



Children's
Oral Health
Network
of Maine

Maine AAP Annual Conference
April 29, 2023

The Rainbow, the Moose and SDF: What's New in Oral Health Integration

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COHN

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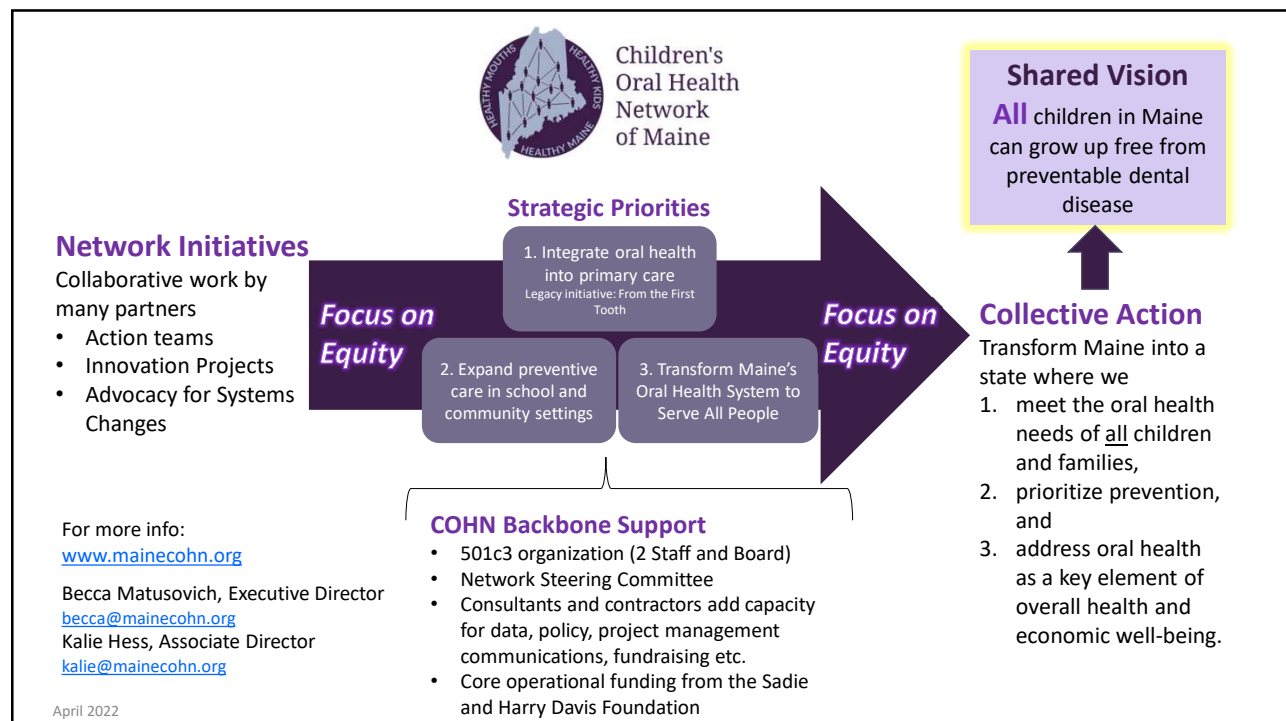
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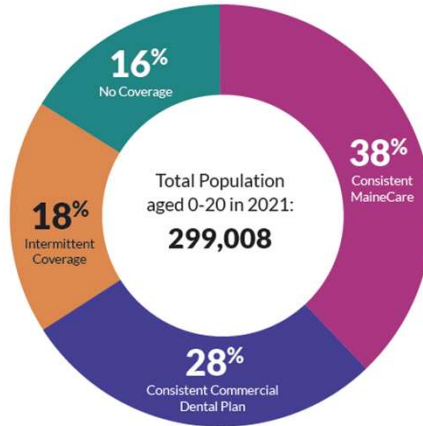
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The current reality of children’s oral health in Maine

Figure 1. Maine Children Under Age 21 by Type of Dental Coverage in 2021



Source: 2021 dental claims data from the Maine Health Data Organization's All-Payer Claims Database. Population denominator from 2021 ACS population estimates.

