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Chapter

Building a Dental Home Network for Children with Special Health Care Needs

Mark DeRuiter, Jeffrey Karp and Peter Scal

Abstract

Children with special health care needs (SHCNs) live in all communities. They present with a diverse group of diagnoses including complex chronic conditions and diseases; physical, developmental, and intellectual disabilities; sensory, behavioral, emotional, psychiatric, and social disorders; cleft and craniofacial congenital disabilities, anomalies, and syndromes; and inherited conditions causing abnormal growth, development, and health of the oral tissues, the teeth, the jaws, and the craniofacial skeleton. Tooth decay, gum disease, dental injuries, tooth misalignment, oral infections, and other oral abnormalities are commonly seen or reported in the health history of children with SHCNs. Nationally, dental and oral health care ranks as the second most common unmet health need, according to the most recent National Survey of Children with Special Health Care Needs. The State of Minnesota does not have enough dental professionals prepared to meet the demand for care. As a result, children with SHCNs either go untreated or receive inadequate services resulting in treatment delays, the need for additional appointments, poor management of oral pain and dysfunction, adverse dental treatment outcomes and/or a lack of appropriate referrals to needed specialists. Research suggests children with SHCNs are best served when assigned to dental homes where all aspects of their oral health care are delivered in a comprehensive, interdisciplinary, and family-centered way under the direction of knowledgeable, experienced dental professionals working collaboratively with an array of allied health, medical professionals, and community partners. An interdisciplinary team consisting of a pediatric dentist, pediatric physician, and speech-language pathology innovator collaborated to advance current and future dental providers' knowledge and comfort in providing care for children with SHCNs and was accepted into the Clinical Scholars program. Their interdisciplinary collaborative team project was named MinnieMouths and included the following six methods or critical endeavors to ensure success: 1. Development of a project ECHO site focused on advancing care for children with SHCNs. 2. Creation of a 28-participant web-based professional network of current dental, community health liaisons, family navigators, and medical health providers. 3. Establishment of a 32-participant web-based interface of dental and medical students and residents, including new-to-practice dental providers. 4. Launching an annual conference focused on advancing oral health care for children with SHCN. 5. Build a toolkit aimed at allowing dentists and future leadership teams to launch dental home networks focused on children with SHCN. 6. Building a Dental Homes Network Field Guide for Providers who attended our first in-person conference. Findings from the MinnieMouths project suggest that

development of peer networks to advance dental homes for children with SHCNs has merit. Network participants gained skills in collaborating with a range of health care providers, understanding the complexities of working within and among health and dental care systems to coordinate care, and the need to better understand and advocate for a more robust medical and dental reimbursement program when launching dental homes for children with SHCN.

Keywords: health care, special needs, dental, oral, dental home, teleECHO, network, clinics, education, toolkit, telementoring

1. Introduction

Today's literature supports a growing need for specialized care and dental homes for children with special health care needs (SHCN). As the rate of children with SHCNs grows, the number of highly qualified oral health care providers who are available to care for them remains stagnant. As the pool of research grows, many health care providers and health systems' leaders understand more fully that oral health is an integral part of general health and well-being [1]. Creating a network of oral health care providers and professionals who support the advancement of dental homes for children with SHCNs has never been more critical.

1.1 Defining the problem

Based on data from the U.S. Census Bureau, approximately 85.3 million Americans live with a disability, with about two-thirds of those classified with a disability as having a severe disability [2]. Of the 85.3 million living with a disability, 12.5 million individuals are children [3].

The American Academy of Pediatric Dentistry defines special health care needs as "any physical, developmental, mental, sensory, behavioral, cognitive, or emotional impairment or limiting condition that requires medical management, health care intervention, and use of specialized services or programs." Conditions may be developmental, congenital, or acquired through disease, trauma, or environmental causes and may impose limitations in performing daily self-maintenance activities or substantial limitations in a significant life activity. Oral and general care for children with special needs requires specialized knowledge, as well as accommodative measures that are beyond routine, increased awareness and attention to specialized care, and adaptation within the clinical setting [4].

