



ENSURING  
ORAL HEALTH

Part of a series on Growing Healthy Readers:  
Taking Action to Support the Health  
Determinants of Early School Success



## Growing Healthy Readers

TAKING ACTION TO SUPPORT THE HEALTH DETERMINANTS OF EARLY SCHOOL SUCCESS

### INTRODUCTION

**W**hen children are healthy and developing on track, they are more likely to be successful in school. The Campaign for Grade-Level Reading recognizes the important interconnections of health and learning, known as *the health determinants of early school success*.

Children from low-income families have more frequent challenges that affect their health and well-being than more affluent children. The Campaign's Healthy Readers Team has identified five Children's Health and Learning Priorities: health-related issues with a demonstrated relationship to one or more of the Campaign's community solutions. They include prenatal care and infant development; comprehensive screenings, follow-up and early intervention; oral health; asthma management; and nutrition and physical activity. The team has developed materials to help community stakeholders incorporate strategies that can strengthen positive impact on children's health and learning. *Growing Healthy Readers: Taking Action to Support the Health Determinants of Early School Success* is a set of seven guides to assist Sponsoring Coalitions in incorporating the Children's Health and Learning Priorities into Community Solutions Action Plans (CSAPs) to achieve the Campaign's community solutions and improve grade-level reading.

These Healthy Readers Resource Guides will help community- and state-level Sponsoring Coalitions

identify priority issues that affect children's health and determine how to take action. The priority issues and corresponding guides — each with a research-based connection to success in learning — include:

#### Prenatal Care and Infant Development

*Resource Guide: Supporting Healthy Births and Infancy*

#### Comprehensive Screenings, Follow-Up and Early Intervention

*Resource Guide: Ensuring Early and Appropriate Screenings and Intervention*

*Resource Guide: Supporting Children's Healthy Social-Emotional Development*

#### Oral Health

*Resource Guide: Ensuring Oral Health*

#### Asthma Management

*Resource Guide: Controlling Environments and Managing Asthma*

#### Nutrition and Physical Activity

*Resource Guide: Promoting Healthy Food Choices*

*Resource Guide: Increasing Physical Activity*

Sponsoring Coalitions will want to consult available local data and gather information to help determine which priorities to address to improve children's health and learning. The Resource Guides include valuable resources and recommendations about how to proceed. Each guide is organized to:

- Address the important link between health and learning
- Identify evidence-based and promising models and strategies
- Help coalitions understand how to begin to take action
- Identify content and funding resources specific to that topic

Improving health and learning for children from low-income families is important work, but it need not be daunting. No matter which strategies a Sponsoring

Coalition undertakes, it is useful to include representatives from Head Start, physician offices, the Health Department and a Federally Qualified Health Center (FQHC) if there is one in your community. These individuals can help Sponsoring Coalition members understand the context for children's health in the community and reach out to others who can support the work.

The Campaign's Healthy Readers Team and state and regional Campaign leads can provide support as well. In the coming months, we expect to establish state-level pilot projects to link communities that are working in the same focus area, support peer learning, and provide additional information and support.

If you have questions or comments, please contact Becky Miles-Polka, Healthy Readers Team Leader: [bmilespolka@gradelevelreading.net](mailto:bmilespolka@gradelevelreading.net).

