I. Best Practice Approach

Access to Oral Health Care Services: Workforce Development

Summary of Evidence Supporting Access to Oral Health Care Services: Workforce Development	
Research	+
Expert Opinion	+++
Field Lessons	++
Theoretical Rationale	+++
See **Attachment A** for details.	

II. Description

A. Defining the Problem: Access to Oral Health Care Services

Priority dental public health concerns include the prevalence and severity of oral diseases and disorders, their potentially grave impact on general health and well-being, and significant health and health care access disparities. Millions of children suffer from oral diseases that are preventable. Findings from National Health and Nutrition Examination Survey (NHANES) show that the oral disease burden is borne by a small segment of the population: 80% of dental caries is found among 25% of the children (1). Children experience tooth decay early and the extent increases with age (1 in 5 preschoolers, one half of second graders, and almost two thirds of ninth graders have experienced tooth decay) (2). Minority children at all ages and at all income levels experience more extensive decay than do their white peers (3). Tooth decay affects roughly two times as many minority preschoolers and three times as many preschoolers who live in poverty (3). Furthermore, low-income children who are eligible for Medicaid have greater tooth decay experience than do higher income children who are not eligible for Medicaid.

Not surprisingly, the children who suffer the most dental disease have the least access to oral health care services. In 1996, the Office of the Inspector General of the U.S. Department of Health and Human Services (DHHS) reported that of the children who were eligible for Medicaid in 1993, only 1 in 5 received routine preventive dental services (4). Analysis of NHANES data found that lower-income children were much more likely to have unmet dental treatment needs as were their more affluent counterparts (3). In a 1994 Robert Wood Johnson Foundation (RWJF) survey, dental care was the most commonly reported unmet health care need in the U.S., two times more common as unmet medical care (5).

Oral health data and reporting, and access enhancement efforts, have primarily focused on children. However, profound oral health and oral health care access disparities also exist for adult minority, low income and low education populations, and individuals who are physically and medically impaired, elderly, homeless and homebound.

B. Issues and Solutions Impacting Oral Health Care Access

The issues and solutions impacting oral health and oral health care access are multifaceted. State and local infrastructure and capacity to provide oral health care for underserved populations needs to be enhanced. Approaches include expanding the traditional delivery system, developing community-based collaborative innovative and integrated delivery systems, increasing the healthcare workforce, and assuring sustainability through adequate and long term funding. Culturally appropriate health promotion and disease prevention initiatives are needed to help populations, which have historically had poor oral health and limited access to care, understand the importance of good oral health and place high priority in obtaining oral health care. Barriers must be eliminated to increase the network of oral health care providers participating in dental Medicaid and practicing in "safety-net" facilities, such as community and school-based dental clinics. Dentists and their staff may need to gain special skills, sensitivity and competency in dealing with complex cultural and social issues, and a wide range of medical, physical and behavioral factors. Dental auxiliary duties, responsibilities, and services may need to be expanded. In addition, in bringing the mouth back into the rest of the body, the provision of selected dental services by non-traditional providers, such as physicians and nurses, should be explored and oral health promotion and disease prevention must be integrated and institutionalized into all health and human services delivery systems. Finally, changes in federal and state statutes and policies need to be implemented to enable and sustain the elimination of barriers for universal access to oral health care.

The myriad of intertwining multidimensional issues and answers impacting oral health care access cannot be collectively and succinctly addressed within the context of one best practice approach report. The ASTDD Best Practices Committee plans to prepare several reports addressing access to oral health care services. Best practice approaches to various key factors influencing access to care will be described in future reports. The focus of this report is the best practice approach that builds capacity to increase access to oral health care services specifically through workforce development.

C. Developing the Workforce

The dental health care delivery system is dependent on the size, composition, characteristics and distribution of the workforce (6, 7). Factors such as productivity, scope of services, participation as providers in public funded programs, and practice settings impact the workforce's capacity to serve the general and vulnerable populations. State and territorial oral health programs (dental public health programs administered by state/territorial health agencies) can contribute significantly to improving oral health through health system interventions. These programs can provide technical assistance to health systems to improve accessibility and availability of dental care. In addition, they can support professional development such as training non-dental health providers (e.g., physicians and nurses) to make the necessary referrals for early dental treatment or administer incentive programs to increase the workforce for underserved, high-risk populations.

