

Training Dental Teams to Address Community Health: Necessary Partnerships and Evaluation of an Evidence-Based Curriculum

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ABSTRACT

Background: Annually, 27 million Americans visit a dental professional but not a physician.

Dental professionals must recognize that they are members of their patients' primary care teams.

Continuing education must then prepare them to appropriately serve their specific communities.

Objectives: The objective of this paper is to describe the implementation of an evidence-based

model to train dental professionals on how to respond to community-level health needs. The

paper details crucial partnerships and provides evidence and key considerations for replicating

the curriculum to improve population health. **Methods:** The Extension for Community

Healthcare Outcomes (ECHO™) model was employed in one state where dental health care

utilization is challenging for persons living rural, eligible for Medicaid, aging, and those who are

American Indian. This formative evaluation knowledge assessments, data on participants'

changes in clinical care practice, web analytics, and artifact review to assess effective

implementation strategies and necessary community partnerships. **Conclusions:** Successful

implementation of the curriculum required active participation and partnership with state

provider associations, the office of Medicaid, the state Board of Dental Licensure, and others.

Without engaged partners, the curriculum would not have been community relevant, nor would it

have had case presentation from local providers. In a state with only 427 practicing dentists, live

attendance ranged between nine and 22 dental team members, with between 11-91 views of the

recorded sessions. Utilizing the evidence-based ECHO™ model, which requires community

health partnerships, is a cost-effective, and accessible, method to offering community specific

education for dental providers across a large geographic region.

KEYWORDS: Oral Health, Curriculum, Primary Prevention, Dental Health Services, Dental health professionals, Evaluation Studies, Quality of Health Care, ECHO model

BACKGROUND

Need for Preparing Dental Teams to Address Community Health

Annually, 27 million Americans visit a dental professional but not a physician.¹ Dental professionals must recognize that they are healthcare providers who serve as a member of their patients' primary care teams; delivering care “with the patient and community in mind”.²

Continuing education must then prepare dental teams to know and understand the communities they serve, addressing population health and specifically identifying community-level needs to prevent chronic diseases. Screening for chronic diseases in a dental setting has the potential to not only improve population-level morbidity and mortality rates but has been projected to save \$102.6 million each year in healthcare costs.³

To serve as a primary care provider, dental team members must offer preventive dental care for all patients, including those who are under-resourced.⁴ Population-level oral health is not equitable across geographies, race, income-level, public insurance eligibility, nor age. For example, Black, Indigenous, and persons of color (including persons who are Hispanic) report worse oral health and lower rates of dental visits compared to their non-Hispanic white peers.⁵ Similarly, 43% of adults with “low-income” report experiencing dental pain occasionally or very often compared to only 25% of those with higher income.⁵ These trends are also noted in North Dakota (ND) with significant disparities experienced among persons who are American Indian (AI), and those covered by Medicaid.⁶ Although ND has developed numerous education and outreach campaigns to inform sub-populations about the importance of dental hygiene and regular dental visits, it is imperative that dental teams recognize how to care for these patients, and that they understand the additional barriers they may experience in utilizing traditional care

models. Dental teams must be willing to serve those who have not historically utilized regular dental care and serve these patients with cultural and situational humility.

Serving only those who are patients of record or who carry private insurance increases access inequities and limits opportunities for under-resourced community members to learn about dental hygiene. Although there is evidence of better individual and population health when dental providers serve as primary care providers within their communities, dental curriculums for dental hygienists, assistants, and dental surgeons alike do not adequately address population health, social determinants of health, nor integration and collaboration in medicine.⁷⁻¹⁰ Providing training for dental teams on how to serve as primary care providers within their communities can improve, not only population oral health, but overall health.

Identifying Opportunities through Continued Education

Although requirements vary among dental professionals and licensing boards within the U.S., dental team members (dental hygienists, assistants, and dental surgeons alike) require continuing education (CE) credits. These requirements allow dental professionals to remain current in their field and are an opportunity to train dental teams managing population-level health.

The Extension for Community Healthcare Outcomes (ECHO™) model was developed to virtually train providers to deliver best-practice medical services to under-resourced populations living with chronic conditions.¹¹ Although extensively tested and implemented globally, the ECHO™ model has not been reportedly used in dentistry.¹² The model requires establishing a local team of community health experts (*Hub Team*) to ensure efficacy of the curriculum, but establishing this team to engage and train dental providers specifically has not yet been addressed in the literature.

The aim of this formative evaluation and case presentation is to outline how the ECHO™ model was employed to train dental professionals on serving as members of the primary care team, and to extensively describe the community health partnerships required to successfully design a curriculum that is locally relevant. The intent is to provide evidence and key considerations for replicating the curriculum, identifying key partners, and to subsequently improving overall community-level health.