## Reading Success by the End of Third Grade

More children  
**LEARNING**  
in the summer

Summer food programs keep kids  
**healthy** when school is out

Physical activity helps children  
pay attention and learn



More children  
**ATTENDING**  
school regularly

Managing children's asthma  
helps them **reduce absences**

**Breakfast** in the classroom  
improves attendance and learning

Regular **dental care** prevents  
lost learning time



More children  
**READY** for  
kindergarten

**Screenings** catch developmental,  
hearing and vision problems before  
they interfere with learning

Social and emotional **development**  
builds curiosity and supports learning

**Prenatal care** supports early  
brain development



## The Health Determinants of Early School Success

## ENSURING ORAL HEALTH

Children’s Health and Learning Priority  <b>Oral Health</b>	Which community solution(s) does it support?  <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid orange; padding: 2px 5px; text-align: center;">SCHOOL READINESS</div> <div style="border: 1px solid orange; padding: 2px 5px; text-align: center;">SCHOOL ATTENDANCE</div> </div>
<b>DEVELOPING AWARENESS</b>	
<p>What is oral health?</p>	<ul style="list-style-type: none"> <li>Oral health (also known as dental health) refers to conditions of the teeth, gums and mouth. Poor oral health results in gum disease and dental caries, commonly known as tooth decay or cavities.</li> <li>Healthy baby teeth improve the likelihood of healthy permanent teeth, which is why it is important to begin having children’s teeth examined starting before age 1 or when the first baby tooth has emerged.</li> </ul>
<p>Why is it important for communities to implement this solution?</p>	<ul style="list-style-type: none"> <li>Oral health problems are the single most common chronic disease of early childhood, and are five times more common than asthma. An estimated 25 percent of 3- to 5-year-olds and of 6- to 9-year-olds living in poverty had untreated dental caries. (National Health and Nutrition Examination Survey, 2009–2010)</li> <li>Tooth decay causes children pain, loss of sleep, reduced concentration and attention span, and absence from school or preschool. Children from low-income families and children of color are most vulnerable and are at much higher risk of missing school.</li> <li>Oral health problems may lead children to limit their food intake and variety, leading to decreased consumption of healthy foods, which in turn affects children’s energy, attention and capacities for learning. (Satcher, 2003)</li> <li>Significant disparities persist in children’s oral health conditions: 37 percent of African-American children and 41 percent of Hispanic children have untreated tooth decay, compared with 25 percent of white children. (W.K. Kellogg Foundation, 2012)</li> <li>Only 40 percent of children from low-income families have an annual dental visit.</li> <li>In far too many states and communities, the dearth of dentists who accept Medicaid-enrolled children severely limits children’s access to oral health care. In 2009, only 44 percent of Medicaid-enrolled children nationwide received dental services. (Pew, 2011)</li> </ul>

## DEVELOPING AWARENESS (CONT.)

How can communities address children's oral health needs?

Several innovative strategies, taken together, are needed to improve children's oral health. These include:

- Mass screening, teeth cleaning and preventive services:
  - School-based dental programs can provide screenings and referrals for treatment. Children receiving dental sealants in school-based programs have 60 percent fewer instances of new decay in the pit and fissure surfaces of back teeth (90 percent of decay is in pits and fissures).
- Integrating oral health into primary care and including oral health education in various settings at every age:
  - Early childhood programs, including Head Start and Early Head Start, use educational curricula to introduce young children to oral health and improve awareness for parents and children of the importance of healthy teeth and gums to positive development and learning.
  - Cavity-Free at Three, a University of Colorado-based program, provides training to primary care providers (including pediatricians, nurses and hygienists) who see children in a wide range of settings (health clinics, WIC programs and early care and education settings) to increase the likelihood that parents are counseled and children are screened and receive preventive oral health services by age 3 to eliminate dental caries.
- Identifying children who need dental care and connecting them with service providers:
  - Public-private partnerships can bring together dental service providers with key community organizations to identify children in need of oral health care and provide support to ensure their care and treatment.
- Identifying and bringing innovative models of care to schools:
  - Oral health care can be improved by delivering care in nontraditional settings such as schools, developing new types of allied dental professionals and engaging non-dental professionals in delivering services. (Kellogg Foundation, 2012) These are providers whose scope of practice is narrower than that of dentists but who can deliver urgently needed, high-quality preventive and routine restorative dental care where children who would otherwise go without dental care are located.
  - Telehealth — the use of technology to provide dental care at a distance — is rapidly becoming a practical solution to meet the dental care needs of children in places, such as schools, in communities where there is no other access to care. Information and communications technology can enable “real-time” supervision of an on-site hygienist or dental therapist, remote oral screenings, patient education and development of treatment plans. This helps families reduce transportation time and costs, connects them to otherwise unavailable dental professionals and ensures that children get early preventive care.

DEVELOPING AWARENESS (CONT.)

How can communities address children's oral health needs? (cont.)