1. Workforce Development – Dentists

Background:

A marked decline in the number of practicing dentists over the last twenty years and a projected decline in dental school graduates have raised serious concerns about the adequacy of the dental workforce to provide needed health services in this country. Multiple reasons for this decline have been identified. Solutions to these issues must be identified and addressed if all Americans are to experience good oral health.

The American Dental Association (ADA) reported that in 1995, 141,396 U.S. dentists were in private practice either part-time or full-time (8). Over 80% of U.S. dentists are general dentists and provide the large majority of oral health care services to children and adults (9). Approximately 3,500 dentists (2.5% of U.S. dentists) are trained and practice in the specialty of

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pediatric dentistry. The general and pediatric dentists deliver primary dental care services (approximately one primary care dentist for every 2,200 persons or 575 children). ADA data indicate that the number of practicing dentists rose by 22% from 1982 to 1995; however, most of the increase was due to doubling of part-time dentists with only an 8% increase in the number of full-time dentists (10). In comparison, the U.S. population increased by more than 13% in that same period with a 10% increase in the pediatric population of children (11). Between 1986 and 1993, six dental schools have closed, and one more has closed in 2001. Only one new school opened during this time period. The remaining U.S. dental schools have experienced reductions in class sizes, and the percentage of graduating dentists declined by 40% between 1986 and 2000 (12). The reduction of students graduating from dental schools, the number of dentists retiring from practice, and the increases in the U.S. population are likely to change the dynamics of the market for dental services over the next 2 decades that could adversely affect access to services for low-income populations.

General dentists are not universally equipped with the skills and training to provide for the care of infants, toddlers, and young children, who present with extensive dental needs and potential behavior complications. In addition, the small number of pediatric dentists continues to be inadequate to meet the requirements of the entire population. Not enough pediatric dentists are being trained and the rate-limiting factor is the number of training positions (13).

Even where the numbers of dentists may be adequate, the distribution of dentists to serve at-risk and vulnerable populations remains a concern. Of the nation's dentists, approximately 90% provide services in the private sector of the dental care delivery system. Of these private practitioners, 92% are in privately owned solo or 2-person practices (14). Safety-net facilities (located in dental schools, community-based clinics, migrant and rural health centers, school-based programs, and mobile van programs) targeting underserved populations in primarily inner-city and rural areas are few in number (6). The Health Resources and Services Administration (HRSA) reports that only half of federally supported community and migrant health centers include dental care (15).

The distribution of dentists varies across regions in the U.S and within each state (16). The Health Resources and Services Administration, Shortage Designation Branch of the National Center for Health Workforce Analysis at the Bureau of the Health Professions reported that there were 1,036 dental Health Professional Shortage Areas (dental HPSA's) in 1998, which require 3,984 dentists (14). For 2002, there are 1,953 dental HPSA's nationwide (Federal Register, 2002). Dental HPSA is used to evaluate the eligibility of a given area or population for a number of federal and state programs. These programs include: the National Health Service Corps, Federal and State Loan Repayment Programs, the Rural Health Centers Program, and a number of Title VII Programs (Federal Register, 1998) (17). A declining workforce of dentists and the population's growing demand for dental services are likely to exacerbate access problems for historically underserved segments of the U.S. population.

Geographic mal-distribution of dentists contributes to poor access to dental care in many communities, especially in rural, low-income, and minority communities (18). Minority dentists are more likely to practice in minority communities, but are a small portion of the dental workforce (18). Minorities in the dental profession is underrepresented compared with the overall population. The proportion of racial and ethnic minorities who enter dental schools has grown slowly in the last two decades (the increase is mostly accounted by Asians) and little change is observed in other racial and ethnic minorities (African Americans, Hispanics, and Native Americans), comprising only 11% of first-year dental school enrollees (19). Less than 5% of incoming dental students are African American, and less than 5% are Hispanic/Latino. These percentages are far below the overall U.S. population of African Americans (12%) and Hispanic/Latinos (11%).