Children with SHCNs are at increased risk for oral diseases throughout their lifetime. Oral diseases have a direct and devastating impact on the health and quality of life of those with specific systemic health problems or conditions [5]. Research suggests children with mental, developmental, or physical disabilities who cannot understand, assume responsibility for, or cooperate with preventive oral health practices are susceptible to lower overall health outcomes, including long-term oral health [6].

SHCNs also include disorders or conditions which manifest only in the orofacial complex. These disorders include amelogenesis imperfecta (unusually small teeth), dentinogenesis imperfecta (a genetic condition causing discolored teeth), cleft lip/palate (incomplete fusion of the lip and/or hard/soft palate), and a range of additional health concerns. While these patients may not exhibit the same physical or cognitive limitations of other patients with SHCN, their needs are unique, impact their overall health, and require oral health care of a specialized nature.

As improvements in medical care afford children with SHCNs a longer, healthier lifespan, many formerly acute and fatal diagnoses have become chronic and manageable conditions. Unfortunately, a subset of healthcare organizations, including dental offices, are not prepared for a large pool of uniquely challenged patients. The Americans with Disabilities Act (ADA) defines the dental office as a place of public accommodation [7] meaning that all individuals must be afforded physical access to care, including wheelchair ramps and designated parking spaces. Failure to accommodate patients with SHCNs is not only discriminatory but also a violation of federal and state law. Thus, oral health professionals and the systems that support care are obligated to be familiar with these regulations to ensure compliance. While dental offices have developed new models to provide care to children with SHCN, the initial education, ongoing training, and financial reimbursement provided to practitioners impacts access to care.

Optimal health of children is more likely to be achieved with access to full health care benefits. Families and those adults caring for children with SHCNs pay greater out of pocket amounts and have higher expenditures in general than those families without special needs children. Research suggests that financial limitations and reimbursement rates are cited as the most common barriers to medically necessary oral health care for children with SHCNs. Insurance plays a vital role for families with children with SHCN, but it still provides incomplete protection [8]. Because of the unmet dental care needs of individuals with SHCN, emphasis on a dental home and comprehensive, coordinated services should be established, including essential insurance coverage and explicit financial support [9].

Limitations in oral health care do not typically end as children with SHCNs reach adulthood. Health insurance and oral care benefits coverage may actually become even more restrictive [10]. Data find that many individuals with SHCNs rely on government funding to pay for medical and dental care. Research also suggests these same individuals lack adequate access to private insurance for general and oral health care services. This lack of preventive and timely therapeutic care may increase the need for costly care and exacerbate systemic health issues later in life [10].

Nonfinancial barriers such as psychosocial, structural, cultural considerations, priorities, and transitions to care as adults have a negative impact on access to oral health care among children with SHCN [11]. Psychosocial factors associated with access for patients with SHCNs include reduced understanding or misguided oral health beliefs and norms, as well as likely negative past dental experiences for patients, caregivers and/or family members. Access to transportation, reduced school attendance thereby affecting absence policies and truancy issues, actual and perceived discriminatory treatment, and limitations in the number of available appointment slots within dental offices for those who have Medicaid coverage are documented structural barriers [10]. Priorities and attitudes also serve as impediments to oral care. Parents and medical providers' limited knowledge may hinder children with SHCNs from securing preventive dental care [12]. Moreover, many families determine that their child's more critical health conditions need to take precedence over oral health [13]. Lastly, in a survey of U.S. and Canadian dental schools, data also revealed that pediatric dentists expressed concerns about decreased access to oral health care and dental homes for patients with SHCNs during their transition to adulthood. Transitioning to a dentist who is knowledgeable and comfortable with adult oral health care among patients with SHCNs is difficult [14].

