Interface with a Community Feeding Team to Address Oral Health of Special Needs Children: A Pilot Project

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Introduction

Oral health is integral to overall health and well-being. Oral Health in America: A Report of the Surgeon General states “there is a ‘silent epidemic’ of oral disease which is affecting our most vulnerable citizens.” In response to key findings in the Surgeon General’s report, the National Call To Action To Promote Oral Health was written to encourage private and public entities to collaborate to address the issues of oral health disparities, including those with disabilities and special needs.¹

Review of the Literature

In an effort to bring together the medical and dental community to address oral health as a component of overall health, The American Academy of Pediatric Dentistry (AAPD) and the Children’s Dental Health Project (CDHP) initiated a project titled The Interface Between Medicine and Dentistry in Meeting the Oral Health Needs of Young Children.² The project examined the challenges surrounding the provision of oral health care to children under 5 years of age.² In particular, the white paper developed by this project focused on access to care issues and strategies for overcoming these challenges.

Abstract

Purpose: Children with special health care needs (CSHCN) are most in need of anticipatory guidance and prevention. Achieving and maintaining optimal oral health is challenging, due to the many challenges this group faces both in medical and dental care. The purpose of this pilot project was to identify the educational needs of health professionals on a feeding team to prepare them to provide anticipatory guidance to special needs children, along with preliminary investigation into the role of the dental hygienist in improving the oral health of the CSHCN served by the feeding team.

Methods: Small focus groups were used to determine educational needs of the feeding team and provide initial identification of the role of the dental hygienist on the feeding team.

Results: The needs assessment indicated interest in an in-service to address connections between oral health and feeding issues, i.e. problems related to tube feeding and oral hypo- and hypersensitivities of the CSHCN.

Conclusion: This project suggests there is a role for the dental hygienist on the feeding team to provide preventive dental care and referral as well as education for caregivers and therapists. Future research is needed to further delineate the role of the dental hygienist on the feeding team as well as implementation of a model for integrating them into this multidisciplinary team.

Keywords: Oral health, Health care disparities, Dental care for disabled, Children with disabilities, Interdisciplinary Health Team

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Research: Assess the impact of dental hygiene services on the outcomes of care for patients with special health care needs

One of the groups most in need of anticipatory guidance and prevention identified by the AAPD and CDHP project were children with special health care needs (CSHCN),³ who are defined as “those who have serious physical, behavioral or emotional conditions that require health and related services beyond those required by children generally.”⁴ Achieving and maintaining optimal oral health for CSHCN is challenging due to the complex issues this group faces both in medical and dental care. Issues encountered by CSHCN and their caregivers when trying to access oral health care include accessibility, financial, psychosocial, physical, communication and medical.³
Given the complexity of the special needs patient, Casamassimo suggests the following providers have a role to play in attaining and maintaining optimal oral health: dentist, dental hygienist, dental assistant, primary care physician, specialty physician, allied therapist and patient and/or caregiver. One of the challenges to creating interdisciplinary partnerships is the lack of education and experience in caring for children with special needs for dental professionals and the tendency of dental professionals to work in isolation from other health professionals. In addition, other non-dental health professionals have little or no education in the area of oral health issues, which leaves them ill-prepared to reinforce developmentally appropriate anticipatory guidance.

One of the steps in the Washington State Collaborative Action Plan on Oral Health Access for Special Populations is to provide basic training in oral health to non-dental professionals who care for CSHCN, including physicians, nurses, physician assistants and dietitians, among others. One way this might be accomplished is by working with multidisciplinary feeding teams who care for some of the most challenging special needs children. The Washington State Department of Health suggests the dynamic interdisciplinary approach utilized by community feeding teams appears to be an opportunity for the dental hygienist to interface with the feeding team in providing preventive oral health education and preventive services in the form of collaborative, sustainable models of health care.