METHODS

Evaluation of the *Dentistry as Primary Care ECHO*™ series occurred within a larger evaluation of the ND Department of Health & Human Services Oral Health Program (ND HHS OHP) and was funded by the Health Resources and Services Administration (HRSA), and the Centers for Disease Control and Prevention (CDC). Formative evaluation began at the onset of the program in late 2021 with the intent of reviewing evaluation outcomes to improve the curriculum in real-time.

To describe implementation strategies, lessons learned, and training outcomes, evaluation included review of the CDC and HRSA workplans, live and recorded ECHO™ training sessions, attendance at all *Hub Team* meetings, collection of participants' training evaluations, website analytics and online registration forms, and review of the *Dentistry as Primary Care ECHO*™ website and associated resources. The electronic survey, employed immediately after participants completed a training, assessed their satisfaction with elements of the curriculum, collected data on participant demographics, measured their knowledge gained by requesting they reflect on their knowledge prior to and after the training, and asked questions related to the trainings' relevance to the dental profession as well as their anticipated changes to their own clinical

practice following the training. The survey and other data collection efforts were approved by the University's Institutional Review Board and are available by request.

RESULTS

Aligning with the ECHO™ model, this series sought to establish engaged community health partnerships to “empower people to make a difference in their communities with the right knowledge, at the right place, at the right time”.⁷ Results provide both details outlining required elements and partnerships to successfully replicate the training, as well as outcome data demonstrating the curriculum's efficacy.

About ECHO™

ECHO™ was developed in 2003 by the University of New Mexico to connect rural healthcare providers with content experts through a virtual hub-and-spoke knowledge-sharing network. The design is inspired by “the way clinicians learn from medical rounds during residencies” and has been applied globally across multiple disciplines prompting sustainable and profound change in clinical practices.¹¹⁻¹² Although ECHO™ has had wide application, many clinics have focused on care provision among traditional clinicians with expansion to mental health providers, with very few applications among the dental profession.¹²⁻¹³

The model requires establishment of a *Hub Team* of experts, routine virtual synchronous training opportunities to establish knowledge sharing, free CE credits, promotion, tracking and evaluation, and most importantly, that each training includes both a didactic lecture as well as a de-identified case presentation. A single expert contributes to the knowledge base of 15 or more local providers, who then ideally apply their newly acquired clinical knowledge and skill to improve the health of people within their communities.

Dentistry as Primary Care ECHO™ series: The Basics

Utilizing the evidence-based model, the OHP funded the ND Project ECHO™ team to develop and implement a *Dentistry as Primary Care ECHO™* series. Between January 2022 and August 2022, twelve, one-hour, virtual, asynchronous trainings were held and marketed toward dental health professionals. The curriculum (didactic lectures and local case presentations) was approved by the State Board of Dental Examiners, and free CE were available for all who attended and completed the electronic evaluation for each of the twelve sessions. The model encourages a routine training schedule to increase attendance; clinics were held on the same day and time, two times a month, and only once a month from June through August (accommodating summer schedules).

Crucial Role of Community Health Partnerships in Design of the ECHO™ series

The team worked with statewide organizations and associations to ensure provider interest and that the program would not be redundant with other state training. These groups included the State Board of Dental Examiners, the State Dental Association, Dental Assisting Association, Dental Hygiene Association, the Community Healthcare Association of the Dakotas, the state Medicaid office, and the state Dental Foundation (among others); see Appendix A for a complete list of the partner organizations and their respective roles.

When establishing the *Hub Team* of content experts, it was important that the group consist of dental health professionals, but that the experts be diversified in professional title, community role, and patient-base. This ensured diversified care perspectives and case presentations, as well as increased the network of providers for promotion of the ECHO™ series. See Appendix A.

The community health partners who served on the *Hub Team* were responsible for identifying training topic priorities, speakers/trainers, and patient cases for presentation. However, recognizing that the *Hub Team* was predominantly comprised of dental professionals, other partners in the state were included in the identification of training needs. Data from the North Dakota Department of Health & Human Services' Oral Health Surveillance System (NDOHSS)¹⁴ were presented to, and reviewed by, the *Hub Team* to identify specific communities and subpopulations struggling to maintain or achieve good oral health. Partners who then advocated on behalf of, or worked with, these communities were engaged and invited to share the primary need for dental team education to address these oral health inequities.

For example, according to the NDOHSS, one in four long-term care residents in the state presented with untreated tooth decay, with 44% of long-term care residents who were covered by Medicare or uninsured requiring early or urgent dental care.⁶ The ND Long Term Care Association was then an engaged and active partner in identifying a speaker and key topic to address oral health concerns for these older adults.

In another example, the *Hub Team*, in review of data in the NDOHSS, recognized that, regardless of age, a majority of those covered by Medicaid had no preventative nor treatment-based dental care in the last year. Specifically, in 2021, 80% of those ages 0-5, 61% of those ages 6-14, and 76% of those ages 15-20 had no dental visit.⁶ The state Office of Medicaid was then invited to assist the *Hub Team* in creating a curriculum for the session entitled, *Caring for Patients who are Covered by Medicaid and Billing for the Services*. Establishing partnerships was crucial to not only ensure that the one-hour didactic lectures and case presentations were relevant to the communities they targeted, but for promotion of the events. Partners would share the free CE events with their networks, broadening the reach of ECHO™ series and increasing

participation. Community-based trainings are better received when promoted by a trusted messenger.