As the demand and need for dental services increases, both nationally and through programs for specific, underserved population groups or communities, collaboration with state oral health programs and other key stakeholders (e.g., state dental association, state dental hygienists

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association, state dental licensing board, Association of Primary Care, community health centers, hospitals, etc.) is needed to assist the development of the dental workforce.

Strategies:

Dental public health approaches aimed at addressing access to care issues should incorporate strategies that increase the number, distribution and availability of dentists for all populations. These strategies may include:

a. Increase the number of dentists by:

    i. Establishing new dental schools

    ii. Partnering with established institutions to create satellite campus sites in states and regions that currently do not have dental schools

    iii. Recruiting doctoral students to become pediatric dentists and expanding the number and distribution of pediatric dentists

b. Increase the availability of dentists in underserved regions by:

    i. Encouraging low income and minority students and students from rural regions to choose dental careers by:
        ▪ Developing programs that introduce high school students to the dental profession
        ▪ Funding scholarship programs to cover the high cost of dental school tuition
        ▪ Implementing state school tuition reimbursement
        ▪ Expanding loan forgiveness programs

    ii. Enhancing recruitment of dentists practicing in underserved regions through:
        ▪ Establishing collaborative efforts of State Dental Directors, Primary Care Associations (PCAs) and Primary Care Organizations (PCOs)
        ▪ Working to assure that all underserved areas within states that qualify are designated by HRSA as dental Health Professional Shortage Areas (dental HPSAs)

    iii. Expanding the opportunities for dentists to practice in underserved regions by increasing the number and distribution of dental safety-net facilities; this may be accomplished by:
        ▪ Developing dental clinics in non-traditional sites such as storefronts and community and migrant health centers
        ▪ Mobilizing dental vans and portable dental clinics for the provision of services in areas where clinics would be impractical services in community; and the expansion of services provided by dental and dental hygiene schools to the underserved

    iv. Offering incentive and training programs to dental providers who serve rural and urban underserved populations in their offices, and who work in safety-net sites; incentives may be scaled according to the number served and the period of time services are provided, and may include:
        ▪ State tax credits
        ▪ Travel/lodging discounts
        ▪ Loan forgiveness
        ▪ Awards, media promotion and other recognition of the provider (e.g., corporate-sponsored bonuses such as golf or skybox memberships)

    v. Exploring innovative ways to involve dentists in providing services in safety net facilities; such services may include:
        ▪ Providing practice management training

- Providing clinical skills and techniques training
- Donation of dental equipment, computers, and billing/utilization software

c. Developing training and education programs that increase cultural awareness, sensitivity, and competency among dental providers by:

  i. Expanding dental school programs to expose students to diverse populations

  ii. Partnering with state dental associations to develop and administer continuing education programs on cultural competency and issues related to special populations

2. Workforce Development – Dental Auxiliary Personnel

Background:

There are currently two types of auxiliary or allied dental professionals in providing direct patient care: dental hygienists and dental assistants. Dental hygienists complete at least a 2-year program and are licensed by a state board. In most states, direct supervision by a dentist is required and independent practice is rare. Dental assistants may or may not receive formal training, and requirements for licensure vary. Nearly two thirds of all dentists employ at least one dental hygienist, and most dentists work with chairside assistants.

In the U.S., there are 255 dental hygiene programs, 258 dental assisting programs, and 28 dental laboratory technology programs according to the American Dental Association's Commission on Dental Accreditation. From 1994/95 to 1998/99, first-year enrollment in dental hygiene education has increased 9.5 percent, in dental assisting programs has declined 7 percent, and in dental laboratory technology programs has declined 31 percent (20). About 100,000 dental hygienists practice in the U.S. (21). An estimated 200,000 dental assistants and 70,000 dental laboratory technicians comprise the other 2 major categories of allied dental personnel (22).

The current workforce is thought to have a reserve capacity, largely through utilization of allied dental personnel (19). To improve access to oral health care and reduce oral health care disparities, the allied dental workforce may be called upon to support innovative approaches (20).

The dental care delivery system may need to explore innovative use of auxiliary personnel in the clinical setting. States allow dental hygienists to provide a defined scope of preventive services, usually under the supervision of a licensed dentist. A few states allow expanded-duty personnel with additional training to increase their role in the delivery of basic restorative procedures (23,24).