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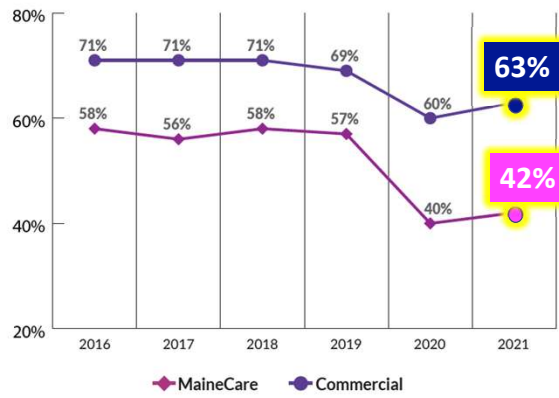
The current reality of children’s oral health in Maine

Challenges:

- About half of kids in Maine are not getting regular preventive dental care
- Workforce shortages are impacting access
- COVID has exacerbated pre-existing access challenges by decreasing provider capacity, increasing provider costs, changing home-care routines, and delaying preventive care

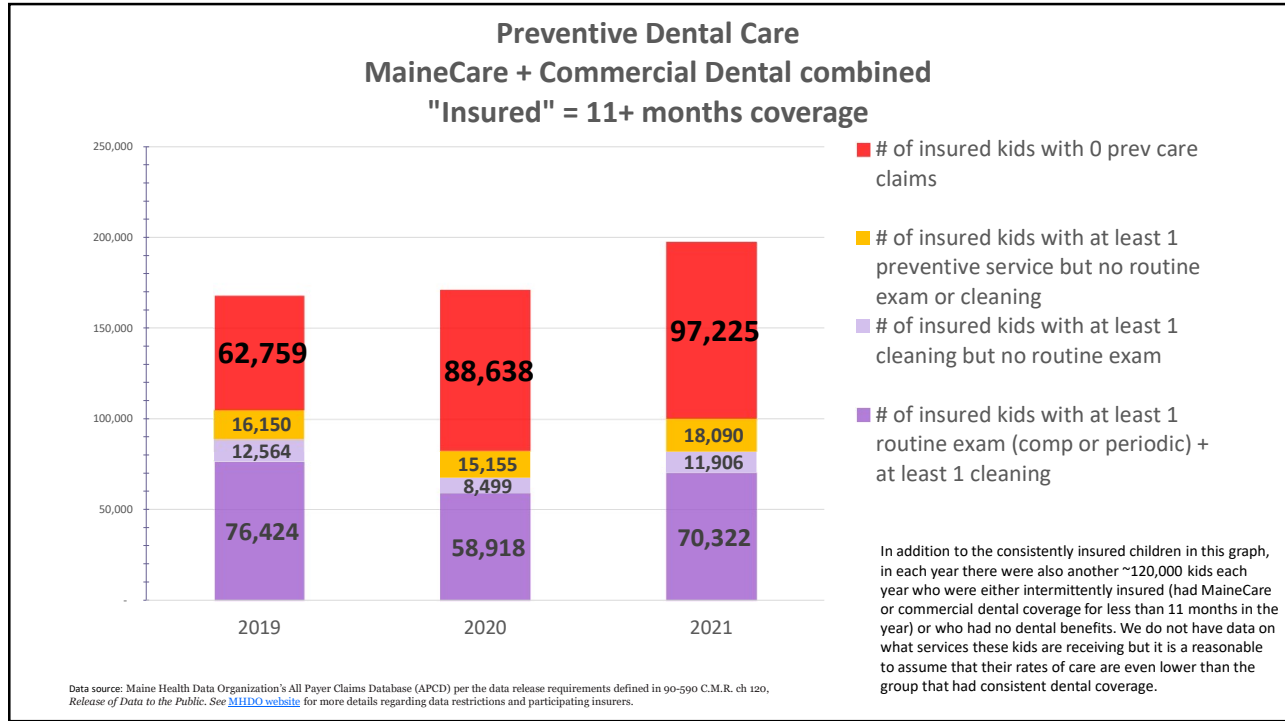
2021 data demonstrates ongoing access challenges and disparities

Figure 5. Percentage of Consistently Insured Children Under Age 21 with at least one Preventive Dental Claim in 2016-2021