Findings suggest children and adults with SHCN who have a dental home and consistent care provided by trained oral health professionals are more likely to receive appropriate preventive and routine care. The dental home model allows

for individualized preventive oral health practices and reduces the child's risk of preventable dental and oral disease [15]. Building a community network of oral and other health professionals committed to making dental homes for children with SHCN is essential. Given the limited financial resources, known barriers, and concerns regarding care transition to adulthood, there is a demonstrated need for a more extensive body of trained professionals.

2. Wicked problem impact project (WPIP) description

Data clearly show that children with SHCNs would benefit from a dental home where all aspects of their oral health care can be delivered in a comprehensive, continuously accessible (including into adulthood), coordinated, culturally competent, interdisciplinary, and family-centered way under the direction of knowledgeable, experienced dental and associated professionals who are comfortable and competent to address their patients' unique dental and oral health treatment needs [16]. We hypothesize that dental and other health care professionals, along with community health workers and interested family members, will embrace the dental home concept and participate in a community-based effort to not only improve dental care for children with SHCNs but also work to build a sustainable program.

Sadly, Minnesota, like most states, does not have enough dental professionals able and ready to meet the dental and oral health demands of its population. As a result, children with SHCNs either go untreated or are subjected to disorganized handoffs between pediatric healthcare professionals, general dentists, local dental specialists, and regional tertiary dental centers. Handoffs are a source of unnecessary appointments, treatment delays, inadequate management of oral pain and dysfunction, limited or absent referrals to appropriate specialists, and result in negative dental treatment outcomes. The time has come to support and prioritize a dental home across the pediatric life course for all children with SHCNs in Minnesota.



Figure 1. Visual representation of Oral health wicked problem for children with special health care needs.

Dental care is the second most common unmet need for children with SHCNs [17]. The numbers are alarming. Minnesota has about 180,000 children with SHCNs, and our best estimates are that there are 103 pediatric dentists, with approximately 16 more in training in the state, to care for them.

As altruistic as they may be, oral health care providers often find themselves lacking knowledge, techniques, and networks to simultaneously manage the dental, medical, and behavioral aspects of care for children with SHCNs. Dentists frequently refer pediatric patients and patients with complex conditions to the University of Minnesota's pediatric dental clinic—one of only 3 hospital-based clinics in the state. **Figure 1** provides a graphic description of our wicked problem.

3. Methods

3.1 Background and context

The goal of the MinnieMouths project was to build interdisciplinary dental homes for children with SHCNs to provide quality care within communities where families live and thrive and capture the process so others could replicate our efforts in their communities. Our intervention incorporated principles from Project ECHO (Extension for Community Healthcare Outcomes), a model for lifelong medical learning and collaborative practice that links primary care physicians with specialist care teams to deliver quality treatment to patients with complex chronic conditions. The ECHO model is recognized nationally and internationally and was selected as one of the top solutions in the MacArthur Foundation 100&Change competition. The ECHO Institute at the University of New Mexico has established a process for groups to start or replicate the program and train in methods important to implementing an ECHO project. There is no fee for becoming a replication partner or to start an ECHO program.

Project ECHO breaks down the walls between specialty and primary care. It links expert specialist teams at an academic 'hub' with primary care clinicians in local communities who are the 'spokes' of the model. Together, they participate in regular sessions called clinics, which are like virtual grand rounds, and include mentoring and patient case presentations. The clinics are supported by teleconferencing technology. During the clinics, healthcare providers from multiple sites have educational sessions, share information, present patient cases, discuss new developments relating to their patients, and review treatment options and determine plans. (https://echo.unm.edu/about-echo/model/).

3.1.1 MinnieMouths infrastructure

The University of Minnesota was certified as our ECHO replication site and was also a source for some of our content experts such as pediatric dentists, pediatricians, psychologists, and other professionals with expertise in caring for children with SHCNs. The Minnesota Academy of Pediatric Dentistry facilitated access to Minnesota's pediatric community from which we could draw content experts. As our work unfolded, we also drew upon the expertise of experts across the country.