Feeding Teams: An Interdisciplinary Approach to Care

A feeding team is an interdisciplinary or multidisciplinary team of health professionals who work collaboratively in evaluating and assessing issues surrounding feeding to avoid duplication of efforts and to assist in prioritizing nutrition issues faced by CSHCN. Professional members of the feeding team typically include a physician, nurse, registered dietitian, speech therapist, physical therapist and occupational therapist, among others. The teams evaluate oral motor skills, dental health, feeding practices, dietary intake and caregiver expectations. Assessment and intervention may include, but is not limited to, assessing swallowing ability, therapeutic feeding techniques, proper positioning, appropriate quantities of food, adequate dietary intake to meet nutrient needs and appropriate use of feeding tubes.

Children with special needs comprise 18% of the population and are at greater risk of developing oral disease, and dental care is reported to be the number one unmet health care need. A national survey in 2005 found 81.1% of CSHCN require preventive dental care, with 24.2% needing other dental care. In addition, the survey found 6.3% were not able to obtain preventive dental care and 2.6% were not able to obtain other dental care. As licensed oral health professionals skilled in providing oral health promotion and prevention services, the dental hygienist is in a unique position to interface with the members of the community feeding team to provide them with the knowledge needed to support parents and caregivers with anticipatory guidance, preventive dental care and referral for other dental care.

Common Issues Addressed by Feeding Teams in Special Needs Children

Although it has been estimated that 3 to 10% of all children have feeding problems, 26 to 90% of those with special needs are affected. Medical conditions, medications and feeding problems of special needs children may ultimately affect tooth development and increase the risk for dental caries, periodontal disease and fungal infections.

Gastroesophageal Reflux Disease

Gastroesophageal reflux disease (GERD) is one of the most common gastrointestinal disorders in children and infants. However, many children outgrow it around 1 year of age. GERD is the regurgitation of stomach acid contents into the oral cavity because the lower esophageal sphincter does not close properly, causing troublesome symptoms. CSHCN are predisposed by neurologic and oral–motor disorders to chronic GERD.

Research suggests children with GERD have significantly higher levels of salivary mutans streptococci than children without GERD. The combination of an acidic environment, along with bruxism or hyperactive bite common in CSHCN, results in a more rapid rate of erosion, which may result in increased pain and sensitivity from pulp exposure. However, the research demonstrates inconsistent results in regard to the development of caries in children with GERD. Preventive treatment for GERD includes lifestyle changes along with medications or surgery.

Oral, Pharyngeal and Esophageal Motor and Sensory Disorders

Oral, pharyngeal and esophageal motor disorders may occur when structure, function or maturation of these systems are disrupted. These motor disorders are associated with many feeding
issues impacting a child’s oral health. The etiology of these motor disorders includes: neurological disorders, intellectual disturbances (such as mental retardation and dementia), traumatic brain injury, central nervous system disorders (such as cerebral palsy), intra-oral and structural problems (congenital clefts or missing teeth) and the loss of extra-oral integrity (aggressive cancer therapy).19

This complex of motor disorders can result in signs and symptoms such as loss of muscle tone of the cheeks and lips, resulting in sialorrhea (drooling) and prolonged oral clearance of food, trouble closing lips, unclear speech, bruxism, oral hyposensitivity or hypersensitivity, tongue thrust, biting on eating utensils during meals and dysphagia (difficulty swallowing).19,20

Sialorrhea

Sialorrhea results in a number of issues, such as malodor, dehydration and chapping of the lips with a risk for secondary fungal infections.21 Sialorrhea is common in CSHCN with neurological impairment, such as cerebral palsy.21 In addition, it is associated with GERD.21 Excessive salivation is also more common in CSHCN who were taking 4 or more medications and who use gastrostomy tubes (G–tubes).22

Excessive saliva interferes with the cohesiveness of the bolus, resulting in swallowing difficulties and a choking hazard.23 Difficulty with forming a bolus also slows the rate of oral clearance, keeping food in contact with the teeth for longer periods of time and increasing the risk for dental caries.24,25