Curriculum Design

The twelve topics were identified with the *Hub* and project teams, as well as with statewide stakeholders through review of national trend data and ND data presenting oral health inequities. See Appendix B for the complete curriculum. Each topic had to be relevant to dental teams, present a public health or clinical care intervention, and relate to the broader goal of preparing dental teams to serve as primary care providers in ND, addressing community health. The *Hub Team* and local provider associations indicated that dental teams valued national expertise paired with local case presentations and community-specific examples from providers they could trust. Both the *Hub Team* and the dental association provided recommendations for local presenters while the OHP offered contact information for key national experts in dental care provision and public health strategies (like water fluoridation). A full list of topics, presenter credentials, evaluation metrics, and training dates are presented in Table 1. Entities interested in replicating, or learning more about the curriculum can review the programs webpage.¹⁵

Table 1. Date, title, and reach of each ECHO™ session: Views through 2023

Promotion Through Community Partnerships

Any ECHO™ series can only be effective, and lead to change in practice, if the appropriate audience attends. This ECHO™ series included dental surgeons, orthodontists, dental hygienist, dental assistants, dental billing, and public health dental hygienists. The series was advertised in membership organization e-newsletters, across listservs, on the OHP

homepage, on social media, at exhibit booths at State dental conferences, on partner websites, through partners in dental professional training schools, and through the *Hub Team*. Without local partnerships, the events would not be well received or attended. Other best practices for promotion included branding of banners and images to accompany web advertisements, newsletters, emails, registration links, and slide deck templates. Samples of these materials are available on the program's webpage.¹⁴

Outcome Data: Demonstrating the Curriculum's Efficacy

Twelve, one-hour, synchronous didactic lectures and clinical case presentations occurred between January and August 2022. These lectures were presented by 15 national and state experts. Live connections to each clinic ranged between nine and 22; a connection is considered one login and does not count the number of persons who joined as a group. For example, one local federal qualified health center would attend the live clinics (one connection) and would invite their entire dental team to take lunch in the room where the clinic was streaming. At last review (July 2023), recorded sessions had between 11-91 views in a state that reports just over 400 practicing dental providers. See Table 1. Promotion campaigns will continue for up to two years, with free CE still available for members of ND dental teams. Community partnerships will continue to be crucial in the ongoing promotion and utilization of the ECHO™ series.

As of 2020, there were 427 dentists in the state with a practice address, and 693 registered dental hygienists; similar data are not available for dental assistants because they do not require licensure and can be trained chairside in ND.¹⁶ A majority of those who attended the ECHO™ clinics were dental hygienists (43%); 33% were dental providers (DDS or DMD), and 19% of attendees were dental assistants.

There was little to no variability in agreement with several measures assessing the impact of each training. A near majority agreed or strongly agreed with measures of satisfaction across the twelve clinics. Figure 1 presents the collective agreement that the trainings enhanced skills, were organized, relevant, and presented useful materials.

Figure 1. Percent of attendees who strongly disagreed/disagreed or agreed/strongly agreed