Strategies:

Dental public health approaches aimed at addressing access to care issues should incorporate strategies to increase the availability of and expand the scope of practice of dental auxiliary personnel; these strategies may include:

a. Increase the number of dental hygienists by:

  i. Establishing new dental hygiene schools

  ii. Partnering with established institutions to create satellite campus sites in states and regions that currently do not have dental hygiene schools

b. Increase the availability of dental auxiliary personnel in underserved regions by:

      i.   Encouraging low income and minority students and students from rural regions to choose a career in dental hygiene by:
- Developing programs that introduce high school students to the dental hygiene profession
- Funding scholarship programs to cover the high cost of dental hygiene school tuition
- Implementing state school tuition reimbursement
- Expanding loan forgiveness programs

     ii.   Offering incentive and training programs to dental hygienists who work in safety-net sites; incentives may be scaled according to the number served and the period of time services are provided, and may include:
- State tax credits
- Loan forgiveness

c.   Expanding the traditional role and scope of practice of dental auxiliary personnel in targeted underserved rural and inner-city areas and in safety net settings by:

      i.   Reducing the supervision requirements of dental hygienists in school-based dental programs, public health, safety-net settings, and underserved rural and inner-city areas

     ii.   Expanding the scope of services permitted by state dental practice acts

    iii.   Exploring the supervision of dental hygienists by physicians

d.   Develop training and education programs that increase cultural competency and sensitivity among dental auxiliary personnel by:

      i.   Expanding dental hygiene school programs to expose students to diverse populations

     ii.   Partnering with state dental and dental hygiene associations to develop and administer continuing education programs on cultural competency and issues related to special populations

3. Workforce Development – Integrating Oral Health Education and Prevention with Services Provided by Non-Dental Providers

Background:

The Surgeon General's report, *A National Call to Action to Promote Oral Health*, emphasized that disease prevention and health promotion campaigns and programs that affect oral and general health can benefit from collaborations among public health and health care practicing communities (25). Further, the report calls for interdisciplinary care to manage the general health-oral health interface. Securing an adequate and flexible workforce will need to include extending and expanding workforce capacity and productivity by integrating oral health with general health services and programs.

With the workforce and population trends, and concerns about access to care for low-income children, public health officials have focus additional attention on the optimal use of various types of health care personnel to deliver oral health services in more diverse settings for the future (23,24). As an example, some states have started to engage physician practices to provide oral health assessments and preventive services for children covered by public programs. Similar changes have been observed with dramatic increases in the numbers and types of non-physician clinicians capable of providing primary medical care services (26).

Strategies:

Dental public health approaches aimed at addressing access to care issues should incorporate strategies to integrate education and prevention with services provided by non-dental providers; these strategies may include:

a. Establishing a broader spectrum of non-dental providers who can:

   i.   Increase access to oral health education and preventive services utilizing the medical model of care (while the surgical model of care be limited to dentists for the treatment of oral disease).

   ii. The non-dental providers may include: physicians, nurse practitioners, physician assistants, school nurses, nutritionists, childcare and outreach workers, and others.

III. Guidelines & Recommendations from Authoritative Sources

A. Healthy People 2010

Several of the following Healthy People (HP) 2010 Oral Health Objectives call for an increase in the availability of dental services and the use of the oral health care system (27):

1. Increase the proportion of children and adults who use the oral health care system each year (HP 2010 Oral Health Objective 21-10).

2. Increase the proportion of long-term care residents who use the oral health care system each year (HP 2010 Oral Health Objective 21-11).

3. Increase the proportion of children and adolescents under age 19 years at or below 200 percent of Federal poverty level who received any preventive dental services during the past year (HP 2010 Oral Health Objective 21-12).

4. Increase the proportion of school-based health centers with an oral health component (HP 2010 Oral Health Objective 21-13).

5. Increase the proportion of local health departments and community-based health centers that have an oral health component (HP 2010 Oral Health Objective 21-14).

6. Increase the proportion of states and the District of Columbia that have a system for recording and referring infants and children with cleft lips, cleft palates, and other craniofacial anomalies to craniofacial anomaly rehabilitative teams (HP 010 Oral Health Objective 21-15).