- Advancing policy change to expand low-income children's access to preventive care and treatment by:
  - Increasing the likelihood that dentists will accept Medicaid-enrolled children;
  - Providing reimbursement to pediatricians and other primary care providers to provide dental screening, fluoride varnish treatments and referral;
  - Ensuring that dental benefits provided under the Affordable Care Act are available and easily utilized;
  - Supporting states in offering training and certification to expand the workforce to include dental therapists and other nontraditional dental providers to deliver preventive services; and
  - Working with state and community partners and policymakers to bring new workforce models and telehealth to children in multiple settings.

What are some strategies for ensuring oral health?

***Strategies with Results***

**Access to Baby and Child Dentistry (ABCD)**, created by the Washington Dental Service Foundation, ensures that children have access to dental services. This public-private partnership has three strands:

- Works with community-based groups to identify Medicaid-enrolled children and remove barriers preventing low-income families from getting dental services for their children;
- Recruits and trains dental professionals to provide preventive care and treatment to Medicaid-enrolled children; and
- Engages primary medical care providers to deliver preventive dental screening during well checkups.

***Results***

- Between 1995 and 2011, ABCD doubled — to 40 percent — the percentage of Medicaid-enrolled babies, toddlers and preschoolers who receive dental care.
- In 2009, 23 percent of eligible children received dental care before age 2, up from 3 percent in 1997.

DEVELOPING AWARENESS (CONT.)

What are some strategies for ensuring oral health? (cont.)

Screenings can identify children who are in need of dental care. In many communities, an additional problem is a lack of dentists who will treat Medicaid patients. Some programs, such as **Making Milwaukee Smile**, employ coordinators, or health navigators, to help parents find access to dentists to treat urgent oral health issues.

Making Milwaukee Smile, a school-based program, provided preventive services to children, many of whom were eligible for Medicaid. The program placed part-time coordinators in the schools to work with parents, increase enrollment in the program, and connect children with care for more urgent dental needs.

*Results*

- Over three years of the initiative, students' participation in the oral health program increased from 50 to 77 percent, increasing access to preventive services and decreasing the proportion of children with dental disease.
- The percentage of children with urgent dental care needs dropped by more than half.

**Smile Squad** — sponsored by the Des Moines Health Center, Inc. (DMHC), a dedicated dental services clinic — is a multipronged oral health prevention and treatment program for young children in a three-county area of Iowa. Designed to reach low-income children most at risk for dental diseases, Smile Squad's components include:

- *Healthy Smiles*. Oral health education, mass screenings and referrals for all students in elementary schools with high percentages of low-income children.
- *Smile Squad Mobile Dental Clinic*. Dental sealant program for second and third graders provided by dental hygienists under general supervision, and treatment and other services for children referred from the screening, sealant and varnish programs. Mobile Clinic treatment services are provided by 36 volunteer dentists, using two mobile vans.
- *Little Healthy Smiles Fluoride Varnish Project*. Oral health education, screening, referral and twice-annual fluoride varnishes, for preschool-aged children in 52 Polk County Head Start and Polk County Early Childhood Iowa sites.
- *DMHC*. Treatment services for low-income children referred by the Smile Squad programs for more serious dental problems provided at DMHC's comprehensive 17-chair oral health clinic by a pediatric dentist.

Public and private funds support Smile Squad programs. DMHC draws on Medicaid reimbursement, private dental insurance (with no family co-pay), local foundations, United Way and others.

## DEVELOPING AWARENESS (CONT.)

What are some strategies for ensuring oral health? (cont.)

### *Results*

- In the preschool program, the rate of children presenting with dental caries has been reduced from 24 to 18 percent.
- The percentage of second and third graders screened in participating schools increased and the percentage with a history of tooth decay declined between the 2010–2011 and 2011–2012 school years.

### *Promising Strategies*

In Los Angeles County, an estimated three out of four poor, migrant and minority children had tooth decay or dental caries in 2010. Follow-up research indicated that children with dental pain were four times as likely to have a low grade-point average and missed significantly more school days than their peers without dental needs. To address the county's "oral health epidemic," Ostrow School of Dentistry at the University of Southern California has developed **CHAMP+ (Children's Health and Maintenance Program Plus)** to:

- Screen an estimated 45,000 children and provide dental education to their families at WIC clinics and Early Head Start programs and link them as early as possible to a dental home; and
- Utilize teams that include dental professionals, promotoras who reach out to and educate Latino families, counselors to help enroll families in public benefits and social work interns.

