Although scientific and medical advancements over the last hundred years have dramatically improved oral health and dental care, the benefits of such progress have not been shared by everyone. Children, the elderly, minorities, and those in low-income families carry a disproportionate burden of oral disease (see box).

Oral health is a significant component of physical and social well-being. Untreated dental caries lead to pain, interference with eating, overuse of emergency room services, poor self-esteem, and lost time at school and work. Many oral diseases can be attributed to bacterial infections that, when left untreated, can affect other systems of the body. Although the relationship between diseases of the mouth and other illnesses is not completely clear, associations between poor oral health and cardiovascular disease as well as respiratory disease have been documented.

FACTORS AFFECTING ORAL HEALTH

The problems of oral health reflect both the broader deficits in health care – such as access, financing, knowledge, and behavior – and problems that are unique to dental care. The dental care delivery system has evolved separately from the medical care delivery system and consists primarily of practitioners in small or solo practices. Dental care is poorly insured; only about half of the U.S. population has third-party dental coverage. Publicly-provided health insurance offers little to no coverage for adults and the elderly, and although Medicaid and the State Children’s Health Insurance Program provide comprehensive coverage for low-income children, many have difficulty accessing dental services. The safety net for comprehensive dental care is small and fragmented. There are few public dental resources that provide comprehensive dental care.

The nation is also experiencing a shortage of providers. The ratio of dentists to population decreased in recent years, and today there are fewer applicants and enrollees to dental school than 25 years ago. There are only a handful of pediatric dentists, and few dental students have an opportunity to practice with elderly patients. There is also a lack of diversity among dental providers, and the already low number of minority dentists is dwindling. At the same time, there are fewer dentists practicing in urban and rural areas where there is the greatest need.

Two other factors contribute to poor oral health. First, more than 100 million Americans live in communities without fluoridated water systems. Second, knowledge about key prevention strategies is low. Recent studies have shown that few adults can identify fluoride and dental sealants as effective tools for prevention.

In recognition of the magnitude of the problem, GIH convened an Issue Dialogue, “Filling the Gap: Strategies for Improving Oral Health,” on May 16, 2001, in conjunction with the Children’s Dental Health Project. This Issue Focus is based upon the meeting’s discussion and will be incorporated into a full report, available this fall.

WHAT CAN BE DONE?
The problems of oral health are not insurmountable. Oral health can be improved by focusing public and private attention and resources on prevention, the dental health care safety net, and awareness of the importance of oral health to overall health and well-being. Several foundations have begun to develop creative solutions to address oral health concerns. Some focus on children and fund strategies to prevent the occurrence of dental diseases; others focus on the oral health of older adults. The following list of activities illustrates the variety of strategies available.

• Direct delivery of oral health services. Foundations can help improve access to oral health services by supporting dental clinics, organizing volunteer dentists and hygienists to provide free dental care, or underwriting the dental expenses of low-income patients.

• Education and outreach. In order to improve oral health, foundations can promote individual prevention efforts.

KEY FACTS ON ORAL HEALTH

• More than half of children ages 5 to 9 and three-quarters of 17-year-olds have at least one cavity or filling.

• Twenty-three percent of those aged 65 to 74 years have severe periodontal disease, and about 30 percent of adults 65 years and older have no teeth.

• Mexican-American children ages 1 to 2 years are more likely to experience dental caries than children in other racial or ethnic groups.

• African Americans are more likely than whites to have untreated dental caries or missing teeth.

(such as eating a healthy diet, abstaining from substance abuse, protecting against injuries, and engaging in a consistent pattern of dental hygiene), and support demonstrations of primary and secondary prevention and dental disease management programs.

- **Convening.** Foundations can bring together key stakeholders such as researchers, policymakers, providers, and advocates to develop a common understanding of the problems of oral health.

- **Advocacy.** In concert with community-based organizations, foundations can build action plans to encourage more providers to participate in public insurance programs such as Medicaid, to expand coverage for dental services for adults in Medicaid, and to improve coverage for the elderly in Medicare.

- **Water fluoridation.** Because water fluoridation is a cost-effective method of preventing dental disease, foundations can fund community water-fluoridation systems and provide technical assistance to communities in need of fluoridated water.

- **Provider shortages.** Foundations can collaborate with lending institutions to help finance the housing, education, and practice costs of recent graduates; engage other health professionals, including physicians, to screen, refer, and promote prevention strategies; and support efforts such as debt reduction and tax incentive programs to encourage practitioners to work in underserved communities.

- **Provider capacity.** Foundations may fund strategies to build dentists’ competencies to address the needs of the very young, the old, and culturally diverse populations through changes in curriculum and training new faculty.

- **Research, policy analysis, and dissemination.** Foundations may fund studies to improve understanding of oral health problems and their antecedents; collect data on dental care financing including cost, market rates, and utilization; and conduct a thorough inventory of the dental care safety net.

**PUBLIC AND PRIVATE ORGANIZATIONS ADDRESSING ORAL HEALTH**

Improving oral health will depend on the combined efforts of foundations, federal and state governments, and non-profit organizations. Programs developed to address the problems of oral health must be adopted at the local, state, and national levels. The following foundations have dedicated significant time and resources to improving oral health:

- **Anthem Blue Cross and Blue Shield Foundation**  
  Denver, CO  
  Contact: Sally Vogler, 303.831.5899

- **The California Endowment**  
  Woodland Hills, CA  
  Contact: Marion Standish, 415.343.0222

- **W.K. Kellogg Foundation**  
  Battle Creek, MI  
  Contact: Henrie Treadwell, 616.968.1611

- **St. Luke’s Health Initiatives**  
  Phoenix, AZ  
  Contact: Jane Pearson, 602.385.6502

- **Sierra Health Foundation**  
  Sacramento, CA  
  Contact: Tom Bennett, 916.922.4755

- **United Methodist Health Ministry Fund**  
  Hutchinson, KS  
  Contact: Kim Moore, 316.662.8586

- **Washington Dental Service Foundation**  
  Seattle, WA  
  Contact: Tracey Peterson Garland, 206.528.7388

**OTHER ORGANIZATIONS AND PROJECTS INVOLVED IN THE ISSUE**

- **Children’s Dental Health Project**  
  www.childent.org

- **HRSA/HCFA Oral Health Initiative**  
  www.hrsa.gov/oralhealth/index.htm

- **National Conference of State Legislatures**  
  www.ncsl.org

- **National Governors’ Association**  
  www.nga.org

- **NIDCR Plan to Eliminate Craniofacial, Oral, and Dental Health Disparities**  

- **National Maternal and Child Health Resource Center**  
  www.mchoralhealth.org

- **National Oral Health Information Clearinghouse**  
  www.nohic.nidcr.nih.gov

- **National Oral Health Surveillance System**  
  www.cdc.gov/nohss

- **Oral Health America**  
  www.oralhealthamerica.org

**REFERENCES**