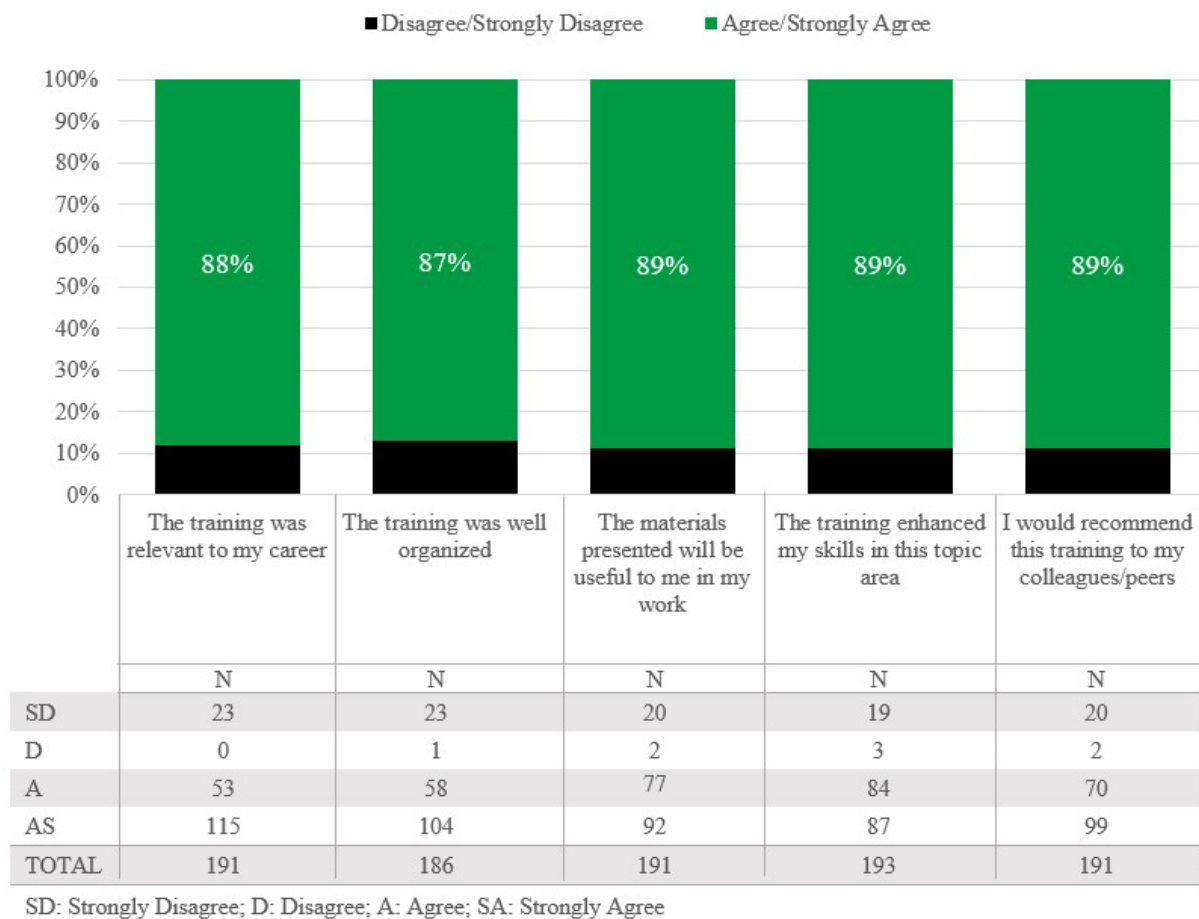


Figure 1. Percent of attendees who strongly disagreed/disagreed or agreed/strongly agreed

An important metric is whether dental professionals would encourage their peers to attend the clinic; 89% indicated that they agreed or strongly agreed that they would recommend the ECHO™ series to their colleagues/peers (Figure 1). Participants also reported their levels of

knowledge, competence, and performance on a five-point scale (1= no knowledge, 5 = expert). Knowledge was conceptualized as knowing WHAT to do; competency was explained as knowing HOW to do this in practice; and performance was described as actual BEHAVIOR in practice. Participants indicated marked improvement in knowledge, competency, and behavior following each clinic. See Figure 2.

Figure 2. Percentage of participants indicating level of knowledge, competency, and performance at a 4 or 5 (expert), before and after the training: All clinics combined

