Oral health content of early education and child care regulations and standards

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Abstract

Objective: Almost two out of every three US children younger than five receive child care from someone other than their parents. Health promotion in early education and child care (EECC) programs can improve the general health of children and families, but little is known about the role of these programs in oral health. We identified US EECC program guidelines and assessed their oral health recommendations for infants and toddlers.

Methods: State licensing regulations were obtained from the National Resource Center for Health and Safety in Child Care's online database. Professional standards were identified through a search of PubMed, early childhood organizations' websites, and early childhood literature. All EECC guidelines were reviewed for key terms related to oral health promotion in children and summarized by domains.

Results: Thirty-six states include oral health in their licensing regulations, but recommendations are limited and most often address the storage of toothbrushes. Eleven sets of standards were identified, four of which make recommendations about oral health. Standards from the American Academy of Pediatrics/American Public Health Association (AAP/APHA) and the Office of Head Start (OHS) provide the most comprehensive oral health recommendations regarding screening and referral, classroom activities, and education.

Conclusions: Detailed guidelines for oral health practices exist but they exhibit large variation in number and content. States can use the comprehensive standards from the AAP/APHA and OHS to inform and strengthen the oral health content of their licensing regulations. Research is needed to determine compliance with regulations and standards, and their effect on oral health.

Introduction

One of the most significant changes in American society in the last 30 years has been the increase in the numbers of mothers of young children who are in the labor force (1). Child care demands have increased accordingly, and by 2005, 63 percent of children not yet in kindergarten received some child care from someone other than their parents (2). Participation in child care is common for children from low-income families, due in part to welfare reform in the 1990s, with more than two million preschool-aged, poor children in regular child care (3). Federal funding for early education and child care (EECC) alone totals almost $17 billion. These numbers will continue to rise as a result of the 2009 American Recovery and Reinvestment Act, which provides an additional $2.1 billion to expand the Head Start and Early Head Start programs by 64,000 children (4). State, local, and private funding adds billions of dollars more to the national investment in EECC (2).

EECC programs are an important setting in which to implement health promotion programs for children and families, particularly for low-income children who have risk factors for development and health problems (5). A growing number of professional and governmental organizations likewise consider EECC programs as possible settings to promote

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oral health in young children (6-8). Consideration of this strategy results from two important additional trends specific to oral health. First, national surveys have revealed an increase in dental caries among preschool-aged children, different from the downward trend for older children observed over the last two to three decades (9). Second, dentistry has come to emphasize early childhood as an important time to introduce proper oral health practices to address this growing problem. Regular oral hygiene practices, professional oral health risk assessment, and the first dental visit should all occur by the child's first birthday (10).

Little is known about oral health practices in EECC programs. Some targeted programs exist, but it appears that in general, oral health receives little attention, particularly in those programs that do not receive federal funds. The quality of child care, including oral health activities can be influenced by a number of non-regulatory and regulatory approaches, including technical assistance, credentialing of individuals, accreditation standards, funding standards, and licensing requirements (11). Two broad categories of recommendations exist. Governmental regulations are issued by each state and outline the minimum requirements a program must meet in order to obtain a license and operate. They vary by state and generally concern staff qualifications, building codes, and safety. Compliance with regulations is assessed with varying frequency and penalties can be imposed for failure to comply. Performance standards are disseminated by public and nonprofit organizations and require varying levels of compliance. Research indicates that adherence to standards can contribute to the healthy development and school readiness of children (12).

One paper has reviewed the oral health content of Head Start performance standards (13), but no comprehensive review has been done of the oral health content of state regulations and performance standards for EECC programs. These programs can provide oral health services such as brushing of children's teeth in the classroom, education of the child or parent, and assurances that the child has a dental visit. However, no assessment has been done of what EECC programs are being required or advised to do concerning oral health by the various regulatory or non-regulatory groups. The purpose of this paper is to identify EECC regulations and standards, and analyze their oral health recommendations to assess the potential role of EECC programs in the oral health of preschool-aged children.

Methods

Overview of methods

We sought to identify state-level regulations and professional standards for EECC programs through a search of multiple sources conducted from October 2008 to January 2010. Each regulation or standard was reviewed for its oral health content and summarized according to major categories of oral health promotion.