B. Surgeon General's Report on Oral Health

The Surgeon General's Report on Oral Health calls for building an effective health infrastructure that meets the oral health needs of all Americans and integrates oral health effectively into overall health (14). There is a lack of racial and ethnic diversity in the oral health workforce. The effect of that change could well enhance access and utilization of oral health care by racial and ethnic minorities. Trends in the workforce disclose a worrisome shortfall in the numbers of men and women choosing careers in oral health education and research. Further, the report points to a need to non-dental health professionals to work in collaboration to provide optimal health care for their patients.

The Surgeon General's Report on Oral Health also calls to remove know barriers between people and oral health services citing that oral health care is not fully integrated into many care programs. Data indicate that the lack of dental insurance, private or public, is one of several impediments to obtaining oral health care and accounts in part for the generally poorer oral health of those who live at or near the poverty line, lack health insurance, or lose their insurance upon retirement. The level of reimbursement for services also has been reported to be a problem and a disincentive to the participation of providers in certain public programs. Reducing disparities requires wide-ranging approaches that target populations at highest risk for specific oral diseases and involves improving access to existing care.

C. National Call to Action to Promote Oral Health

National Call to Action to Promote Oral Health, a report released by the Office of the Surgeon General in April 2003, proposed five actions in its call for a response to act. One of the actions is to "increase oral health workforce diversity, capacity, and flexibility." Needed efforts include having the racial and ethnic minorities better represented in the dental profession to meet patient and community needs, supplying personnel to meet the needs of dental health professional shortage areas and overall demand for oral health care, and moving society toward optimal use of its health professionals (25).

D. State and Territorial Dental Directors

State dental directors or state dental consultants from 43 states responded to an ASTDD survey and identified ten essential elements that would build infrastructure and capacity to achieve Healthy People 2010 Oral Health Objectives. These elements reflect the public health core functions of assessment, policy development and assurance. One of the top elements is the development of health systems interventions to facilitate quality dental care services for the general public and vulnerable populations. Workforce development is a key strategy for health systems interventions (28).

IV. Research Evidence

There is a lack of scientific evidence that evaluates the effectiveness and efficiency of various approaches in workforce development to provide improved access to oral health care services for vulnerable or high-risk populations. Reliable and valid measures of oral health outcomes have not be well established for public health approaches to improving access to care. The long-term effectiveness of many approaches and suggested strategies is unknown. More research is needed to evaluate the effectiveness and cost-effectiveness of workforce development strategies.

V. Best Practice Criteria

For the best practice approach of **Access to Oral Health Care Services: Workforce Development**, the ASTDD Best Practices Committee has proposed the following **initial review standards** for five best practice criteria:

1. **Impact/Effectiveness**:

   o   Net gain in services for target populations or communities
   o   Achieving program targets in outreach and service delivery for the target populations

2. **Efficiency:**

   o   Monitoring/tracking of unit cost for each child enrolled in the program and/or service provided through the program
   o   Maintains a cost-benefit or cost-efficiency analysis for the program or service

3. **Demonstrated Sustainability**

   o   The program or service has a consistent funding source without time limitation (e.g., a 2-year grant), and/or has a plan for fund-raising or long-term funding
   o   The program or service has a policy or legislation in place to support implementation

4. **Collaboration/Integration:**

   o   Integration, collaboration and/or coordination with key stakeholders
   o   Public/private partnerships to leverage resources

5. **Objectives/Rationale:**

   o   Linking of program goals/objectives to national goals/objectives (e.g., Healthy People 2010 or Surgeon General's Report on Oral Health)
   o   Linking of program goals/objectives to state oral health goals/objectives (e.g., state oral health improvement plan, state policy agenda, or health agency's priorities)

VI. State Practice Examples

During the first phase of the ASTDD Best Practices Project, states submitted descriptions of their successful practices and shared their experiences and implementation strategies to increase the workforce for the underserved populations, expand the role of dental auxiliary personnel, and integrate oral health with services provided by non-dental providers. The following practice examples illustrate various elements or dimensions of the best practice approach for **Access to Oral Health Care Services: Workforce Development**. These reported success stories should be viewed in the context of the state's and program's environment, infrastructure and resources. End-users are encouraged to review the practice descriptions (click on the links of the practice names) and adapt ideas for a better fit to their states and programs.