The MinnieMouths project team consisted of 1) the Clinical Scholars-enrolled leadership team of Peter Scal, MD, MPH (pediatrician); Mark DeRuiter, PhD, MBA (audiologist), and Jeffrey Karp, DMD, MS (pediatric dentist), and non-Clinical Scholars community-based extended team members: 2) a family navigator; family navigators are parents of children with SHCNs trained to partner with health care providers and community leaders, and 3) two Community Health Workers.

Our final piece of infrastructure was the establishment of video capabilities in the communities and practices of core participants, enabling them to participate in teleECHO clinics, not to see actual patients but to have structured educational sessions, receive information on forming community-based dental homes for children with SHCNs, discuss barriers and ways to overcome them, present and learn from case studies, and discuss best and emerging practices among all participants.

3.1.2 Approach

We pursued several methods in four phases to build a dental home network within Minnesota and beyond.

3.1.2.1 Start-up phase

Our initial step in planning the development of a dental homes network focused on children with SHCNs was to meet with diverse stakeholders across Minnesota and throughout the country to understand gaps in care, community knowledge, and provider confidence in providing care to children with SHCNs. Our formative meetings consisted of open-ended discussions with parents of children with SHCNs, family advocacy and health non-profits, pediatric healthcare providers, state-appointed leaders in developmental and physical disabilities, dental professionals (including many pediatric dentists), private dental insurance and government-supported Medicaid plan administrators, academicians working in interdisciplinary health team environments, and leaders of health professional associations. The team analyzed findings from our stakeholder conversations and developed a Driver Diagram, available in the Toolkit for Building a Dental Home Network for Children with Special Health Care Needs.

One of our early actions was to establish a Project ECHO replication site at the University of Minnesota's School of Dentistry. To our knowledge, this was the first Project ECHO site focused on dental care needs of children with SHCNs. In keeping with the Project ECHO model, the MinnieMouths project did not provide direct care to patients but instead provided front-line clinicians with the knowledge and support they needed to manage patients with complex conditions within the patients' communities, dramatically increasing access to the specialized dental care required by children with SHCNs. The leadership team also partnered with the University of Minnesota Continuing Dental Education (CDE) program who supported our efforts by drafting an online and social media presence, providing outreach materials, and planning network events that introduced the MinnieMouths project to a range of oral health professionals, and managing providing continuing education credits to participants and speakers.

We analyzed the current status of dental homes capacity within Minnesota and nationally, conducted a literature review, and refocused our project hypothesis. To ensure we understood the concepts of Project ECHO, the leadership team completed Project ECHO training and patient tracking management through the American Academy of Pediatrics. Next we determined suitable partners for our long-term project. We selected and contracted with Family Voices of Minnesota for our Family Navigators and the Minnesota Community Health Worker Alliance for Community Health Workers.

We extended invitations to 10,000 licensed professionals throughout Minnesota via LinkedIn, Facebook, personal connections, and a MailChimp email campaign to establish a viable group of core participants at the community level. Our goal was to recruit a minimum of 25 professionals who were interested in improving oral health care services for children with SHCNs and could/would attend monthly teleECHO

clinics via videoconference links. Simultaneously, we prepared curricula, lined up content experts for the teleECHO clinics, and invited interested healthcare providers and stakeholders to participate as guest attendees and presenters.

3.1.2.2 Phase 1: practicing clinicians

In Phase 1, we targeted practicing providers to participate in a pilot Peer Telementoring Network using the teleECHO clinics model from Project ECHO. We launched an interdisciplinary telementoring and case-based learning network with monthly teleECHO clinics to educate dental professionals and health care providers about establishing dental homes for children with SHCNs within their communities. We integrated community health workers (CHWs) and family navigators into the network to provide insights on cultural competency, family communications, and unique approaches to delivering care within underserved communities. A typical teleECHO clinic included a guest presentation related to barriers in providing care and dental homes for children with SHCN, two case studies, a robust discussion among the attendees regarding the cases and barriers presented, and a conversation regarding resources available to mitigate common obstacles. Once we completed the series of monthly teleECHO clinics, we evaluated the results and began planning for Phase 2.