The term posterior drooling refers to the situation when saliva pools in the hypopharynx rather than spilling out over the lips.26 Normally, the swallowing reflex would be stimulated, but in some cases there is a loss of oral–sensory perception, resulting in dysphagia.26 As a result, there is risk of gagging, vomiting, choking and aspiration of saliva and oral bacteria into the trachea or lungs. While it has long been believed posterior drooling is common in CSHCN with cerebral palsy, research now suggests it may be due to poor oral motor function and/or dysphagia rather than sialorrhea.26,27

Sensory Processing Disorders

Children with sensory processing disorders have difficulty dealing with information from the senses (auditory, visual, touch and oral), which present challenges in providing dental care.28 CSHCN with hyposensitivity become desensitized to stimuli and may not experience pain in the same way as other children. For instance, there are a number of case reports of autistic children with hyposensitivity extracting their own teeth along with other self-injurious behaviors.29,30

Persons fed by tube exhibit higher levels of oral hypersensitivity as a result of non–oral feeding.31 These children require desensitizing therapy, such as touch and massage therapy.31 Although a team approach is utilized to deal with sensory processing disorders, the occupational therapist is critical in assisting with desensitizing the client to oral hygiene procedures and would benefit from working with a dental hygienist. A process of desensitization therapy for oral self–care begins with touch to the lips with gloved fingers, followed by a foam swab (Toothette®), and then progresses to a tooth brush.32 If sensory hypersensitivity is not addressed, it may develop into facial or oral defensiveness, which is a conditioned response to stimuli that is perceived to be unpleasant by the child.33 Oral defensiveness may present as reflex biting, lip pursing, facial grimacing, crying, gagging, head turning or pushing away things coming towards the mouth or face.33 An oral assessment of a small group of CSHCN reported 50% of children with autism (n=39) and other developmental disabilities (n=16) exhibited oral defensiveness.34 Oral defensiveness requires a team approach for resolution.

A hyperactive bite (tonic bite reflex) is a forceful, sustained jaw closure occurring after stimulation of the teeth or gums.35 It is often difficult to release and may cause damage to any object placed between the teeth. The tonic bite reflex may prohibit the caregiver from providing oral hygiene care, such as basic tooth brushing and flossing.

Medications

Advances in medicine allow CSHCN to live to adulthood with chronic diseases and disabilities. Medical conditions and disease in these children require a wide range of medications based on their individual needs. These children usually take these medications in liquid form which contain higher levels of sucrose, ranging from approximately 3 to 6 grams per dose.36 Children taking medications long–term are at increased risk for dental caries.37 In addition to the increased caries risk from sucrose–containing medications, side effects such as xerostomia may further increase the risk. Xerostomia is a side effect of over 400 medications, however there is a lack of evidence in regard to its prevalence in pediatric populations.38,39 Given the issues CSHCN face from the side effects and sucrose content of medications, it is critical to ad-
dress dietary guidelines and oral self-care to reduce cariogenic activity and risk for dental caries.

**Failure to Thrive**

No matter what the cause, feeding problems, along with the medical conditions and medications utilized in the care of the CSHCN, often results in failure to thrive. The definition of failure to thrive varies, but it is generally described in children as inadequate physical growth for age with weight falling below the fifth percentile on standardized growth charts. Failure to thrive can be classified as inadequate calorie intake, excess metabolic demand, defective utilization or poor absorption of nutrients.

CSHCN require high calorie diets for catch-up growth. The medical nutrition prescription in toddlers and children calls for additional caloric intake which may be provided with a high protein nutrient dense diet with added fats, such as adding cheese and peanut butter to foods. Children may also use high calorie liquid supplements to meet their protein and caloric needs. Unfortunately, parental anxiety over failure to thrive can result in children receiving snacks and juices that are high in carbohydrates, have little nutritional value and can potentially increase the risk for dental caries, as well as complicate management of failure to thrive. This underscores both the importance of oral hygiene care and the role of diet in the development of dental caries.