The program is supported by First 5 LA, which allocates funds generated through the state's tobacco tax. CHAMP+ expands the Ostrow School's already extensive community outreach, services and professional training designed to improve dental health for underserved children and families in the county.

To address widespread dental disease in its regions, the Community Health Foundation of Western and Central New York recently designed and launched the new initiative **CHOMPERS! Bringing Dental Care to Kids**, a three-pronged approach to bring dental education, prevention and treatment to places young children in low-income families are already found by:

- Implementing the Cavity Free Kids curriculum in a variety of settings including child care centers and home visiting programs;
- Engaging pediatric medical providers to apply fluoride varnish to baby teeth during well-child checkups; and

## DEVELOPING AWARENESS (CONT.)

What are some strategies for ensuring oral health? (cont.)

- Bringing treatment services into WIC clinics, community centers and child care settings using portable dental equipment.

The program was developed in collaboration with the Washington Dental Service Foundation.

**Project ENGAGE** in Philadelphia is a partnership between Temple University's Kornberg School of Dentistry and United Health Care that will address the dental needs of low-income children under age 6 in the surrounding community by:

- Creating an oral health registry, using dental claims and other information to identify children most at risk of dental problems;
- Supporting community health workers to provide families with information, counseling and assistance with scheduling dental appointments; and
- Deploying public health hygienists to provide in-home dental care and other treatments for children such as sealants and fluoride varnishes.

This partnership and its strategies provide valuable ideas about the potential for similar partnerships in other communities.

### *Strategies to Build Public Awareness*

Through its **Give Kids a Smile** program, the American Dental Association (ADA) encourages dentists around the country to plan local events in conjunction with National Children's Dental Health Month (NCDHM), observed each February; the major event occurs on the first Friday of February. Events involve dental professionals providing free oral health education, mass screenings and treatment/restorative care for children from low-income families and children with disabilities. In addition to reaching children who need care, the ADA teams up with highly visible organizations, such as NASCAR, to promote oral health and uses NCDHM to advocate through media for policies that will help improve dental care for underserved children. According to the ADA, in February 2013 an estimated 400,000 kids were reached by 40,000 volunteers. These efforts are supported by oral health-related industries and their products are featured at the events. The ADA has developed a planning guide and other tools to help dentists plan events as part of the Give Kids a Smile program.

## MOVING TO ACTION

How would a Sponsoring Coalition begin to implement this strategy?

Determine what actions the team could take now to strengthen children's health and development to support improved grade-level reading outcomes. Often simple no-cost or low-cost actions are a way to build momentum and gain early enthusiasm and support for the work.

1. **Gather information** about children's oral health problems in your community. Talk with dentists, child care providers, teachers, school nurses and pediatricians, among others. What do they know about oral health problems among children from low-income families?
2. **Contact** parents to find out about their experience in finding affordable oral health care for their children.
3. **Understand the issues** with dentists and Medicaid in your community. Are there sufficient dentists to treat children from low-income families? Do parents need transportation to get to dental offices? What services and supports are lacking for parents and children?
4. **Engage** your local dental society to see whether they encourage or organize volunteer efforts by dentists.
5. **Learn** about effective programs in other communities.
6. **Determine** what financing strategies are available in your community, including how your state's new Health Care Exchange is ensuring dental benefits guaranteed in the Affordable Care Act, and what dental coverage your state provides under CHIP/ Medicaid and other public funding sources.
7. **Reach out** to service clubs such as the Rotary and civic groups as well as local funders once you have gathered the information, listened to parents and professionals, and understand the problem in your community. Many of these organizations will support programs for children's oral health.

## MOVING TO ACTION (CONT.)

What funding sources may be available to support this strategy in your community?

Every community is different, and different sources of funding are available in different states for programs that serve children from low-income families:

- The Ronald MacDonald House and other charities may support children's dental health programs, especially mobile vans.
- Healthy Smiles, Healthy Children: American Academy of Pediatric Dentistry Foundation, awards grants for community-based initiatives for access to care for all children.
- Your local United Way may support oral health programs for children from low-income families.
- Oral Health America provides donated dental products and technical assistance grants to community projects designed to expand dental services in school-based or school-linked elementary settings for underserved and uninsured children.