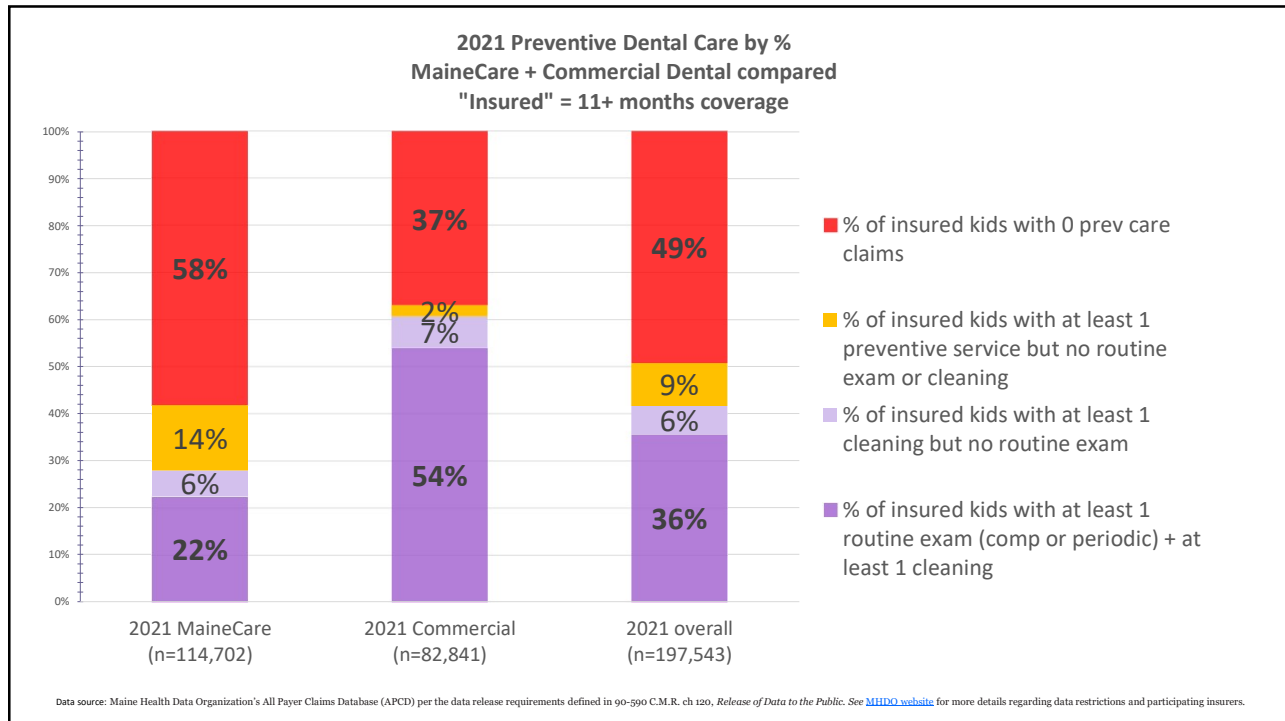


Source: Dental claims data from the Maine Health Data Organization's All-Payer Claims Database. Note: percentages reflect the rates among children with consistent coverage (i.e. 11+months of either MaineCare or commercial dental insurance in 2019). Full data brief: <https://www.maineconh.org/assets/docs/2020-COHN-Data-Brief.pdf>

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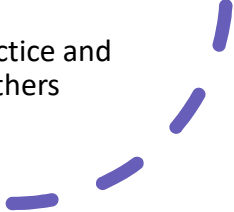


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Some very positive policy changes!

- Big changes for MaineCare (July 2022)
 - Comprehensive adult benefit
 - New dental rates
 - Maine CDC rebuilding and expanding oral health programs
 - Restored State Oral Health Coordinator position
 - Expanding School Oral Health Program to all public schools over next few years
 - Teledentistry
 - Authorized by Board of Dental Practice and reimbursable by MaineCare and others
- 

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Still room for improvement...

- Biennial budget for FY 23-24 and 24-25 needs to include funding to complete the School OH Program expansion
 - LR 1201 (not printed yet)
 - Fact sheets at our table
 - In progress: State plan for growing the public oral health workforce
- 

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MeAAP-MDA partnership



Spring Conference - April 28-30



2023 Annual Convention
June 8-10, 2023 in Bar Harbor

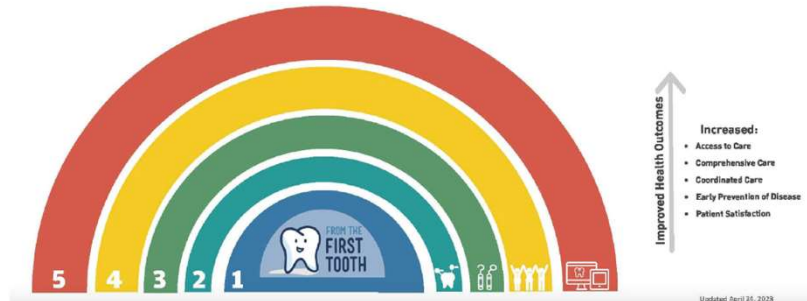
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The Health Integration Rainbow