**Enteral Nutrition**

Many CSHCN have feeding issues related to gastrointestinal disorders, neuromuscular disorders, cardiopulmonary disorders, failure to thrive and prematurity which require enteral nutrition or tube feeding to ensure adequate nourishment and hydration.

While there are no statistics on the number of children receiving tube feeding, according to the federal Medicaid statistics for the years 1989 to 1992, there were 152,000 adults and children receiving tube feeding. The ultimate goal for overall long-term health and gastrointestinal health is to transition the child to consumption of food by mouth. The transition from tube feeding to oral feeding involves progressing from feeding tube only with no oral consumption, tube feeding while introducing snacks consumed orally and, finally, to tube feeding for liquids with solid foods consumed orally.

For children requiring nutrition support longer than 4 weeks, surgical placement of a feeding tube is required to ensure adequate nutrition. These types of feeding tubes may be in place for variable lengths of time, ranging from a few months to a lifetime. The most common type of feeding tube is the G–tube, which is surgically placed through the abdominal wall into the stomach. This type of tube may also be referred to as a PEG (percutaneous endoscopically guided gastrostomy) and appear to be quite safe and effective even in very small infants. Another type of feeding tube is the gastrojejunostomy tube (GJ tube), which is placed surgically by inserting the feeding tube through the abdominal wall into the jejunum. The GJ tube is used most frequently in children with severe GERD. These feeding tubes are used to provide the bulk of the child’s nutritional needs, however, most children may still be able to eat small amounts of food orally.

Although research in regard to the oral health of these children is limited, the available evidence suggests CSHCN with G–tubes tend to have significantly more plaque and calculus accumulations in spite of regular oral hygiene and dental care. CSHCN also have significantly higher levels of oral pathogens implicated in aspiration pneumonia, such as Haemophilus influenzae, with trends toward more gram negative enteric rods. These children are also more likely to have had aspiration pneumonia than children without a G–tube. For this reason, proper oral hygiene to optimize plaque removal is imperative to minimize the risk for aspiration pneumonia.

Given the challenges children with special needs encounter, this project was designed to begin exploration of the role the dental hygienist might play on a multidisciplinary feeding team. The purpose of this pilot was twofold: to identify the educational needs of the health professionals at The Children’s Therapy Center (CTC) to prepare them to provide anticipatory guidance to special needs children, and a preliminary investigation into the role of the dental hygienist in improving the oral health of the special needs children served by the feeding team.

**Project Description**

The CTC feeding team comprises one of Washington’s community feeding teams, which function under the State Department of Health, CSHCN Program and address the feeding and nutritional needs of special needs children. The group participating in the project included 26 (n=26) professionals and staff members consisting of physical therapists, speech therapists, occupational therapists, family
resource coordinator, caregivers and procurement and development staff member.

**Phase 1: Educational Program**

The investigator met with the CTC director, who is also a speech therapist, to discuss feeding issues addressed by the CTC’s therapists. The CTC director served as an intermediary by facilitating presentation of the project to the therapists. The needs assessment was conducted with 3 open-ended questions sent via internal e-mail to the staff members of the CTC. Eight CTC members (30.7%) responded, providing a total of 6 topics of interest. Responses indicated interest in an in-service presentation to address the topic of connections between feeding issues and oral health of the special needs child (Table I).

In a follow-up focus group with 2 therapists, the needs of the target population were further defined. A literature review was also conducted to further elucidate the key issues related to oral health promotion for special needs children in order to develop educational objectives for the in-service. Based on the literature review and input from therapists, an in-service program titled Oral Health Care Needs and the Special Needs Child was developed. The topics for the program included:

- Oral health problems associated with tube feeding
- Medications and sugar content
- Early childhood caries and transmission of bacteria
- Preventive measures for the special needs child
- Adaptations and oral hygiene self-care
- Healthy snacks
- Resources for access to dental care

**In-service objectives included:**

- Identify resources for access to dental care for the special health care needs child

The methods selected for the in-service included presentation software using visual images and text in slide format, along with small group discussion of the concepts being presented to reinforce key concepts. This allowed for meeting the needs of a variety of learning styles and, more importantly, allowed for accommodation of the learning needs of the hearing impaired participants. An interpreter was also present to aid in translating the verbal information for the hearing impaired.