Identification of guidelines

We obtained state licensing regulations for each of the 50 states and the District of Columbia (DC; hereafter collectively referred to as states) from the National Resource Center for Health and Safety in Child Care, which operates an online public database with current regulations (14). States generally regulate both child care centers and family child care homes. We excluded family child care homes because they enroll fewer children, and excluded informal child care providers (e.g., relatives and neighbors) because they are not regulated by the state (2,11).

Child care professional standards were identified through a search of PubMed, early childhood organizations' websites, and early childhood literature. The search was limited to EECC guidelines written in English and currently disseminated in the United States. We searched for these standards using terms related to the themes of child care ("child care," "day care," or "early education") and guidelines ("guideline," "standard," "regulation," or "accreditation").

Review of regulations and standards

Regulations and standards were reviewed for their oral health content by the first author. We used the scientific literature, professional recommendations, and themes observed in oral health guidelines to identify key terms related to oral health promotion in children. We *a priori* selected the following seven broad terms because of their documented importance in oral health promotion programs: a) screening for needed dental care; b) referral for dental care; c) recommended timing of first dental visit; d) tooth brushing practices; e) fluoride use; f) bottle use; and g) oral health education (15-17). We later added "storage of toothbrushes" as a key term because of its relevance to the safety of oral health practices conducted in EECC classrooms. Although important for oral health, we excluded "diet," "nutrition," or other terms related to feeding practices, with the one exception of "bottle use," because they are common risk factors for a number of conditions other than oral health, and it is difficult to disentangle motivations for including them in the guidelines. A review of state regulations for food menus has been published (18).

After initially reviewing the regulations and standards, we refined our description of three of the selected key terms. The "referral for dental care" item was modified to distinguish between emergency referrals and non-emergency referrals. For our analysis of state regulations, we grouped screening and referral together because of the way these terms were addressed in regulations. The "tooth brushing" term was

expanded to allow for different recommendations for infants without teeth and older children. The "oral health education" term was expanded to differentiate between education directed toward children, parents, or staff. The resulting 12 key terms were classified into three overarching themes: screening and referral, classroom activities, and education.

Oral health information contained in the regulations and standards was entered into spreadsheets for analysis. The presence of a governmental licensing regulation with oral health content was noted in tabular form for each theme by state. The presence of an oral health theme in performance standards also was noted in a table. We describe specific content of the regulations and standards in the narrative of the manuscript, and for regulations specifically, note differences by state.

Results

State licensing regulations

Thirty-six states were found to have regulations that addressed at least one of our oral health key terms (Table 1).

Screening and referral

Three states have non-emergency oral health screening and/or referral provisions in their regulations. In DC, families must provide documentation of a dental visit for children age three and older, and annual documentation of dental visits thereafter. Additionally, EECC staff members are required to watch for possible dental problems and when necessary, discuss concerns with the child's family or health care provider. Regulations in California and Massachusetts indicate that centers should have procedures for dental referrals.

Sixteen states have regulations that address referral for emergency dental problems. The regulations require centers to retain records with the name and contact information for the dentist of each enrolled child. In addition to these records, Connecticut, Oklahoma, and Oregon require their staff to be trained to respond to dental emergencies, and Iowa and Ohio require centers to have written procedures for dealing with dental emergencies.

Classroom activities

Kansas, Massachusetts, and West Virginia address tooth brushing in EECC programs. Children in centers throughout Kansas are expected to brush daily after meals. In Massachusetts, brushing occurs when the child is at the center for more than 4 hours or after a meal. In West Virginia, teachers are required to provide opportunities daily for supervised brushing for children. None of the brushing regulations specifically mention the age at which brushing should begin.

Although only three states require brushing, the storage and/or labeling of toothbrushes is mentioned in the regulations of 26 states. Five of these states have regulations about dispensing toothpaste. Specifically, the regulations from Alaska and West Virginia instruct staff to dispense toothpaste in a sanitary manner. Kentucky, Illinois, and North Carolina provide additional guidance, suggesting the use of an intermediate surface, such as wax paper, when dispensing toothpaste. Related to hygiene, Alaska's regulations require staff to wash hands prior to helping children with brushing.

Washington is the only state to mention fluoride use in its regulations, instructing staff to obtain written consent from a health care provider in order to provide fluoride to children. Guidelines do not specify the types of fluoride regimens that fall under this regulation.

