
- Evidence was insufficient because only one study, with limitations in the quality of execution, was available.
- Insufficient evidence means that we were not able to determine whether or not the intervention works.

The findings of our systematic review are based on one study that examined the effectiveness of cultural competency training for healthcare professionals in improving at least one of these outcomes: client satisfaction, racial or ethnic differentials in use and treatment, or health status measures. Eighty women, all lower-income African Americans who resided in the community, sought help at a counseling clinic (in a metropolitan college mental health center) or were referred by area social services agencies. Counseling staff (two white and two African-American counselors) had either received four hours of cultural sensitivity training or had received only usual training. Those clients who met with counselors who had cultural sensitivity training reported greater satisfaction with counseling than those who met with counselors in the “usual training” group (standard effect size 1.6, \( p < .001 \)), inde-
pendent of the counselor’s race. Further, those clients who met with culturally sensitive counselors returned for more sessions than did those assigned to the other counselors (difference of 33%, \( p < .001 \)).

Although this study’s results were promising, one study with limitations in the quality of execution is insufficient to determine the effectiveness of cultural competency training in improving client satisfaction or health status, or in reducing racial and ethnic differences.

Because we could not establish the effectiveness of cultural competency training, we did not examine situations in which such programs would be applicable, information about economic efficiency, or possible barriers to implementation.

In conclusion, the Task Force found insufficient evidence to determine the effectiveness of cultural competency training programs for healthcare providers in improving health care because only one qualifying study, with limitations in the quality of execution, was available.

Use of Linguistically and Culturally Appropriate Health Education Materials: Insufficient Evidence to Determine Effectiveness

Culture defines how health information is received, understood, and acted upon. Language is a powerful transmitter of culture. Nonverbal expression differs among ethnic groups. Health information messages (i.e., print materials, videos, television or radio messages) developed for the majority population may be inaccessible by or unsuitable for other cultural or ethnic groups.

Culturally and linguistically appropriate health education materials are designed to take into account differences in language and nonverbal communication patterns, and to be sensitive to cultural beliefs and practices.

Effectiveness

- We found insufficient evidence to determine the effectiveness of linguistically and culturally appropriate health education materials in improving health care.
- Evidence was insufficient because only a small number of studies, with limitations in the quality of execution, was available.
- Insufficient evidence means that we were not able to determine whether or not the intervention works.

The findings of our systematic review are based on four studies that evaluated the effectiveness of linguistically and culturally appropriate health education materials in improving client satisfaction, racial or ethnic differentials in use of services or treatment, or health status measures.\(^{58-91}\) Two other studies did not meet our quality criteria and were excluded from the review.\(^{92,93}\)
All four reviewed studies examined the effectiveness of culturally sensitive health education videos among African-American or mixed African-American and Latino populations. Three studies examined HIV knowledge, attitudes, or behaviors—two among adults and one among adolescents. The remaining study examined tobacco use knowledge and behavior among adolescents.

The cultural communication techniques used in the videos included race or ethnic concordance between actors and the target audience, multicultural messages versus those targeted specifically to African Americans, and similarity in contemporary music and dress between actors and audience. Of the four studies reviewed, one reported a change in health behavior: African-American women exposed to a video specifically designed to emphasize culturally relevant values had an 18% increase ($p < .01$) in self-reported HIV testing in a two-week period after the intervention. The remaining studies included measures of satisfaction with the cultural relevance of the videos. Significant positive differences in satisfaction with the educational video and credibility of content and attractiveness of the announcer were reported. One study reported no difference in preference for a “rap” format video targeted to African-American youth over a standard video.

Although these studies showed promising results, the Task Force found that they did not provide sufficient evidence to determine whether or not linguistically and culturally appropriate health education materials are effective in improving client satisfaction or health status or in reducing racial or ethnic differences in health care.

Because we could not establish the effectiveness of these materials, we did not examine situations in which their use would be applicable, information about economic efficiency, or possible barriers to implementation.

In conclusion, the Task Force found insufficient evidence to determine the effectiveness of interventions to provide linguistically and culturally appropriate health education materials in improving health care, because only a small number of comparative studies, with limitations in the quality of execution, were available.

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**Culturally Specific Healthcare Settings: Insufficient Evidence to Determine Effectiveness**

Healthcare settings may raise both linguistic and cultural barriers for ethnic subgroups, particularly recent immigrants with limited acculturation. People with limited English language proficiency or who are of a different ethnic group from local healthcare providers may delay seeking health care. Ethnic or culturally specific clinics for immigrant populations provide a welcoming healthcare environment for clients.
Effectiveness

- We found insufficient evidence to determine the effectiveness of culturally specific healthcare settings in improving health care.
- Evidence was insufficient because no qualifying studies could be found.
- Insufficient evidence means that we were not able to determine whether or not the intervention works.

For our systematic review, we searched for studies that evaluated the effectiveness of culturally or ethnically specific clinics and services located within the community served. No comparative studies evaluated these programs. Therefore, evidence was insufficient to determine whether or not interventions to deliver services in culturally or ethnically specific settings are effective in increasing client satisfaction or health status, or in decreasing racial or ethnic differences in health care.

Because we could not establish the effectiveness of culturally specific healthcare settings, we did not examine situations in which such programs would be applicable, information about economic efficiency, or possible barriers to implementation.

In conclusion, the Task Force found insufficient evidence to determine the effectiveness of culturally specific healthcare settings in improving health care because no qualifying studies were found.

IMPROVING HEALTH FACTORS IN THE SOCIAL ENVIRONMENT THROUGH USE OF THESE RECOMMENDATIONS

In this chapter, the Task Force recommends early childhood development programs and tenant-based rental assistance programs as ways to improve community health.

Interventions that improve children’s opportunities to learn and develop capacity are particularly important for children in communities disadvantaged by high rates of poverty, violence, substance abuse, and physical and social disorder. Communities can assess the quality and availability of early childhood development programs in terms of local needs and resources, and can use the Task Force recommendation to advocate for continued or expanded funding of early childhood development programs. Current levels of federal and state funding are not adequate to support accessible quality services for the number of at-risk children who would benefit from participation.94 Child health advocates from all disciplines can use this recommendation to develop testimony for those making policy and funding decisions about the effectiveness of these programs. Healthcare providers can use the
recommendation to promote participation in an early childhood development program as part of well-child care. Public health agencies can use the recommendation to inform communities about the importance of early childhood development opportunities and their long-lasting effects on children’s well-being and ability to learn.

The Task Force recommendation for use of tenant-based rental assistance programs can be used by public health agencies in conjunction with local housing authorities to inform policy makers of the effectiveness of such programs for increasing family safety in the neighborhood environment.

The Task Force made no recommendations on mixed-income housing developments or culturally competent health care.

CONCLUSION

This chapter summarizes Task Force conclusions and recommendations on interventions in the social environment to improve community health. To improve children’s readiness for school and to reduce retention in grade and placement in special education, the Task Force recommends comprehensive, center-based, early childhood development programs for low-income children. To improve family safety, the Task Force recommends tenant-based rental assistance programs (voucher programs), which are effective in reducing individuals’ experience of victimization and neighborhood social disorder.

Details of these reviews have been published\textsuperscript{14,95–100} and these articles, along with additional information about the reviews, are available at \url{www.thecommunityguide.org/social}.

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References


47. Katz LF, Kling JR, Liebman JB. Moving to Opportunity in Boston: early results of


64. Rosenbaum JE, Popkin SJ. Employment and earnings of low-income blacks who