A. Summary Listing of Practice Examples

See **Figure 1**. Each practice name is linked to a detailed description report.

Figure 1.

State Practice Examples of
Access to Oral Health Care Services: Workforce Development

Item	Practice Name	State	Practice #
Workforce Development – Dentists			
1	Medicaid Travel of Pediatric Dental Teams (Archived January 2017)	AK	02001
2	Colorado Commission on Children's Dental Health	CO	07001
3	Colorado Old Age Pension Dental Program	CO	07002
4	Health Care Commission's Dental Care Access Improvement Committee	DE	09001
5	Reforms in Indiana's Medicaid Dental Program	IN	17002
6	Maryland Dent-Care Loan Assistance Repayment Program	MD	23001
7	St. Mary's County Pilot Dental Program	MD	23005
8	Healthy Kids Dental	MI	25001
9	University of Michigan Dental School's Partnership with Community Health Centers (Archived January 2017)	MI	25002
10	National Governors Association (NGA) Policy Academy on Oral Health Care for Children	MN	26001
11	New York State's Innovative Dental Service Delivery Models Program	NY	35006
12	Director of Health's Task Force on Access to Dental Care	OH	38003
13	Community Primary Care Challenge Grants	PA	42001
14	Vermont's Dental Access Grants	VT	51004
15	Dental Scholarship and Loan Repayment Program	VA	53005
Workforce Development – Dental Auxiliary Personnel			
1	Dental Health Aide Program	AK	02002
2	EPSDT Exception to Policy	IA	18001
3	School-Based Preventive Dental Programs	NH	32003
4	Tooth Tutor Dental Access Program	VT	51001
Workforce Development – Integrating Oral Health Education & Prevention with Services Provided by Non-Dental Providers			
1	The Development of an Innovative Nutrition Education Model for the Prevention of Early Childhood Caries in Alabama WIC Children	AL	01001
2	OPEN WIDE	CT	08002
3	"Bright Smiles for Bright Futures"	LA	21001
4	Baby Bottle Tooth Decay (BBTD) Program	VT	51002

B. Highlights of Practice Examples

1. Workforce Development – Dentists

AK   Medicaid Travel of Pediatric Dental Teams (Practice #02001)
A grant providing partial coverage of the travel and lodging costs incurred by SEARHC, a non-profit Native health corporation, enable pediatric dental teams to travel to southeast Alaska and deliver dental services to 900 children the first year and 600 children the second year.

CO   Colorado Commission on Children's Dental Health (Practice #07001)
The Commission's recommendations and support resulted in 5 successful legislative initiatives including a dental loan repayment program, a tax credit program for dentists and dental hygienists, direct billing to Medicaid by dental hygienists, funding expansion of a dental safety net clinic, and funding for a dental benefit in the State Children's Health Insurance Program (SCHIP).

CO   Colorado Old Age Pension Dental Program (Practice #07002)
The program is a response to Medicaid not covering dental care for adults and oral health needs of low-income seniors. The program has a network of participating dentists, has regional coordinators matching seniors to dentists, serves more than 1,000 clients per year, and pays 80% of fee for diagnostic, preventive, restorative and prosthetic care.

DE   Health Care Commission's Dental Care Access Improvement Committee (Practice #09001)
The Committee was established to study ways to improve access to dental care and make recommendations, which resulted in passage of two key bills allowing for development of alternative methods for dental licensure and developing innovative programs such as loan repayment program and dentist recruitment efforts.

IN   Reforms in Indiana's Medicaid Dental Program (Practice #17002)
In 1997, only 751 dentists were listed as participating in Indiana's Medicaid program. Medicaid dental reforms in 1998 included increased reimbursement, removal of pre-authorization, timely reimbursement, giving Medicaid patients freedom to choose their dentists, and reinstating denture coverage. After changes in the Medicaid program, the number of participating dentists rose to 1,446 in 2001.