Education

Regulations from Connecticut and West Virginia address oral health education (excluding education related to dental emergencies). In Connecticut, EECC staff should have access to a consultant who can provide guidance about children's dental health. Centers in West Virginia are instructed to put together a "dental health plan," which describes relevant training for staff and developmentally appropriate education for children.

Performance standards

Eleven sets of EECC standards were identified (19-29), of which four mentioned oral health and are described in Table 2 (26-29). Of the 11, we excluded from our analysis standards for military child care centers from the U.S. Department of Defense because nearly all military centers are accredited by organizations using standards already included in our analysis. Standards are classified as professional standards [American Academy of Pediatrics/American Public Health Association (AAP/APHA) and Child Welfare League of America (CWLA)], accreditation standards [National Association for the Education of Young Children (NAEYC)], and funding standards [Office of Head Start (OHS)]. Table 3 identifies the oral health content found in the four sets of standards according to domains and sub-domains.

Screening and referral

OHS standards instruct staff in Head Start programs to be attentive to the oral health of enrolled children and refer children to dentists when problems are observed. Head Start staff must determine within 90 days of enrollment if the child has a dental home, and if not, help families to locate a provider.

All organizations address non-emergency dental referrals by recommending that EECC programs retain a list of local

Table 1 Oral Health Content of State Licensing Regulations

		Screening and referral		Classroom activities			
State	Month/year enacted	Screening and referral	Emergency screening and referral	Storage of brushes	Brushing practices	Fluoride use	Education
Alaska	Feb-08			✓†			
California	Sep-06	✓	✓				
Colorado	May-05		✓	✓			
Connecticut	Jul-09		✓				✓
District of Columbia	Apr-07	✓					
Illinois	Mar-06			✓			
Indiana	Nov-03		✓	✓			
Iowa	Jan-09		✓				
Kansas	Jul-08			✓	✓		
Kentucky	Mar-08			✓†			
Louisiana	Nov-03		✓				
Maine	Aug-08		✓	✓			
Massachusetts	Jan-10	✓		✓	✓		
Minnesota	Apr-85		✓				
Mississippi	Jul-09			✓			
Nebraska	Jul-99			✓			
New Hampshire	Nov-08			✓			
New Jersey	Mar-05			✓			
New Mexico	Aug-06			✓			
New York	Jan-05			✓			
North Carolina	Aug-07			✓†			
North Dakota	Jan-99			✓			
Ohio	May-09		✓	✓			
Oklahoma	Oct-09		✓	✓			
Oregon	Jul-07		✓				
Pennsylvania	Sep-08			✓			
South Carolina	Feb-05		✓	✓			
South Dakota	Feb-09		✓				
Texas	Mar-08			✓			
Utah	Jul-09			✓			
Vermont	Feb-01		✓	✓†			
Virginia	Mar-08			✓			
Washington	May-08		✓			✓	
West Virginia	May-09			✓†	✓		✓
Wisconsin	Jan-09			✓			
Wyoming	Sep-08		✓				
Total (n = 36)*		3	16	26	3	1	2

* We examined 51 states (including DC). States without oral health content in regulations (n = 15) include: AL, AZ, AR, DE, FL, GA, HI, ID, MD, MI, MO, MT, NV, RI, TN.

† Regulation also includes instructions for dispensing toothpaste.

dental providers and help parents to locate and contact them. NAEYC and OHS standards instruct staff to help families locate, contact, and secure dental care for their children. OHS allows federal funds to be used for dental care when no other source of funding is available. AAP/APHA and CWLA promote a community-oriented approach to dental referrals, encouraging EECC programs to use community agencies to help obtain dental care for children. Because it can be challenging to find dentists for young children, CWLA and OHS also endorse the delivery of dental services within the EECC program itself through use of mobile screening units or by finding dental professionals willing to work with children at the EECC program.

AAP/APHA, NAEYC, and OHS also address referrals for dental emergencies, indicating that emergency plans should include contact information for the planned source of urgent dental care and the child's family.