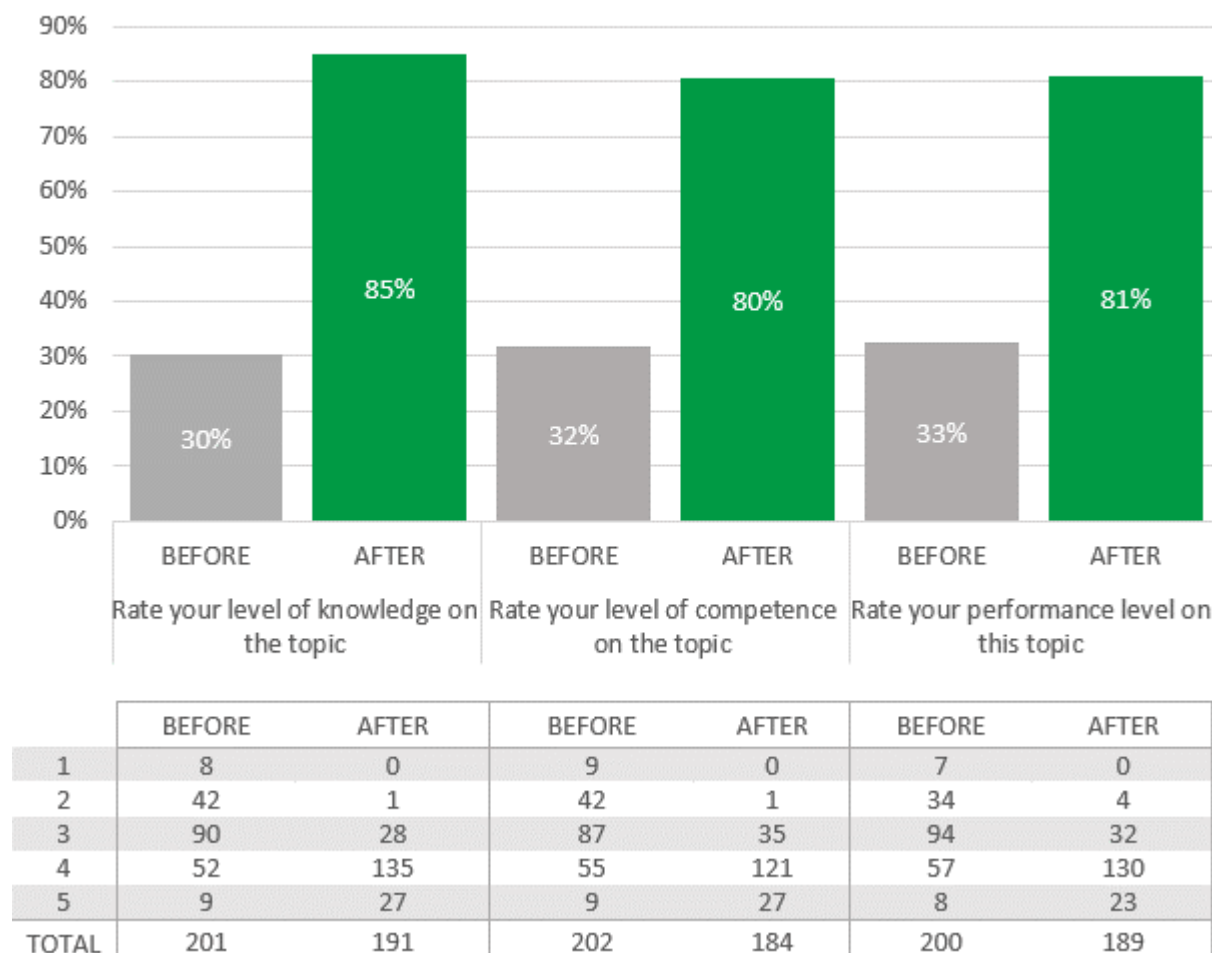


Figure 2. Percentage of participants indicating level of knowledge, competency, and performance at a 4 or 5 (expert), before and after the training: All clinics combined

DISCUSSION: RECOMMENDATIONS AND IMPLICATIONS

ECHO™ has been established as an evidence-based model that is highly effective at training local providers to address population health within typically under-resourced communities.¹¹⁻¹³ Although ECHO™ has been detailed in the extant literature, this formative evaluation is one of the first to identify the stages and community health partners necessary to establishing a successful ECHO™ series in which dental providers are the intended audience.¹²

Broadly, the series improved knowledge, competency, and behavior among dental team members. However, also important to note is that before attending this ECHO™, only one in three dental providers self-identified high levels of knowledge, competency, and performance in the topics presented. For example, prior to this series, no dental team member rated their knowledge of caring for patients who are AI at a four or five (expert). ND is the sixth leading state for the proportion of the population who are AI, and yet a majority of those attending the series were not knowledgeable, competent, nor prepared to provide care for these patients. These outcome data do not demonstrate lack of care or motivation among dental teams, but simply, a clear opportunity to replicate this model and ensure curriculum on population-level care is available for dental teams in ND and elsewhere.

Outcome data also demonstrate that, broadly, the ECHO™ series was well received by dental providers and the model, which requires deeply established and quality community health partnerships, can successfully establish a local dental curriculum. Dental membership organizations, foundations, coalitions, and other community-health partners were crucial in

identifying training topics, potential speakers, patient case presentations, and in the promotion of each event. The establishment of, and reliance on, a team of engaged partners and content experts (*Hub Team*) is a critical (and well tested) element of the ECHO™ model and has proven, in this case, to be as effective among dental providers as it has been in other clinical care applications.¹²

Limitations

Although this case presentation provides the necessary detail and key partnerships to replicate elements of a successful ECHO™ series targeting dental professionals, evaluation data are limited. Several of the individual sessions had less than ten completed evaluations. Dental CE certification does not require the same stringency in reporting in ND as other health professions, and dental providers self-report total hours, nor necessarily requiring a certificate of completion, which may have reduced the number of completed evaluations for this series.

An important consideration in implementation science is that immediate, positive change in knowledge and competencies is to be expected following a training, and these measures are more appropriately collected at later intervals (six weeks, six months, and one-year post training). However, there were no funds allocated toward additional evaluation activities. Future evaluation should include focus groups or key informant interviews, as well as assessment of long-term change in practice (if any) among those who attended the series.

CONCLUSION

This evaluation and case presentation identifies areas of expertise for potential *Hub Team* members and provides topics that are of interest for those seeking to establish a similar curriculum. Partners identified as both *Hub Team* members and key stakeholders are crucial to the success of this curriculum. The topics covered in this curriculum not only build capacity for

dental teams to serve as primary care providers, but they also have the potential to improve community and population-level health focused on addressing oral health inequities that are evident both in ND, and nationally.

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Thank you to our community partners who participated in the development and implementation of this ECHO™ series. Without these partners we could not have identified relevant topics, engaged necessary experts, nor reached the intended audiences. This is your work as much as it is ours. Thank you for being community dental health champions.