Oral Health Integration Models for Primary Care and Dental Practices

Blend models to meet the needs of your community

- 1** From the First Tooth
- 2** E-Consults, SDF, & Warm Handoffs
- 3** Co-located Dental Hygienist
- 4** Integrated Dental Hygienist
- 5** Virtual Dental Home



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Health Integration Action Team Project Updates

• *FTFT – Bruce the Moose pilot*

- Dental Steps for ME
- E-Consults, SDF, & warm handoffs



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Bruce the Dental Health Moose

2023 Pilot:

- 9 primary care offices across Maine serving pediatric patients
- Family oral health kits include a toothbrush for each family members, toothpaste, floss, educational material, and a mirror cling that links to fun tooth brushing videos.
- If you're interested in future participation stop by our table!



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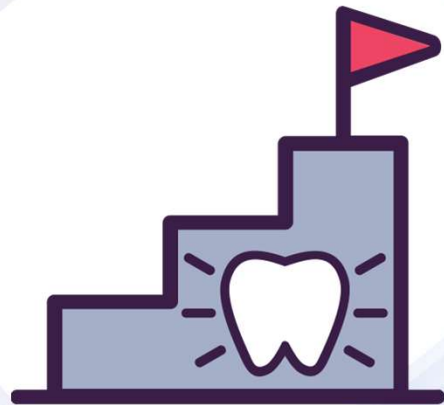
Health Integration Action Team Project Updates

- FTFT – Bruce the Moose pilot
- **Dental Steps for ME**
- E-Consults, SDF, & warm handoffs

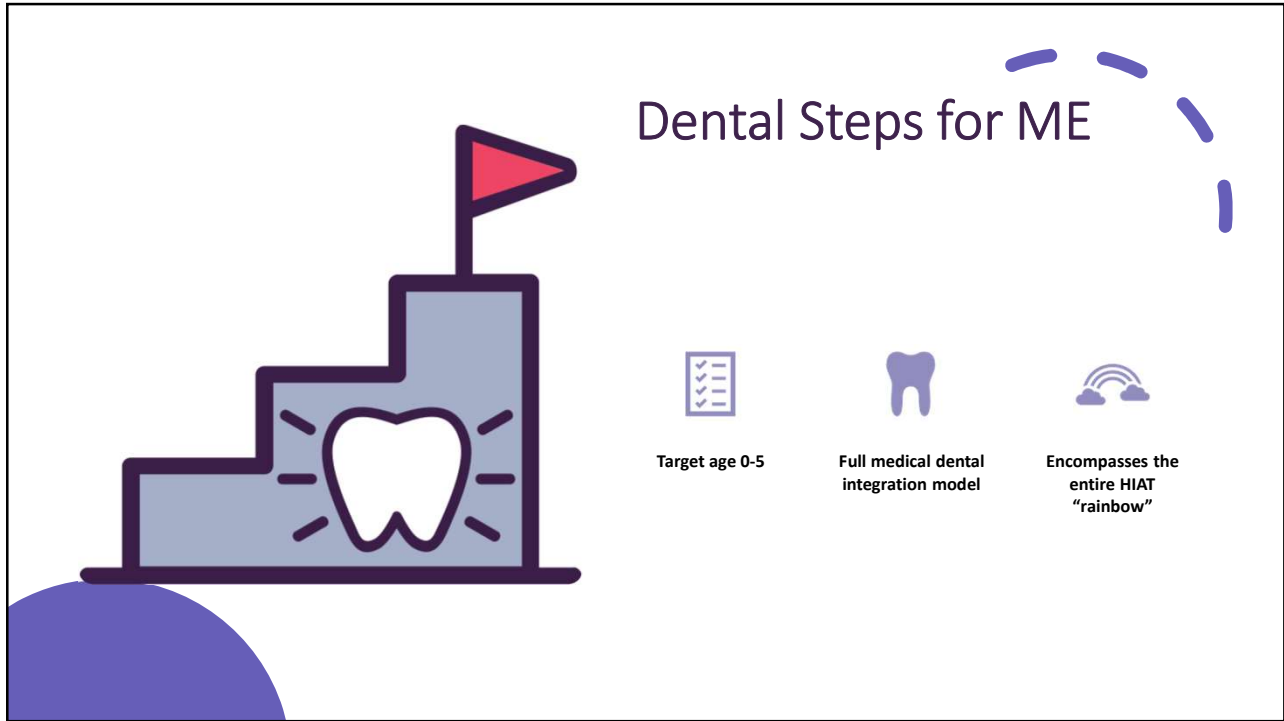
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Dental Steps for ME Background