AAP/APHA and OHS provide recommendations for the timing of a child's first dental visit. AAP/APHA recommends that children at high risk of developing dental problems visit a

Table 2 Organizations with Early Education and Child Care Guidelines

Organization	Standards	Type	About	References
National Association for the Education of Young Children (NAEYC)	Early childhood program standards	Accreditation	NAEYC seeks to promote the education and development of children. Since 1985, the standards have guided NAEYC's accreditation process, which promotes the adoption of best practices by EECC programs and helps families to identify high-quality programs. Based on research, field tests from researchers, and input from stakeholders, the standards provide recommendations about staffing, partnerships, and the administration of EECC programs. The standards were revised in 2007. Over 7,000 EECC programs nationwide are currently accredited by NAEYC.	(26)
Office of Head Start Administration for Children and Families (OHS)	Head Start performance standards	Funding	Funded by OHS, Early Head Start and Head Start programs are designed to promote the healthy development of low-income children and prepare them for school. In general, children are eligible for Head Start if they are under age five and have a family income at or below 135% of the Federal Poverty Level. Head Start serves 904,153 children annually with a budget of more than $7.2 billion. To receive funding, programs strive to achieve performance standards, requirements specified in the Head Start Act. Standards address staff qualifications, child eligibility, health promotion, education, and safety promotion. Guidelines addressing oral health were revised in 2007.	(27)
American Academy of Pediatrics / American Public Health Association (AAP/APHA)	National health and safety performance (NHSP) standards	Professional	The AAP/APHA received a grant from the Maternal and Child Health Bureau to identify guidelines that promote high-quality child care. First published in 1992, the NHSP standards were updated in 2001. Based on recommendations from early childhood experts, academicians, advocates, and practitioners, the 659 NHSP standards address health, safety, and administrative issues. These standards are used in the training of child care health consultants at the National Resource Center for Health and Safety in Child Care and Early Education at the University of Colorado at Denver and the National Training Institute for Child Care Health Consultants at the University of North Carolina at Chapel Hill. Revised standards will be released in late 2010 or early 2011.	(28)
Child Welfare League of America (CWLA)	Standards of excellence for child care, development, and education	Professional	CWLA is a coalition of approximately 800 private and public child welfare organizations who work together to improve child well being. The standards were revised in 2005 through collaboration of academicians, professionals, and CWLA member agencies. The standards are based on current literature, practices, and existing guidelines and address health, safety, and child welfare services. Whereas CWLA does not perform accreditation, they intend for their standards to inform the licensing and accreditation of centers. CWLA helped to revise the Council on Accreditation's Standards for Child Care Services.	(29)

EECC, early education and child care.

dentist when they are 6 months old. All other children are advised to see a dentist by the age of three, or sooner if an oral health problem is evident. OHS standards indicate that programs should follow the state Medicaid Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) periodicity schedule for the timing of dental visits. Most state EPSDT periodicity schedules permit reimbursement of dental services after 12 months of age, but require a dental referral by 36 months (30).

Classroom activities

Three of the four standards contain recommendations for classroom oral health activities for both infants and toddlers, but guidelines for the specifics of implementation such as for the use of fluoride toothpaste vary (Table 4).

AAP/APHA and OHS standards address fluoride treatments for children, recommending that children at high risk of developing caries consult with their dentists about fluoride supplements and topical fluoride treatments.

AAP/APHA, OHS, and NAEYC also address infants' bottle use. All three organizations state that infants should not have access to bottles when they are in their cribs. AAP/APHA and NAEYC also specify that children should not carry bottles around during the day.

Table 3 Oral Health Content of Early Education and Child Care Standards

			Professional standards		Standards for accreditation	Funding standards
			AAP/APHA	CWLA	NAEYC	OHS
Screening and referral	Screening for problems					✓
	Referral	Non-emergency	✓	✓	✓	✓
		Emergency	✓		✓	✓
	Dental visits		✓			✓
Classroom activities	Cleaning	Child	✓		✓	✓
		Infant	✓		✓	✓
	Fluoride Use		✓			✓
	Storage of brushes		✓			
	Bottle use		✓		✓	✓
Education	Child		✓		✓	✓
	Parent		✓			✓
	Staff		✓		✓	✓

AAP/APHA, American Academy of Pediatrics/American Public Health Association; CWLA, Child Welfare League of America; NAEYC, National Association for the Education of Young Children; OHS, Office of Head Start.

Education

AAP/APHA, NAEYC, and OHS recommend that oral health education be integrated into children's daily activities such as lessons on proper tooth brushing. AAP/APHA and OHS recommend that staff educate children's families about oral health. AAP/APHA instructs EECC programs to provide written materials about important oral health topics. OHS standards indicate staff should encourage families to take an active role in their child's receipt of health care services.