Figure 2 shows the interdisciplinary network of health care providers who engaged in Phase 1. Note that Phase I had a higher percentage of dental providers, seasoned practitioners who gave informal input on the structure of the ECHO sessions and telementoring in general.

3.1.2.3 Phase 2: next generation scholars

Phase 2 was similar to Phase 1 in that we launched a second interdisciplinary Project ECHO telementoring and case-based learning network via monthly teleECHO clinics, this time focused on educating future and new-to-practice dental students and residents, medical students and residents, and new-to-practice dental and medical professionals. The goal of Phase 2 was to expand young scholars' desire and ability to establish dental homes for children with SHCNs within their future or new-care practices. Family navigators were again integrated into the teleECHO clinics to provide insights on cultural competency, family communications, and unique approaches to delivering care within underserved communities. Each clinic included a presentation related to barriers and ideas in providing care and dental homes to children with

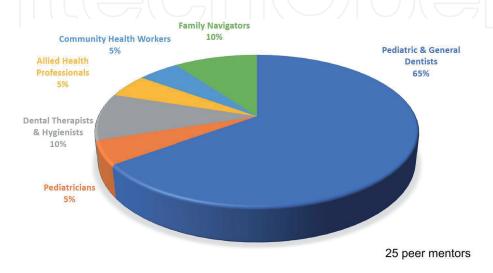


Figure 2. *Interdisciplinary network of healthcare providers (by percent) who engaged in phase I.*

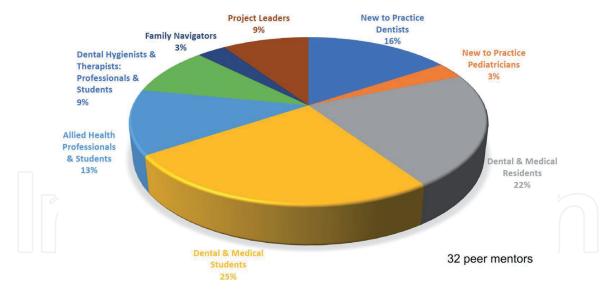


Figure 3.Percentage of different providers-in-training who attended teleECHO clinics in phase 2.

SHCNs, one case study, a robust discussion among the attendees regarding the cases and barriers presented, and a conversation regarding resources available to mitigate common obstacles. We repeated the cycle of teleECHO clinics, and at the close of the cycle, we again evaluated perceptions of the participants and made plans for the future and for sustainability of the dental homes program.

Figure 3 provides the percentage of different providers-in-training who attended the ECHO sessions.

3.1.2.4 Sustainability phase

Based on findings of the two phases and related research, the leadership team developed a conference focused on building dental homes for children with SHCNs. The conference aimed to expand the network of providers who see the merit in establishing dental homes within their communities, including rural and underserved communities. The meeting included an overview of the national landscape, essentials for expanding the Project ECHO program, critical insights from parents of children with SHCNs, and a presentation of non-profits and organizations that serve children with SHCNs and have the interest in collaborating with providers.

In addition, we built a Dental Homes Network Field Guide for Providers (available to those who attended our in-person conference), a Toolkit for Building a Dental Home Network for Children with Special Health Care needs, disseminated project findings online through professional networks, communicated with the nearly 18,000 professionals who view the Continuing Dental Education website each month, established a Telementoring Study Club, and initiated efforts to update and modernize dental provider directories to enable easy identification of providers who serve children with SHCNs.