- Many children do not get to a dentist until too late- decay process already underway
- Many early barriers to care
- Meeting children where they are is the most effective, lowest barrier approach for prevention
- Early and often **PREVENTION** and intervention
= *a childhood free of active tooth decay*



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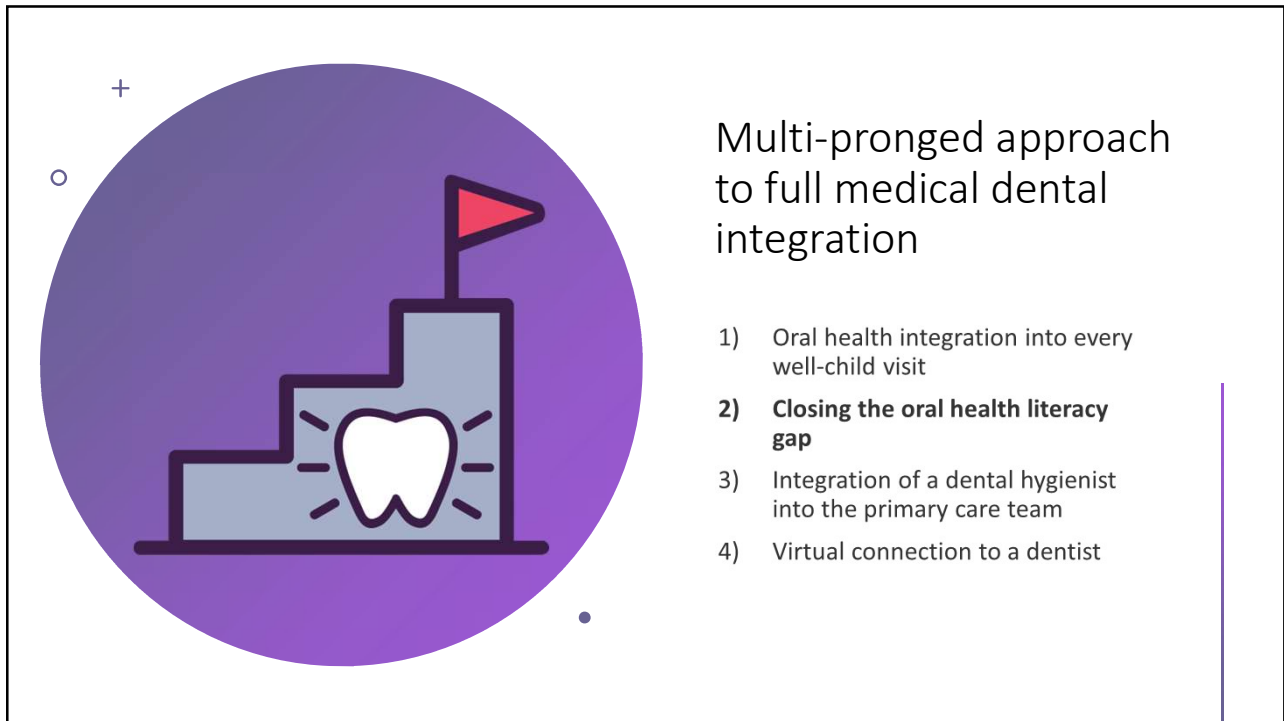


The graphic features a stylized staircase with a red flag on top, and a white tooth with radiating lines in the center of the steps. To the right, the title "Dental Steps for ME" is displayed. Below the title are three icons: a checklist, a tooth, and a rainbow. Each icon is accompanied by a text label: "Target age 0-5", "Full medical dental integration model", and "Encompasses the entire HIAT 'rainbow'".