According to AAP/APHA, OHS, and NAEYC, EECC programs should employ someone knowledgeable about oral health. Both AAP/APHA and NAEYC advise centers to retain a health consultant for oral health. As defined by NAEYC, the role of the health consultant is to make recommendations to the staff regarding the health of young children, including their oral health. Similarly, Head Start programs employ a staff member or consultant who is experienced and knowledgeable about health. In Head Start programs, health consultants are usually full-time employees, whereas AAP/APHA recommends monthly visits and NAEYC recommends quarterly visits.

Discussion

EECC programs have the potential to provide a large number of oral health services for young children who otherwise would not have access to them. Interventions that can be provided in EECC settings are reasonably well defined and rather extensive (31). The level of oral health activity among EECC programs nationwide is not well documented, but is thought to be less than optimal. Because of their potential for influencing oral health practices of staff in EECC programs, we identified oral health recommendations contained in EECC

Table 4 Tooth Brushing Activities Described in Early Education and Child Care Standards

	AAP/APHA	NAEYC	OHS
Frequency	At least once daily	At least once daily when two or more meals served	Once daily
Timing	Not specified	Not specified	After meals
Assistance	Staff assist children with brushing	Not specified	Staff assist children with brushing
Fluoride use	For children under 3 years, use 1/4 to 1/2 size of a pea of fluoridated toothpaste	Toothpaste not required for brushing	For children 1 year and older, use "small smear" of fluoridated toothpaste
Storage of brushes	Brushes individually stored and labeled	Not specified	Not specified
Recommendations for infants	After feeding, wipe infants' teeth and gums with clean cloth or tissue	After feeding, wipe infants' teeth and gums with clean cloth or tissue	Wipe infants' gums at least once daily
Additional instructions	Rinse with water after brushing After eating, rinse mouths with water when brushing not possible		

AAP/APHA, American Academy of Pediatrics/American Public Health Association; NAEYC, National Association for the Education of Young Children; OHS, Office of Head Start.

regulations and standards. We found that the number and content of these recommendations about oral health varies greatly.

Content of regulations

As expected, state licensing regulations provide the least comprehensive set of recommendations. Regulations vary across states because no federally mandated standards for private EECC programs exist. Fifteen states have no oral health recommendations at all. Of the 36 states with oral health regulations, only 13 states provide more than a single oral health recommendation, with most addressing only the storage of toothbrushes. These findings suggest that state regulatory agencies are most concerned with safety issues, not oral health itself, and that the promotion of oral health by EECC programs is not a priority for these agencies.

Three states require brushing in EECC programs. Massachusetts recently adopted this regulation, requiring centers to begin brushing programs in January 2010. The regulation itself is brief, but supplemental materials indicate that EECC programs need parental consent to use fluoridated toothpaste and parents have the option to opt out of brushing entirely (32). To ease implementation of the regulation, the Department of Early Education and Care and the Department of Public Health made additional materials available online, including a guide to implementing a brushing program in EECC classrooms, and contracted with a private organization to provide optional training for EECC staff (33).

Content of performance standards

Non-emergency dental referrals were the only item included by all four organizations in their standards. We found that AAP/APHA and OHS standards provide the most comprehensive content on oral health. Both sets of standards address 11 of the 12 practice areas that we included in the review. Less oral health content is found in NAEYC accreditation standards, which included items in seven of the 12 areas. CWLA professional standards contained the least, mentioning only non-emergency dental referrals, probably because the mission of CWLA is quite broad and their standards are not intended for use in accreditation.

OHS standards included all the reviewed dental content areas except storage of toothbrushes. Funding is tied to performance reviews in which adherence to standards is evaluated. Head Start budgets provide positions for staff that are responsible for implementing and coordinating health activities within the program. Head Start staff members are often supported in their implementation of federal funding standards by federal- and state-level interventions and resources. National and state-level initiatives specifically targeted to oral health have provided support for Head Start programs. The Office of Head Start Oral Health Initiative funded 52 4-year demonstration grants in 2006 to develop, implement, and disseminate innovative oral health models for Head Start populations (34). The AAPD Head Start Dental Home Initiative is currently working toward helping programs meet their requirements for dental care (6).