4. Results

4.1 Start-up

• Established our team's infrastructure, built the project team, and in conjunction with the ECHO Institute at the University of New Mexico, established the School of Dentistry at the University of Minnesota as a Project ECHO

replication, the first project ECHO site focused on oral health care for children with special healthcare needs

- Established continuing dental education credits program for various participants
- Analyzed the current status of dental homes capacity within Minnesota and nationally, conducted a literature review, and refocused our project hypothesis

4.2 Phase 1: practicing clinicians

- Conducted 7 monthly teleECHO clinics involving 28 core participants, parents of children with SHCN, policy influencers, and mentors
- Evaluated treatment, case management infrastructure, and clinical outcomes of ~14 children with SHCNs presented during TeleECHO clinics
- Awarded 180 Continuing Education Units to participants
- Launched a Facebook group to provide a social environment for core participants to meet and engage professionally
- Gauged initial impact of our wicked project idea against the prevailing knowledge found in literature
- Evaluated perceptions of practicing clinicians to assess change in knowledge and comfort in providing oral health services for children with SHCNs

4.3 Phase 2: next generation clinicians

- Launched teleECHO clinic focused on preparing and mentoring new-to-practice providers, and students: dental, dental hygiene, dental therapy, as well as dental and medical residents (Next Generation Scholars) to better understand oral health care for children with SHCNs
- Recruited and trained 32 Next Generation Scholars
- Conducted 11 clinics
- Evaluated treatment, case management infrastructure, and clinical outcomes of ~10 children with SHCNs presented during clinics
- Evaluated perceptions of Next Generation Scholars to assess change in knowledge and comfort in providing oral health services for children with SHCNs
- Initiated planning for May 2019 conference focused on providing oral healthcare for children with SHCNs

4.4 Sustainability phase

- Evaluated project and project participants' perceptions of the ongoing need for dental home engagement efforts
- Re-engaged stakeholders in long-term planning

- Distributed project findings (See below section on outcomes)
- Engaged additional family navigators to expand the reach of oral health educational materials and awareness of dental home network into communities
- Developed learning experiences for Next Generation Scholars to spend time with children with SHCNs in their homes, schools, and during care provider visits
- In April 2019, established the Telementoring Study Club, an optional, informal case-based discussion open to students, residents, and practicing clinicians across health disciplines
- Initiated project to update and modernize dental provider directories in the state, with an emphasis on being able to identify clinicians who provide services for children with SHCNs
- Hosted May 2019 conference focused on providing care for children with SHCNs, including four marquee speakers, scholar presentation posters, a parent panel, and an overview of the next phase of our project
- 193 people attended the 2019 Conference which met our expectations
- Launched toolkit of information focused on expanding dental homes for children with SHCNs, with essentials of reimbursement as one element of this offering; toolkit can be found [https://clinicalscholarsnli.org/ community-impact]

180 Free Continuing Education Credit Hours Awarded December 2017 to June 2018

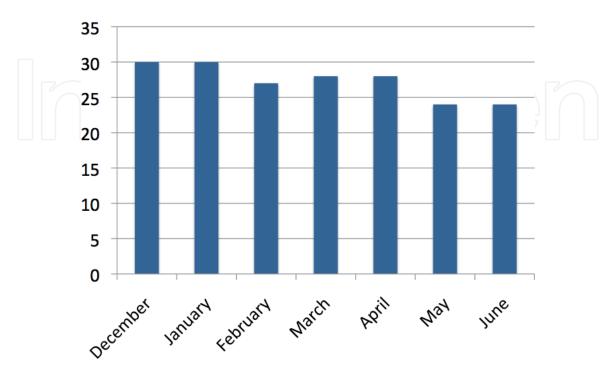
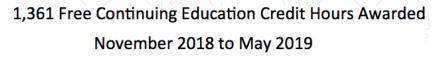


Figure 4.Number of continuing dental education units awarded by month in phase I of the project.

4.5 Outcomes

Multiple measurable outcomes resulted from our work; here we report on two we consider important: points of contact and continuing dental education units awarded. **Figures 4** and 5 provide information regarding the number of dental CEUs awarded in Phases 1 and 2, respectively.

The more than 1500 credit hours awarded in a span of approximately 18 months demonstrates the strong investment from people who participated in the teleECHO clinics and those who participated face-to-face.