Table 1. Date, title, and reach of each ECHO™ session: Views through 2023

Live Clinic	Clinic Title	Presenter(s) Title and Credentials	Live Login	Views
1/12/22	Integration of Oral Health & Overall Health	RADM Timothy Ricks, DMD, MPH; Chief Dental Officer, US Public Health Service; Deputy Director, IHS Division of Oral Health	21	50
1/26/22	Rescheduled due to presenter illness			
2/09/22	Importance of, and how to, Complete Blood Pressure Screenings in Dental Settings	Community Clinical Coordinator, DNP, MSN, RN	9	151
2/23/22	Importance of Collecting Patient Health Information in Dental Clinics and the Relation to Systemic and Oral Health	Natalia Chalmers, DDS; Chief Dental Officer, Office of the Administrator, Centers for Medicare & Medicaid Services	12	31
3/09/22	Nutrition and Chronic Disease: How to Have These Conversations in Dental Settings	Registered Dietitian & Nutritionist; MS, RD, CSSD	18	64
3/23/22	Talking With Patients About Fluoridation and Safe Drinking Water	American Fluoridation Society; DMD, MS	11	122
4/13/22	Role of North Dakota Dental Teams in Addressing Pediatric Oral Health School-Based Programs	Program Coordinator; RDA, CDA Pediatric Dentist; DDS	14	9
4/27/22	How Medical-Dental Integration is Working in North Dakota	Public Health Hygienist; RDH Oral Health Program Evaluator; PhD, MA	13	60
5/11/22	Caring for Patients who are Covered by Medicaid and Billing for the Services	Pediatric Dentist; DDS Dental Office Manager	18	33
5/25/22	Connecting Dental Professionals with Emergency Departments Reducing Use of the ED for Dental Pain	QI Specialist; MS, BSN, EMT Dental Assistant; CDA, RDA, CDHC, RDAEF	21	13
6/08/22	Dementia Friendly Dental Practices	Professor & Dentist; DDS, MS, FGSA	22	n.d.
7/13/22	Caring for Patients Who Are Indigenous in North Dakota	IHS Dentist, DDS	14	n.d.
8/10/22	Dementia Friendly Dental Practices: Treatment Planning	Professor & Dentist; DDS, MS, FGSA	9	31

NOTE: Data reported were pulled January 2024. Data continue to be collected and recorded trainings are available, with free CE credit for dental providers up to two years. n.d. = no data; recordings not available.

BSN: Bachelor of Science in Nursing; CDA: Certified Dental Assistant; CDHC: Community Dental Health Coordinator; CSSD: Certified Specialist in Sports Dietetics; DDS: Doctor of Dental Surgery; DMD: Doctor of Dental Medicine; DNP: Doctor of Nursing Practice; EMT: Emergency Medical Technician; FGSA: Fellow of The Gerontological Society of America; IHS: Indian Health Service; MA: Master of Arts; MPH: Masters of Public

Health; MS: Master of Science; MSN: Master of Science in Nursing; PhD: Doctor of Philosophy; RADM: Rear Admiral; RD: Registered Dietician; RDA: Registered Dental Assistant; RDAEF: Registered Dental Assistant in Extended Functions; RN: Registered Nurse

Appendix A: Community Health Partnerships: *Hub Team*, Implementors, and Key Partners

Dentistry as Primary Care ECHO™ Expert Hub Team			
Title	Credentials	Organization	Relevant Roles & Areas of Expertise
Dentist	DDS	Private Practice, Dental Clinic	<ul style="list-style-type: none"> • North Dakota Dental Association Board of Trustees, Western At-Large Trustee • ECHO presenter • Private practice • Advisory council for Donated Dental Services.
Dentist	DDS	Indian Health Services, Dental Clinic	<ul style="list-style-type: none"> • Licensed dental professional practicing in an Indian Health Services clinic • ECHO presenter • Integrated health facility
Dentist	DDS	Private Practice, Dental Clinic	<ul style="list-style-type: none"> • Vice President of the North Dakota Dental Association Board of Trustees • ECHO presenter • Private practice • Participant in school-based sealant program
Dental Director, Dentist	DDS	Federally Qualified Health Center, Dental Clinic	<ul style="list-style-type: none"> • Past president of the North Dakota Dental Association Board of Trustees • ECHO presenter • Dental student rotation lead
Community Engagement Advocate	MPH, CPH	Quality health care organization	<ul style="list-style-type: none"> • Community engagement • Health care quality • Indigenous health
Dentist	DDS	Indian Health Services, Dental Clinic	<ul style="list-style-type: none"> • Enrolled tribal member providing dental care through Indian Health Services • ECHO presenter
Public Health Hygienist	RDH	ND HHS	<ul style="list-style-type: none"> • North Dakota Dental Hygiene Association • ECHO presenter • Medical-dental integration within a family medical center
SEAL!ND Coordinator	DA	ND HHS	<ul style="list-style-type: none"> • Project lead for the school-based sealant program • North Dakota Dental Assistants Association, Liaison • ECHO presenter