The implementation of health programs for most child care settings requires local partnerships among families, child care providers, and community health professionals (35). Considerable federal, state, and local resources have been invested in developing comprehensive early childhood systems that can provide these needed services. Since the mid-1980s, the Health Resources and Services Administration and the Administration for Children and Families have supported the development of standards for child care programs, the training of child care health consultants, and the development of community-based networks to improve and maintain the health of children who use child care services (14). The AAP/APHA standards are disseminated along with other information by the National Resource Center for Health and Safety in Child Care and Early Education at the University of Colorado. The National Training Institute for Child Care Health Consultants at the University of North Carolina at Chapel Hill has trained consultants from every state. The federal Maternal and Child Health (MCH) Bureau, Early Childhood Comprehensive Systems grants program provides state MCH agencies with funding to strengthen systems of health care for young children in child care.

Child care health consultants and employees of other agencies such as local health departments, MCH Title V Block Grant programs, and Medicaid provide services for many center and home-based child care programs at the local level (36,37). For example, the Healthy Families America Initiative, Smart Start and the Nurse-Family Partnership are well-known and successful examples of national programs that provide local health services similar to those that exist in Head Start for low-income mothers and their young children (38). Consultants and health coordinators in all of these programs are usually nurses, who with additional oral health training can be engaged to help implement preventive dental programs. Thus, a network exists in many communities that can facilitate implementation of oral health standards. To our knowledge, however, Connecticut is the only state that recommends that EECC staff have access to a consultant who is knowledgeable about child oral health and oral health education.

Evidence for effectiveness of regulations and performance standards

Some of the recommendations in the EECC standards are not in agreement with recommendations of expert dental panels or professional organizations. For example, some

recommendations about timing of the child's first dental visit and use of fluoride toothpaste conflict with recommendations from professional dental organizations (10). Inconsistency across guidelines can confuse EECC staff, which could discourage adoption or lead to improper implementation of oral health activities, both of which could attenuate oral health impact. Future research should examine the extent to which EECC guidelines are consistent with professional dental guidelines and make recommendations for changes as needed.

In addition to establishing the consistency of guidelines with recommended best practices, research should be conducted to determine the effectiveness of oral health practices recommended for implementation in EECC programs, and more firmly establish the evidence base for guidelines. Evidence for their effectiveness is limited, primarily because of the small number of studies that have been done with EECC populations. A systematic review by the Task Force on Community Preventive Services on the effectiveness of EECC programs in affecting health found only one dental study that met the review criteria, and thus concluded that insufficient evidence exists to determine the effectiveness of these programs on improving dental outcomes (39). A few individual studies have demonstrated positive impacts of EECC interventions on early childhood caries (40,41) and dental use (42).

Dissemination and adoption of standards

Despite the availability of comprehensive EECC standards about oral health, their adoption rates and thus, their role in improving oral health disparities are unknown. Limited staff and resources make it difficult to enforce licensing requirements (11). Because most standards are voluntary and lack sufficient enforcement mechanisms, many children likely attend EECC programs at which oral health guidelines have yet to be adopted. A recent study found low use of tooth brushing in day care centers in Toronto, Canada, but staff were receptive to implementing these programs (43). Future research should examine the opinions and knowledge of EECC staff about oral health because this may affect adherence to regulations.

Regulations and standards should be supported by guidelines and materials that facilitate implementation. As described previously, Massachusetts disseminates information to facilitate implementation of its brushing regulation. AAP/APHA integrates specific instructions into their manual of standards and OHS supplements their performance standards with required program instructions and supporting online materials.

Limitations

Our assessment might underestimate the number of oral health recommendations contained in regulations and standards. We did not examine EECC dietary guidelines – an important risk factor for ECC. EECC programs are required to respond to licensing regulations and monitoring by a number of agencies, such as those responsible for health and sanitation. We did not review these supplemental materials, which may include additional requirements or recommendations related to oral health. Additionally, we did not examine governmental regulations for family child care homes.

Conclusion

EECC programs provide settings in which children can be reached with health promotion and disease prevention activities, especially those from low-income families. Because these children are at great risk of developing caries, EECC programs are an important setting to promote oral health. Despite minimum state regulations and variation in EECC standards, comprehensive oral health guidelines do exist. An opportunity exists to enhance the limited attention to oral health in state regulations. States can use comprehensive guidelines, such as those from AAP/APHA and OHS, to inform and strengthen the oral health content of their regulations. If coupled with appropriate training and enforcement mechanisms, the inclusion of more oral health content in state licensing regulations may help to improve child oral health and reduce disparities by introducing appropriate oral health practices at a young age.

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