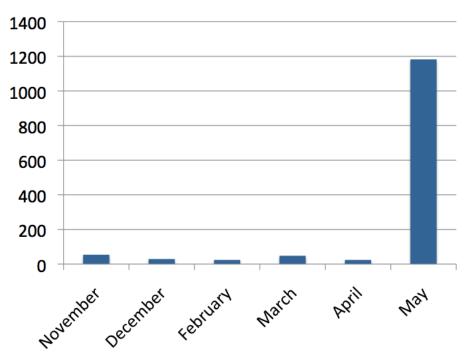


Figure 5.

Number of continuing dental education (CDE) units awarded by month in phase II of the project [note: May 2019 represents CDE units from initial conference].

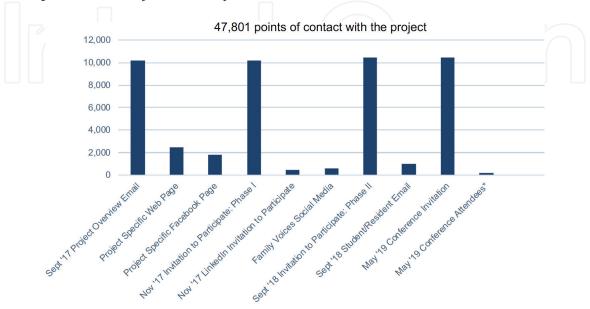


Figure 6.Points of contact with the project from September 2017 through May 2019.

We measured our overall points of contact in the project during Phases 1 and 2. **Figure 6** provides data on different points of contact we tracked over the time course of the project.

During approximately 18 months, we recorded more than 47,000 different points of contact with the community. Contacts included dental providers, allied health providers, students, and many others. Some of the points of contact were targeted emails, and others were from Facebook followers and web pages designed specifically for the project.

5. Discussion

The wicked problem we chose to address is complex and multi-faceted. The resulting MinnieMouths project had multiple elements and a broad impact. Project team leaders completed their work in a three-year time period, while maintaining clinical positions and engaging in leadership training. Work in this project was specifically designed to be collaborative and interdisciplinary, a way of work that is time consuming but extremely effective and rewarding in the long run.

Our collaboration with a wide range of providers revealed multiple areas that must be addressed to realize the vision of a comprehensive dental home network for children with SHCNs, not only in Minnesota, but also nation-wide.

- Providers who care for children with SHCNs (and those who would if conditions changed) are constrained by limited information on insurance reimbursement codes, time management, allowable payments, and other aspects of the current system of reimbursement.
- Providers have great difficulty in managing the range of co-morbidities and complex cases of children with SHCNs. Training provided to healthcare professionals must include 1) ways to implement the dental homes concept in local communities, 2) simultaneous development of medical homes in underserved and rural communities, and 3) sufficient integration of medical and dental services to allow for comprehensive care across the life span. An expansion of the current project could be an exploration of a combined community-based health care dental and medical home concept for children and adults with special healthcare needs.
- While some oral health and medical care providers have confidence in providing care to children with SHCNs, many do not. Ensuring providers have access to no-cost peer networks where they can ask questions, share concerns, and seek insider tips is essential.
- Families of children with SHCNs often feel negated in their views regarding oral health care, approaches to providing care for their children, and are uncomfortable discussing Medicaid and insurance concerns. Organizations such as Family Voices of Minnesota must continue to work collaboratively with the care community and insurance groups to address ongoing concerns and innovations in care provision.

6. Leader learning

The three program leaders found a range of health equity skills to be imperative when addressing the oral health care of children with SHCNs. Two capabilities that

stand out among the three leaders include fostering cross-sector collaboration and strengthening the integration of health services and systems.

The overarching goal of our project was to test whether an interdisciplinary network of oral health care, medical care, allied health, and community partners could begin building sustainable dental homes for children with SHCNs, and to identify aspects that would make the effort successful. Our ability to partner early and receive training on Project ECHO and its telementoring philosophy provided a foundation for what we valued throughout the program. We learned that true cross-sector collaboration occurs only when professionals appreciate each other's ideas and recommendations for care, when families' and community partners' viewpoints are shared at the beginning of programs and threaded throughout experiences, and when young scholars' points of views and desire to develop career-long expertise are regarded as vital.