Dentistry as Primary Care ECHO™ Project Team (Implementors)

Title	Credentials	Organization	Relevant Roles & Areas of Expertise
Project ECHO Coordinator		School of Medicine	<ul style="list-style-type: none"> • Project ECHO program fidelity and implementation
Assistant Professor	PhD, MA	School of Medicine	<ul style="list-style-type: none"> • Lead program and project evaluation
Director, Oral Health	RN, BSN, RDN, RD	ND HHS	<ul style="list-style-type: none"> • Current director of the ND DoH OHP • PI for the HRSA and CDC oral health awards

Dentistry as Primary Care ECHO™ Community Health Partners and Key Stakeholders

Partner or Stakeholder Organization	Relevant Roles
North Dakota Dental Association	<ul style="list-style-type: none"> • Identification of topics for ECHO™ series • Identification of possible presenters and case presentations • Promotion of ECHO™ series and identification of other key promotion opportunities
North Dakota Dental Hygienist Association	<ul style="list-style-type: none"> • Identification of topics for ECHO™ series • Identification of possible presenters and case presentations • Promotion of ECHO™ series and identification of other key promotion opportunities
North Dakota Dental Assistants Association	<ul style="list-style-type: none"> • Identification of topics for ECHO™ series • Identification of possible presenters and case presentations • Promotion of ECHO™ series and identification of other key promotion opportunities
North Dakota Board of Dental Examiners	<ul style="list-style-type: none"> • Process for reviewing and approving continuing education credits for dental professionals
North Dakota Oral Health Coalition	<ul style="list-style-type: none"> • Promotion of ECHO™ series and identification of other key promotion opportunities
North Dakota Medicaid	<ul style="list-style-type: none"> • Presentation during ECHO™ series and promotion of training

North Dakota Department of Oral Health	<ul style="list-style-type: none">• Funding of the ECHO™ series• Review and approval of all curriculum topics• Identification of national content experts for training sessions• Promotion of ECHO™ series and identification of other key promotion opportunities
North Dakota Long Term Care Association	<ul style="list-style-type: none">• Promotion of training related to older adults and aging• Identification of key training topics for older adult oral health
Center for Rural Health	<ul style="list-style-type: none">• Promotion of training to rural health professionals and advocates in North Dakota
American Fluoridation Society	<ul style="list-style-type: none">• Identification of key topics related to water fluoridation in North Dakota• National presenter on one of the ECHO™ sessions
Quality Health Associates of North Dakota	<ul style="list-style-type: none">• Partner in identifying the training needs for dental professionals• Partner who is working in emergency department referral to dental care services in North Dakota• Promotion of ECHO™ series and identification of other key promotion opportunities
North Dakota Tribal Health Liaisons	<ul style="list-style-type: none">• Identification of topics related to oral health for American Indians communities in North Dakota• Promotion of ECHO™ series and identification of other key promotion opportunities

Appendix B: Dentistry as Primary Care TeleECHO™ Series – Curriculum

[Home](#) > [What We Do](#) > [Project ECHO](#) > [Topics](#)

Dentistry as Primary Care TeleECHO

Primary care is any healthcare delivered with the patient and community in mind. Oral health and good dental hygiene are essential components of primary care and overall health. In this sense, dental teams serve as members of the larger body of primary care providers in North Dakota. This teleECHO™ series is focused on providing local training and case presentations to assist dental teams in providing comprehensive care to members of our community.

Virtual Learning Network and Continuing Education

Hear from local dental providers and members of the state Oral Health Program as they share lectures and case presentations to illustrate how dental teams in North Dakota serves as primary care providers. These sessions carry free continuing education (CE) credits for dental providers. Some of the sessions also have CE for medical professionals as well as dietitians and nutritionists.

- If you want to earn Dental CE credits, [read these instructions](#).

Primary Care in Dentistry TeleECHO Topics

The Primary Care in Dentistry teleECHO Hub Team is comprised of local dental professionals, Oral Health Program team members, dental professional associations, and other community and tribally-based program leads. This Hub Team identified the clinic topics and speakers.



Dentistry as Primary Care
Center for Rural Health
University of North Dakota

Previous Clinics

- [View all past dentistry as primary care teleECHO clinics](#)

Get Project ECHO Updates!

To join our mailing list, email Nicole at nicole.crouch@UND.edu.



Integration of Oral Health & Overall Health

This session, presented by Rear Admiral Timothy Ricks, examines issues of oral health equity in the context of access to dental care, disparities based on race/ethnicity and income, and social determinants of health as they relate to oral health. This is followed by a discussion of integration of not only oral health into primary care, but the incorporation of primary care practices in a dental setting: multi-directional integrated care. RADM Timothy L. Ricks, DMD, MPH, FICD has served as the Chief Professional Officer for the Dental Category since September 2018. As the Chief Professional Officer, RADM Ricks advises the Office of the Surgeon General and the U.S. Department of Health and Human Services on the recruitment, assignment, deployment, retention, and career development of oral health professionals.