Dental Steps for ME

- Target age 0-5
- Full medical dental integration model
- Encompasses the entire HIAT "rainbow"

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The graphic shows a purple circle containing the staircase and tooth icon. To the right, the title "Multi-pronged approach to full medical dental integration" is followed by a numbered list of four points. A vertical purple line is on the right side of the text area.

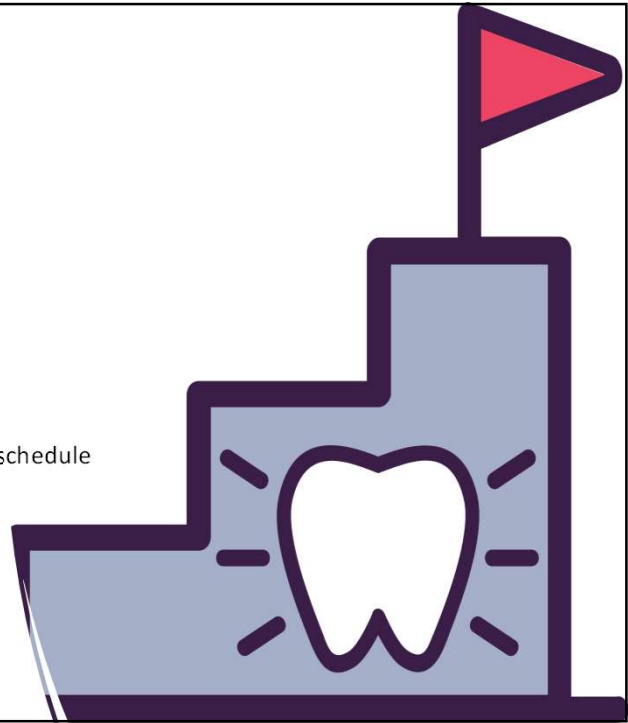
Multi-pronged approach to full medical dental integration

- 1) Oral health integration into every well-child visit
- 2) **Closing the oral health literacy gap**
- 3) Integration of a dental hygienist into the primary care team
- 4) Virtual connection to a dentist

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Status update

- Year long planning process nearly complete
- Development of "Implementation Guide"
 - Ex: Guide contents:
 - Readiness assessment
 - Schedule of activities following well-child schedule
 - Clinical workflows
 - Records integration guidance
 - Fiscal projections
 - Supply needs
 - Sample documents



**For more information, visit our table!*

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Closing the oral health literacy gap



Oral health education
in every well-child visit
2 months to 5 years

New resource for
primary care providers
to make education
integration **EASY!**

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Oral Health Video Library



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Video Library Contents

Video / well-child visit	Video Length (Minutes)	Topic
Introduction	4:46	Introduction to the video library; connections of parent / caregiver oral health to child oral health
2 months	1:47	Importance of caring for baby teeth
4 months	2:09	Caries development / early feeding connections
6 months	2:06	Early oral health homecare practices
9 months	2:21	Caries development / dietary influences
12 months	2:15	Preparing for early dental visits
15 months	2:44	Fluoride
18 months	3:01	Pacifier use
2 years	2:36	Oral hygiene tips for active toddlers
2 ½ years	2:41	Airway issues and their effects on oral health
3 years	2:09	Caring for the supporting structures of the teeth, the gingiva
4 years	2:44	Early caries detection, parent / caregiver role
5 years	1:59	What to expect looking forward / permanent dentition

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Dental Steps for ME For Providers English (US) ▾

This oral health video library contains one video correlating with each well-child visit from 2 months to age 5 as well as a prenatal/introduction to the library. Each video contains one small, digestible nugget of oral health information aimed at closing the oral health literacy gap for families of young children. All of the information is delivered by an oral health champion from the Children's Oral Health Network of Maine, and purposefully chosen to provide families with the key pieces of information they need to prevent dental disease in their children.