Following the in-service program, an evaluation was conducted in the form of a 5 item survey in a Likert-scale format using a 1 to 5 rating scale (strongly agree to strongly disagree). Four of the items focused on the value of the presentation and effectiveness of the presenter, with 1 item aimed at learning if the group felt dental hygienists should be a part of the feeding team (Table II).

**Table I: Needs Assessment of CTC Staff**

<table>
<thead>
<tr>
<th>Identification of Need</th>
<th>Number of Responses Indicating Need for Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are there specific issues which impact the oral health of the CSHCN? If so, what are these conditions?</td>
<td></td>
</tr>
<tr>
<td>Problems related to tube feeding</td>
<td>8</td>
</tr>
<tr>
<td>Oral motor dysfunction</td>
<td>8</td>
</tr>
<tr>
<td>Oral hypersensitivity and hyposensitivity</td>
<td>6</td>
</tr>
<tr>
<td>GERD</td>
<td>6</td>
</tr>
<tr>
<td>Access to care (finding providers, finding providers who accept Medicaid and DSHS coupons, and finding resources/referrals for care)</td>
<td>4</td>
</tr>
<tr>
<td>Aspiration pneumonia</td>
<td>2</td>
</tr>
<tr>
<td>2. Are there topics related to oral health that you would like to learn more about? If so, what are these topics?</td>
<td></td>
</tr>
<tr>
<td>Basic introduction to oral health</td>
<td>7</td>
</tr>
<tr>
<td>When should child first see have a dental exam and frequency</td>
<td>2</td>
</tr>
<tr>
<td>GERD</td>
<td>6</td>
</tr>
<tr>
<td>Preventive care</td>
<td>6</td>
</tr>
<tr>
<td>Effects of medications on the teeth</td>
<td>1</td>
</tr>
<tr>
<td>3. Are there neurological impairments or developmental conditions which put the CSHCN at greater risk for oral health related problems? If so, what are these conditions?</td>
<td></td>
</tr>
<tr>
<td>Cerebral palsy</td>
<td>5</td>
</tr>
<tr>
<td>Cystic fibrosis</td>
<td>4</td>
</tr>
</tbody>
</table>
Table II: In–Service Evaluation Results

<table>
<thead>
<tr>
<th>The information presented will be useful to me in my work with this population of children</th>
<th>Strongly disagree=1 (n)</th>
<th>Somewhat disagree=2 (n)</th>
<th>Neutral neither=3 (n)</th>
<th>Somewhat agree=4 (n)</th>
<th>Strongly agree=5 (n)</th>
<th>Percentage Somewhat or Strongly Agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>The topics were presented at an appropriate level of understanding</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>19</td>
<td>21/22=95%</td>
</tr>
<tr>
<td>The presenter demonstrated knowledge of the topic and was able to convey the information</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>20</td>
<td>20/22=91%</td>
</tr>
<tr>
<td>The dental hygienist plays a valued role in the multidisciplinary, collaborative approach</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>19</td>
<td>19/22=86%</td>
</tr>
<tr>
<td>The one–hour time allotment was appropriated for the information presented</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>14</td>
<td>19/22=86%</td>
</tr>
</tbody>
</table>

**Phase 2: Feeding Team Questionnaire**

The item on the in–service program evaluation used to assess the value of the dental hygienist on the feeding team read: “The dental hygienist plays a valued role in the multidisciplinary, collaborative approach.” Based on strong agreement with the statement by participants (86%) (Table II), a questionnaire was developed to further explore the role of the dental hygienist on the feeding team. The CTC director assisted with development of the questionnaire.

The feeding team questionnaire consisted of 6 open–ended questions aimed at gathering information from the therapists about the perceived need for a dental hygienist as a member of the feeding team, to assess the therapists’ knowledge of the services provided by the dental hygienist, and to seek input into the roles in which the dental hygienist could contribute to the interdisciplinary approach of the feeding team.