We learned reimbursement was a common theme and the central challenge among current and well-intentioned future providers. When faced with the reality that Medicaid covers most children with SHCNs, and state and federal funds will, at best, cover 27 to 42 percent of billed costs, the financial solvency of dentists and those who support them quickly comes into question. Many oral health care providers who expressed interest in and have adequate training to provide care to children with SHCNs are limited by their ability to remain financially solvent in the face of current reimbursement systems. We found the future of the project and expanding dental homes for children with special health care needs lies primarily within the purview of policymakers, insurers, and federal funding sources.

We believe fostering cross-sector collaboration and strengthening the integration of health services and systems provides fodder for future projects and grants and requires building relationships with policymakers and funding sources.

7. Toolkit

A comprehensive toolkit can be found at: https://clinicalscholarsnli.org/community-impact.

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References

- [1] U.S. Dept of Health and Human Services. Oral health in America: A report of the Surgeon General. Rockville, Md.: U.S. Dept of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000.
- [2] U.S. Census Bureau. Disability Characteristics. 2010 American Community Survey 1-Year Estimates S1810. Available at: "http://factfinder.census.gov/faces/table services/jsf/pages/productview.xhtml?pid=ACS_14_5YR_DP02&src=pt". Accessed September 24, 2018.
- [3] Newacheck PW, McManus M, Fox HB, Hung YY, Halfon N. Access to health care for children with special health care needs. Pediatrics 2000;105 (4 Pt 1):760-766.
- [4] American Academy of Pediatric Dentistry. Definition of special health care needs. Pediatr Dent 2016;38(special issue):16.
- [5] Thikkurissy S, Lal S. Oral health burden in children with systemic disease. Dent Clin North Am 2009;53(2): 351-357, xi.
- [6] Charles JM. Dental care in children with developmental disabilities: attention deficit disorder, intellectual disabilities, and autism. J Dent Child 2010;77(2):84-91.
- [7] U.S. Dept of Justice. Americans with Disabilities Act of 1990, as Amended. Available at: "http://www.ada.gov/publicat.htm." Accessed September 4, 2018.
- [8] Rouleau T, Harrington A, Brennan M, et al. Receipt of dental care barriers encountered by persons with

- disabilities. Spec Care Dentist 2011;31(2):63-67.
- [9] Lewis C, Robertson AS, Phelps S. Unmet dental care needs among children with special health care needs: Implications for the medical home. Pediatrics 2005;116(3): e426-e431.
- [10] Callahan ST, Cooper WO. Continuity of health insurance coverage among young adults with disabilities. Pediatrics 2007;119(6):1175-1180.
- [11] Kaiser Family Foundation. Medicaid's role for children with special health care needs: A look at eligibility, services, and spending. Available at: http://files.kff. org/attachment/Medicaid%E2%80%99s-Role-for-Children-with-Special-Health-Care-Needs-A-Look-at-Eligibility,-Services-and-Spending. Accessed December 10, 2019.
- [12] Chen AY, Newacheck PW. Insurance coverage and financial burden for families of children with special health care needs. Ambul Pediatr 2006;6(4):204-209.
- [13] Shenkin JD, Davis MJ, Corbin SB. The oral health of special needs children: Dentistry's challenge to provide care. J Dent Child 2001;86(3):201-205.
- [14] Barnett ML. The oral-systemic disease connection. An update for the practicing dentist. J Am Dent Assoc 2006; 137(suppl 10):5S-6S.
- [15] Krause M, Vainio L, Zwetchkenbaum S, Inglehart MR. Dental education about patients with special needs: A survey of US and Canadian dental schools. J Dent Educ 2010;74(11):1179-1189.
- [16] American Academy of Pediatric Dentistry. Policy on dental home.

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Pediatr Dent 2016;38(special issue):25-26.

[17] U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The National Survey of Children with Special Health Care Needs Chartbook 2009-2010. Rockville, Maryland: U.S. Department of Health and Human Services, 2013.