Introduction: Oral Health Video Library (English): Prenatal [Share](#)

2 months well-child visit

4 months well-child visit

6 months well-child visit

9 months well-child visit

12 months well-child visit

15 months well-child visit

18 months well-child visit

24 months well-child visit

30 months well-child visit

36 months well-child visit

48 months well-child visit

60 months well-child visit

[Watch on YouTube](#)

[Introduction: Oral Health Video Library \(English\)](#) [Library key points \(pdf\)](#)

Need these videos in a different language? [English \(US\)](#) [Español](#) [Français](#) [Arabic](#) [Somali](#) [Portuguese](#)


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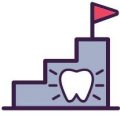
DentalStepsforME.org



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Children's Oral Health Network of Maine
Oral Health Video Series for Parents/Caregivers: Ages 0-5



Children's Oral Health Network of Maine


Introduction




Age	Topic	Key Points
Introduction (Prenatal)	Introduction to library/importance of parent & caregiver oral health	*Your child's dental health begins with yours *Be sure to take care of any dental needs you might have *Be very cautious of saliva and bacterial transmission with your baby, and make sure to tell all people who have contact with your baby too
2 months	Importance of baby teeth	*Baby teeth are as important as adult teeth to care for *Decayed baby teeth can negatively affect overall health as well as the health of adult teeth
4 months	Cavity development/feeding patterns	*Make a good practice of limiting frequency of exposure to carbohydrates *Only have milk bottles at meals, and never send your child to bed with milk in a bottle
6 months	Early homecare	*It is never too early to introduce healthy mouth habits to your baby *Begin brushing and flossing daily as part of a healthy oral hygiene routine *Children will need help brushing and flossing effectively until they are around the age of 7-8
9 months	Cavity development / dietary influences	*Limiting frequency of exposure to carbohydrates reduces decay risk *Sources of carbohydrates include candy, cakes, cookies, snack crackers, breads, and sweetened liquids *Dentally healthy snack choices include fresh fruits (except citrus fruits that are highly acidic), vegetables, cheese, cottage cheese, low-sugar yogurt, and peanut butter
12 months	Preparing for early dental visits	*Prepare your child for their first dental visits by sharing with them all the fun and exciting new things they will experience *Keep a positive attitude when discussing their dental appointments so they will enter the appointment with expectations of a welcoming, comfortable environment
15 months	Fluoride	*Fluoride supports strong teeth and cavity prevention *Check the fluoride content in your drinking water and talk with your healthcare provider about supplementation if it is too low *Fluoride containing dental homecare products are important to use but should be used carefully to ensure young children are not swallowing them
18 months	Pacifiers	*Long-term use of pacifiers can cause facial development issues *Plan to stop pacifier use by age 2 *Take extra care to ensure the transition is as positive for your child as you can
24 months	Oral hygiene tips for active toddlers	*Regular oral hygiene routines can be very challenging with active toddlers *Employ creative techniques to make daily oral hygiene a fun and welcome experience for your child *Refrain from negativity and threatening tones that can make the experience more challenging
30 months	Dental issues connected to breathing	*Chronic mouth breathing can negatively impact your child's health *Observe your child to determine if they are breathing through their mouth or nose *If your child is mouth breathing, schedule an appointment with your health provider
36 months	Gum health	*Plaque must be removed frequently to prevent tartar build-up *Tartar requires removal by a dental hygienist! *Plaque and tartar can contribute to gum disease *Effective brushing and flossing can limit plaque and tartar
48 months	Early cavity detection	*Although prevention of cavities is ideal, sometimes cavities still occur *Catching cavities in their early stages can limit the amount of treatment needed *As a parent, your daily look at the child's teeth can be very helpful in early cavity detection
60 months	What to expect looking forward/ adult teeth	*Your child will get their first adult tooth around age 6 *Continued excellent brushing and flossing will help keep these adult teeth healthy *Help your child adjust their oral health routine to accommodate these new teeth and take extra care around areas that might be sore due to new teeth coming in *Regular dental check-ups are important and your child's health team can continue to be a great resource as your child grows

COME TO OUR TABLE!!


2 months




4 months




6 months




9 months




12 months




15 months




18 months




2 years




2.5 years




3 years



4 years



5 years



WELL-CHILD VISITS: Follow the QR code to the ENGLISH Dental Steps for ME oral health video

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Health Integration Action Team Project Updates

- FTFT – Bruce the Moose pilot
- Dental Steps for ME
- **E-Consults, SDF, & Warm Handoffs**

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E-Consults, SDF & Warm Handoffs



- Planning group underway
 - Field test using existing telehealth platform
 - Share intraoral imaging
 - Dentist guidance on appropriate course of action
 - SDF application by pediatrician
 - Other planning items:
 - Referral process for identified needs
 - Fiscal feasibility
 - Preparation for a larger scale pilot
- **Visit our table to learn more!**

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Silver Diamine Fluoride (SDF)



- Announcement of New SDF CPT CODE: 0792T
- Effective July 2023
- Multi-organization support including ADA & ADHA
- Link to Carequest press release:
<https://www.carequest.org/about/blog-post/cpt-code-application-silver-diamine-fluoride-explained>
- Link to one of the first SDF webinars/trainings aimed at a primary care audience following this news:
https://youtu.be/QMvx5glwg_I

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Silver Diamine Fluoride (SDF)

What is it and how is it used?