MD   Maryland Dent-Care Loan Assistance Repayment Program (Practice #23001)
The Program provides loan repayment for up to five dentists a year for a 3-year commitment. The dentists are required to provide oral health care services to a minimum of 30% Medical Assistance Program recipients as a proportion of their total patient population without restrictions on the practice location.

MD   St. Mary's County Pilot Dental Program (Practice #23005)
The Program is intended to increase the number of practicing dentists in St. Mary's County who participate in the Medicaid program and improve access to dental care. The Program provided higher reimbursement levels, reduced administrative burden of dentists, facilitated credentialing and contracting process for providers with managed care organizations, eliminated predetermination of dental procedures, and was administered by local health department. Provider participation increased from 2% to 28%.

MI   Healthy Kids Dental (Practice #25001)
A demonstration program, initiated in 2000 to create access to oral health care for Medicaid beneficiaries, uses the Delta Dental's network of participating providers. The program is in 37 counties of Michigan and a 12-month assessment demonstrated substantially more Medicaid beneficiaries are receiving care under the program and more providers participating under the program compared to the traditional fee-for-service Medicaid program.

MI   University of Michigan Dental School's Partnership with Community Health Centers (Practice #25002)
      Five community health centers signed with University of Michigan Dental School to rotate dental students, dental hygiene students and dental residents into their centers to treat Medicaid beneficiaries. In FY 2000-2001, 146 students rotated through the centers treating an additional 8,600 Medicaid clients. All five centers hired dentists who rotated through the program.

MN   National Governors Association (NGA) Policy Academy on Oral Health Care for Children (Practice #26001)
      The NGA Policy Academy formed a Minnesota team representing major stakeholders to improve children's oral health in the state. Achievement included the passage of the legislation which provided enhanced Medicaid reimbursement rates, dental access grants, community clinic expansion grants, licensure of foreign trained dentists, expanded functions dental auxiliaries, a loan forgiveness program, provider recruitment for state programs, and a retired dentist program to cover licensing fees and malpractice insurance costs.

NY   New York State's Innovative Dental Service Delivery Models Program (Practice #35006)
      New York State Department of Health, Bureau of Dental Health established a grant program during 2002-2006 called "Innovative Dental Health Service Delivery Models." The grant program funded communities in designing and testing innovative solutions to improve access to oral health care for residents in geographically isolated and/or health manpower shortage areas. Eight projects were awarded. Seven projects provided service delivery that included establishing mobile dental vans, school-based clinics and fixed clinics, providing dental case management services, and recruiting and training of dentists. One project established a Technical Assistance Center to assist communities in implementing innovative solutions.

OH   Director of Health's Task Force on Access to Dental Care (Practice #38003)
      The Task Force formulated recommendations that included increasing fees in the Medicaid dental program, expanding the state physician loan repayment program to include dental professionals, instituting a scholarship for dental professionals working in underserved areas, increasing the number of pediatric and general dental residency slots, and increasing the number of safety net clinics.

PA   Community Primary Care Challenge Grants (Practice #42001)
      The Challenge Grants aim to: (1) Promote the recruitment and retention of primary health care practitioners, with an emphasis on dental providers, in order to increase clinical capacity for dental care availability and access; (2) Encourage primary care systems development in underserved areas; (3) Stimulate community based approaches to this development; (4) Encourage maximum community participation through the local health improvement partnership in the planning and development of a comprehensive primary health care system.

VT   Vermont's Dental Access Grants (Practice #51004)
      Vermont approved legislation which provided funding to any entity with a plan to increase access and capacity to provide dental care. Grant funding was awarded to dentists, community health centers, Expanded Function Dental Assistant students, hospitals and schools. The grantees increased the number of Medicaid patients receiving dental services in their practices by 73% during FY 2000-2001.

VA   Dental Scholarship and Loan Repayment Program (Practice #53005)
      Since 1952, the program provides a one-year scholarship to qualified dental students for tuition. A student may be given up to five scholarships with each scholarship requiring one-year service in a HPSA area. The loan repayment part of the program helps dentists set up a practice in a shortage area.

2. Workforce Development – Dental Auxiliary Personnel

AK   Dental Health Aide Program (Practice #02002)
The program will create a new dental provider type – dental health aides – as a specialty area under the Community Health Aide/Practitioner Program operated by Alaska Tribal health programs.