## RESOURCES

- For Give Kids a Smile, see [www.ada.org/givekidsasmile.aspx](http://www.ada.org/givekidsasmile.aspx)
- For ABCD, see [www.abcd-dental.org](http://www.abcd-dental.org)
- For Project ENGAGE, see <http://dentistry.temple.edu/news/kornberg-school-dentisty-gets-175-million-%20gift-improve-children%E2%80%99s-dental-access>
- “Making Milwaukee Smile: A Report on Efforts to Improve the Oral Health of Milwaukee Children,” see [www.chawisconsin.org/documents/MMSreport12.11.pdf](http://www.chawisconsin.org/documents/MMSreport12.11.pdf)
- For Smile Squad, see <http://dsmhealth.org/smile-squad>
- For Smiles Across America, including potential grant funding and donated dental products, see <http://oralhealthamerica.org>
- For a guide to developing a mobile dental van program, see <http://www.astdd.org/docs/mobile-portable-astdd-issue-brief-final-02-29-2011.pdf>
- The Colgate Bright Smiles Bright Futures program may also be a source for mobile dental vans, see [www.colgate.com/app/BrightSmilesBrightFutures/US/EN/Mobile-Dental-Van/FAQ.cvsp](http://www.colgate.com/app/BrightSmilesBrightFutures/US/EN/Mobile-Dental-Van/FAQ.cvsp)
- For more information about using telehealth to meet children’s oral health needs, see [www.childrenspartnership.org/our-work/health-it/telehealth/100-meeting-the-health-care-needs-of-californias-children-the-role-of-telemedicine](http://www.childrenspartnership.org/our-work/health-it/telehealth/100-meeting-the-health-care-needs-of-californias-children-the-role-of-telemedicine)
- The National Maternal and Child Oral Health Resource Center provides a wealth of resources to improve awareness and guide action in communities: Bertness, J., & Holt K., eds. (2012). *Oral Health in Head Start: A Resource Guide (2nd ed.)*. Washington, DC: National Maternal and Child Oral Health Resource Center. [www.mchoralhealth.org/materials/results.php](http://www.mchoralhealth.org/materials/results.php)
- Choose and Use: Head Start Oral Health Curricula, National Maternal and Child Oral Health Resource Center. This provides a searchable source for free, online and print curricula that can be targeted to different users (Early Head Start professionals, Head Start professionals, health professionals) and specific topics (oral health basics, tooth decay, oral hygiene, fluoride, nutrition, schedule of dental visits, injury, risk assessment, children with special needs), see [www.mchoralhealth.org/HeadStart/curricula/index.html](http://www.mchoralhealth.org/HeadStart/curricula/index.html)
- For an example of how a state can improve access to dental care for Medicaid-enrolled children, see Kattlove, J. (2013). “Fix Medi-Cal Dental Coverage: Half of California’s Kids Depend on It.” The Children’s Partnership. [http://childrenspartnership.org/storage/documents/Advocacy/Presentations/MCHA\\_3.21.13.pdf](http://childrenspartnership.org/storage/documents/Advocacy/Presentations/MCHA_3.21.13.pdf)
- For a description of strategies to expand the dental workforce, see Kattlove, J. (2011). “Expanding California’s Dental Team to Care for Underserved Children: New Times, New Solutions.” The Children’s Partnership. [http://childrenspartnership.org/storage/documents/Publications/Dental-Workforce-Issue-Brief-Final\\_Rev2\\_11\\_30.pdf](http://childrenspartnership.org/storage/documents/Publications/Dental-Workforce-Issue-Brief-Final_Rev2_11_30.pdf)
- For research underlying the Los Angeles CHAMP+ Project, see Seirawan, H., Faust, S., Mulligan R. (Sept. 2012). “The impact of oral health on the academic performance of disadvantaged children.” *Am J Public Health*. 102(9):1729-34. doi: 10.2105/AJPH.2011.300478. Epub 2012 Jul 19.

[WWW.GRADELEVELREADING.NET](http://WWW.GRADELEVELREADING.NET)