The investigator prepared an introduction in which she presented the nature of the project and solicited participation on the part of the therapists in completing the feeding team questionnaire, which was distributed via e–mail. An attachment of the Oral Health Care Needs and the Special Needs Child presentation that was previously presented to the CTC staff during a weekly in–service meeting was also provided. Four therapists responded via e–mail to the questions.

Responses to question #1 (Do you see a need for an oral health component to the feeding team?) indicated all respondents felt there was a need for an oral health component. Comments included “It seems like an excellent opportunity to educate and problem solve with families who deal with feeding issues that may lead to dental problems” and “I can think of many opportunities addressing oral health; we could really improve access to care...”

Topics suggested in response to question #2 (If so, what topics and information might this include?) included: time of first dental visit, eruption patterns, nutritional issues (ex: children with cerebral palsy), sugar in medications, gastro–esophageal reflux disease and acid oral environment, oral health information for caregivers, oral health risk factors and preventive measures, along with referral sources who understand their unique needs.

In response to question #3 (How do you see this oral health promotion and prevention being delivered?), respondents indicated “It would be helpful for a dental hygienist to educate caregivers and the feeding team” and be available “for difficult situations,” “make printed educational materials..."
The purpose of Phase 1 was to identify the educational needs of the health professionals at the CTC to prepare them to provide anticipatory guidance to special needs children. Based on initial needs assessment with a sample of CTC members, 6 topics of interest were identified, focusing on the connections between feeding issues and oral health of the special needs child. Of primary interest to the group was oral health related to tube feeding, oral motor dysfunction, oral preventive care, oral hypo- and hyposensitivity and GERD. The in-service evaluation suggested the information was well received and of interest to the feeding team. Eighty-six percent of participants (n=22) strongly agreed that “The dental hygienist plays a valued role in the multidisciplinary, collaborative approach.” This suggested need for future research to identify the role of the dental hygienist on the feeding team, as well as implementation of a model for integrating them into this multidisciplinary team.

The purpose of Phase 2 was preliminary investigation into the role of the dental hygienist in improving the oral health of special needs children served by the feeding team. A small focus group (n=4) participated in the feeding team questionnaire, which is a significant limitation and limits generalization of the findings. However, the preliminary findings suggest there is a role for the dental hygienist as a contributing member on the interdisciplinary feeding team. The highest priority identified was dental care and referral with providing education and training for feeding team members and caregivers. Based on

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### Table III: Priority of Oral Health Prevention and Promotion Services

<table>
<thead>
<tr>
<th>Oral Health Prevention &amp; Promotion Services</th>
<th>Priority #1</th>
<th>Priority #2</th>
<th>Priority #3</th>
<th>Priority #4</th>
<th>Priority #5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide dental care and referral for dental services</td>
<td>n=3</td>
<td>n=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide the therapists with training on addressing oral hygiene care for persons with oral hypo- and hypersensitivities</td>
<td></td>
<td>n=2</td>
<td>n=1</td>
<td>n=1</td>
<td></td>
</tr>
<tr>
<td>Provide in-service oral health intervention presentations to the therapists; provide on-site oral health intervention presentations to children, parents, and caregivers. Have a “dental day” at CTC</td>
<td></td>
<td>n=1</td>
<td>n=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide oral health assessment and monitor oral health needs</td>
<td>n=1</td>
<td></td>
<td></td>
<td></td>
<td>n=3</td>
</tr>
<tr>
<td>Provide printed oral health related materials and resources to therapists and caregivers; explain the use special oral hygiene devices.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n=4</td>
</tr>
</tbody>
</table>

available for the feeding team and caregivers” and “hold “clinic day’ at CTC”. For question #4 (Were you aware that in Washington state, a dental hygienist is licensed to provide preventive services to underserved populations, persons in designated rural areas, and Medicaid-eligible children?), 3 of the 4 respondents were not aware the dental hygienist could provide preventive services to these populations. In response to question #5 (Do you currently utilize any type of personalized oral health assessment forms?), all respondents reported oral health assessment forms were not utilized, but they felt it would be a benefit to clients.