IA   EPSDT Exception to Policy (Practice #18001)
Iowa's Department of Public Health and Department of Human Services implemented the EPSDT Exception to Policy allowing regional Title V child health contractors to be reimbursed by Medicaid for oral screenings and fluoride varnish application provided by dental hygienists to Medicaid children in areas with a demonstrated lack of access to dental providers. As a result, 32 of 99 counties in Iowa have screening/fluoride varnish services delivered by dental hygienists.

NH   School-Based Preventive Dental Programs (Practice #32003)
New Hampshire has fourteen school-based preventive dental programs serving over 10,000 students. Each program, administered independently by a sponsoring agency, hires a dental hygienist to deliver and/or coordinate dental screenings, prophylaxis, topical fluoride treatments, dental sealants, oral health education, fluoride mouthrinses, collection of data for the state's oral health surveillance system, and referrals/case management for children needing dental treatment.

VT   Tooth Tutor Dental Access Program (Practice #51001)
The program is developed for schools with the goal of linking every child to a dental home. A dental hygienist works with each school to educate and provide a dental home for targeted children in grades K-6.

3. Workforce Development – Integrating Oral Health Education and Prevention with Services Provided by Non-Dental Providers

AL   The Development of an Innovative Nutrition Education Model for the Prevention of Early Childhood Caries in Alabama WIC Children (Practice #01001)
An early childhood caries educational model was developed for nutritionists to be used in WIC clinics statewide to educate women, infants, children and their families through the WIC program. The educational model and related teaching tools will be provided to 125 WIC sites.

CT   OPEN WIDE (Practice #08002)
OPEN WIDE is an oral health training program for non-dental health and human service providers including physicians, nurses, nutritionists, childcare and outreach workers. The program training enables non-dental providers to recognize and understand oral diseases and engage in anticipatory guidance and prevention intervention.

LA   "Bright Smiles for Bright Futures" (Practice #21001)
The oral health surveillance program trained volunteered school nurses as survey examiners. The school nurses perform oral health screenings for 3rd grade children to assess oral health status and treatment needs, made referrals for needed care, and followed up with families on whether care was received.

VT   Baby Bottle Tooth Decay (BBTD) Program (Practice #51002)
The program recruits pediatricians to provide dental education, fluoride supplements and dental referrals, as well as works with WIC clinic staff to detect BBTD and make referrals for children age 4 or younger.

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Strength of Evidence Supporting Best Practice Approaches

The ASTDD Best Practices Committee took a broader view of evidence to support best practice approaches for building effective state and community oral health programs. The Committee evaluated evidence in four categories: research, expert opinion, field lessons and theoretical rationale. Although all best practice approaches reported have a strong theoretical rationale, the strength of evidence from research, expert opinion and field lessons fall within a spectrum. On one end of the spectrum are promising best practice approaches, which may be supported by little research, a beginning of agreement in expert opinion, and very few field lessons evaluating effectiveness. On the other end of the spectrum are proven best practice approaches, ones that are supported by strong research, extensive expert opinion from multiple authoritative sources, and solid field lessons evaluating effectiveness.

Promising Best Practice Approaches		Proven Best Practice Approaches	
Research	+	Research	+++
Expert Opinion	+	Expert Opinion	+++
Field Lessons	+	Field Lessons	+++
Theoretical Rationale	+++	Theoretical Rationale	+++

Research
+   A few studies in dental public health or other disciplines reporting effectiveness.
++   Descriptive review of scientific literature supporting effectiveness.
+++   Systematic review of scientific literature supporting effectiveness.

Expert Opinion
+   An expert group or general professional opinion supporting the practice.
++   One authoritative source (such as a national organization or agency) supporting the practice.
+++   Multiple authoritative sources (including national organizations, agencies or initiatives) supporting the practice.

Field Lessons
+   Successes in state practices reported without evaluation documenting effectiveness.
++   Evaluation by a few states separately documenting effectiveness.
+++   Cluster evaluation of several states (group evaluation) documenting effectiveness.

Theoretical Rationale
+++   Only practices which are linked by strong causal reasoning to the desired outcome of improving oral health and total well-being of priority populations will be reported on this website.