[Slides](#) | [Recording](#) | [Evaluation](#)

Importance of, and how to, Complete Blood Pressure Screenings in Dental Settings

Speakers address the pivotal role of dental teams in the identification and treatment of high blood pressure among residents living in North Dakota. Blood pressure can impact oral health, and conversely, the health of the mouth can influence blood pressure.

[Slides](#) | [Recording](#) | [Evaluation](#)

Importance of Collecting Patient Health Information in Dental Clinics and the Relation to Systemic and Oral Health

Dr. Natalia Chalmers, Pediatric DDS, is the first-ever Chief Dental Officer in the Office of the Administrator for the Centers for Medicare & Medicaid Services. Dr. Chalmers speaks to the role that dental clinics can play in managing patient and community health through the use of patient medical records. Through a clinical case presentation and lecture, she shares how North Dakota dental providers can best utilize patient health information to improve care and overall patient health while maintaining a profitable practice.

[Slides](#) | [Recording](#) | [Evaluation](#)

Nutrition and Chronic Disease: How to Have These Conversations in Dental Settings

The health of the mouth has a direct impact on patient nutrition and can play a crucial role in supporting diabetes management. Similarly, good nutrition, a healthy weight, and management of one's blood sugar supports positive oral health. A registered dietitian provides practical tips and a clinical case presentation to assist dental teams with having these crucial conversations with their patients using evidence-based health education.

[Slides](#) | [Recording](#) | [Evaluation](#)

Talking With Patients About Fluoridation and Safe Drinking Water

This session reviews levels of fluoridation in North Dakota's community drinking water and how to talk with patients about using tap water and not bottled water for better oral health. Dr. Johnson shares a case presentation and practical tips for dental teams in North Dakota. He also shares where and how to find your community's fluoridation levels. Finally, Dr. Johnson discusses how to read a study about fluoride or fluoridation.

[Slides](#) | [Recording](#) | [Evaluation](#)

Role of North Dakota Dental Teams in Addressing Pediatric Oral Health School-Based Programs

Two North Dakota dentists speak about their role in school-based sealant programs, how they fit this work into their busy practices, and why this work is so important.

[Slides](#) | [Recording](#) | [Evaluation](#)

How Medical-Dental Integration is Working in North Dakota

A registered dental hygienist who has been providing dental care in one family medical center in North Dakota for several years, funded by the Health Resources and Services Administration, speaks about how medical-dental integration is serving patients who would otherwise lack access to needed preventive dental services.

[Slides](#) | [Recording](#) | [Evaluation](#)

Caring for Patients who are Covered by Medicaid and Billing for the Services

Dr. Duffy and Caitlin Friedt present considerations when providing dental services for persons covered by Medicaid, and how to develop treatment plans. Dental teams in North Dakota will learn how to provide care and bill for these services in private practice.

[Slides](#) | [Recording](#) | [Evaluation](#)

Connecting Dental Professionals with Emergency Departments Reducing Use of the ED for Dental Pain

This session discusses how often the emergency department (ED) has been utilized for dental care provision in North Dakota and what common practices are in our EDs for persons who present with dental pain. There is also a discussion of a model of dental case management that has been successful in one North Dakota ED, and how dental teams can serve as both resources for local EDs and as a key component for prevention.

[Slides](#) | [Recording](#) | [Evaluation](#)

Dementia Friendly Dental Practices: Patient Management Tips

School of Dentistry Associate Professor Stephen Shuman, DDS, MS, discusses increasing the capacity of community dental practices to care for the growing number of older adults living with dementia. “The goal of the dementia-friendly dental practice is a smoother experience for the patient, caregivers, and dental providers,” says Shuman. “The entire team needs to be involved, including front office staff, accounting, and the clinical care team. This includes recommended practices related to the physical environment, scheduling, communication, treatment planning, care delivery and more.”

[Slides](#)

Caring for Patients Who Are Indigenous in North Dakota

This session covers the importance of tailoring dental care to serve persons who are American Indian, recognizing the growing inequities and barriers to finding culturally sensitive care. The session also discusses dual insurance and how to access care through IHS, as well as in community when eligible for Medicaid.

[Slides](#)

Dementia Friendly Dental Practices: Treatment Planning

School of Dentistry Associate Professor Stephen Shuman, DDS, MS, works with an interprofessional team of experts on dementia care. The group, which includes representatives from the Minnesota Dental Association, Minnesota Area Agencies on Aging (AAA), and dementia care consultants, review existing curriculum from the AAA’s ACT on Alzheimer’s initiative and augment it with new materials tailored to dental practice. This

session covers strategies for good treatment planning when working with persons with Alzheimer's and related dementias.

[Slides](#) | [Recording](#)