These same 4 therapists selected and prioritized the 5 oral health prevention and promotion services which they would most like to see delivered by the dental hygienist as a member of the feeding team (Table III).

**Discussion**

Literature about the role of the dental hygienist on interdisciplinary teams is limited. This pilot project explored the role of the dental hygienist on feeding teams who provide services to CSHCN. The findings from this pilot project are consistent with the available literature. Nowjack-Raymer also proposed a role for the dental hygienist in the coordination of the clinical cleft palate team, but primary research in this area is lacking.

The primary research in this area suggested the dental hygienist plays a role on the interdisciplinary dysphagia team. Nowjack-Raymer also proposed a role for the dental hygienist in the coordination of the clinical cleft palate team, but primary research in this area is lacking.
the recommendations in Phase 2, this project calls for further investigation into the possible aspects of care provisions, such as anticipatory guidance and education for caregivers, monitoring and continued support for optimal oral self-care, sealants, fluoride varnish and oral prophylaxis.

Although dental hygienists in most states in the United States are not able to perform restorative care, dental hygiene graduates are competent in providing oral health prevention and promotion services. However, the ability of dental hygienists to perform preventive dental care in alternative settings is limited in many states by dental practice acts. Washington is 1 of approximately 30 states the American Dental Hygienists’ Association (ADHA) indicates as direct access states.50 Direct access means the dental hygienist can initiate treatment based on their assessment of the patient’s needs, without the specific authorization of a dentist. They are able to treat the patient without the presence of a dentist, and can maintain a provider–patient relationship. Dependent upon the specifications of the dental practice acts in the direct access states (regarding providing care in alternative settings), dental hygienists are in a position to initiate collaborations with interdisciplinary teams, such as the feeding team, to increase access to preventive oral health promotion and care.

In Washington, the law allows the dental hygienist to practice unsupervised in specified alternative settings to serve individuals with disabilities.51 Given that community feeding teams are state funded entities and are often located in health care facilities caring for populations covered by Medicaid, it is likely this setting would qualify as a direct access setting for the dental hygienist. However, since direct access is not available in all states, more research into the value of dental hygienists on multidisciplinary teams is needed in order to demonstrate the need to expand unsupervised dental hygiene practice.

In addition to the need for the dental hygienist to have direct access to participate on the multidisciplinary feeding team, direct reimbursement by Medicaid and insurance companies is also a consideration. Washington is 1 of approximately 15 states which directly reimburse dental hygienists for services under the Medicaid program.52,53 Expansion of direct reimbursement is likely to be dependent upon research and outcome assessment of the cost effectiveness of dental hygienists in alternative settings in reducing medical and dental costs. This is an area where significant research is needed and the dental hygiene profession may want to look towards other health care providers for models on how this can be accomplished. Beginning in the 1990s, dietetics began generating cost effectiveness data for nutrition services and, as a result, registered dietitians are not only Medicaid providers, but can also be reimbursed for certain nutrition services by Medicare.54,55 The American Dietetic Association makes cost effectiveness data available as a member benefit to aid in advocacy efforts, which may be something the ADHA may be able to provide in the future once adequate research is conducted.

Conclusion

The experience of working with the feeding team at CTC provided insight and perspective to the interdisciplinary nature of the teams along with preliminary information about the oral health needs of persons served by feeding teams and the potential role of the dental hygienist as a member of the interdisciplinary team. The project was reciprocal in nature, in that it served to inform the feeding team members of the services and expertise a dental hygienist is able to contribute, as well as providing the dental hygienist with an understanding of the dynamic interdisciplinary nature of the feeding team. In moving towards interdisciplinary teams, it will be critical to continue this collaborative approach with mutual respect for the value each member brings to the team.

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References