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What is Silver Diamine Fluoride?

- Clear or sometimes dyed blue in hue, liquid that can be directly applied to carious teeth
- Silver acts as an antibacterial agent, previously silver nitrate has long history of use in medical and dental settings
 - Howe's Solution (silver nitrate) was used frequently and phased out starting in the 1950's forward with the advent of regular fluoride application, water fluoridation, and better equipment/materials in the dental field
- Silver containing treatments have been commonly used for almost a century in wound disinfection, to protect from bacterial invasion and cauterization
- It is the bactericidal action of the silver that stains the lesion black

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What is Silver Diamine Fluoride?

- Combination with fluoride to improve tooth strength and remineralization began in the 1970's in Japan, improvement on success continued for years and regular use spread to Australia, Argentina and Brazil
- Also contains ammonia as the primary solvent and contributes most to bad taste
- Clinical trials began in the U.S. in 2002 and FDA approval for dentin desensitization was given in 2014

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Current Use



- Manufacturers instructions are reflective of use as a dentin desensitizer
- In 2017 (updated 2018) the American Academy of Pediatric Dentistry published a guideline for practitioners to use SDF for dental caries management
- Encouraged off label use for caries arrest
- Clinical trials are currently underway, and it has been granted “breakthrough” status to allow for this off-label use
- Most widespread use, especially in primary dentition, is caries arrest

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Who uses it?

- Virtually all pediatric dentists are using SDF in some capacity in their practices
- 50-60% of general dentists are utilizing SDF
- It has been critical in stabilizing children who require sedation for definitive care
 - Wait times in Maine can be anywhere from 6 months to 2 years for definitive treatment
 - Maine has had a provider shortage that was well known even prior to COVID and this has been especially apparent in specialty settings

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Does it Work?

- The recently published JAMA article by Ruff et al. showed that SDF is actually more effective in **arresting** and **preventing** caries than traditional glass ionomer protective restoration, sealants, and fluoride varnish interventions currently used in many school based oral health programs
- Gao 2016 meta-analysis showed “the proportion of caries **arrest** on primary teeth treated with different application protocols (1 application, annual, and biannual), and followed from 6 to 30 months, was 81%”
- Chibinski and colleagues (2017) reported that the “caries **arrest** at 12 months promoted by SDF was 66% higher (41%–91%) than by other active material, but it was 154% higher (67%–85%) than by no treatment.”
- Oliveira and colleagues-evaluated caries **prevention** for primary teeth and concluded that, “when compared with placebo at 24 months or more, SDF decreased the development of dentin caries lesions in treated and untreated primary teeth with a preventive fraction of 77.5%”

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Indications for Use

- High to extreme caries risk
- **Multiple untreated caries lesions**
- **Lack of dental home**
- Xerostomia from medications, disordered breathing, inhaler use, etc.
- Young age where cooperation is not guaranteed for definitive treatment
- Anxiety, intellectual and development delays that make traditional treatments more challenging

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Caveats

- Dark black staining of the lesion is expected, may slightly fade over time but will always be dark unless restored
- Larger teeth (permanent vs. primary teeth), larger lesions, and poor oral hygiene all play a role in success and multiple applications in a year may be necessary
- Generally, not recommended on teeth that are symptomatic such as:
 - Any notable swelling around the tooth
 - Tooth is painful to pressure
 - Wakes the patient up at night
 - Refuses to brush or eat on that side

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The Journal of the American Dental Association
ORIGINAL CONTRIBUTIONS ESTHETICS | VOLUME 146, ISSUE 7, P510-518.E4, JULY 2017

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Parental perceptions and acceptance of silver diamine fluoride staining

Yasmi O. Crystal, DMD • Malvin N. Janal, PhD • Dylan S. Hamilton, DMD • Richard Niederman, DMD

Published: April 27, 2017 • DOI: <https://doi.org/10.1016/j.adaj.2017.03.013> • Check for updates

PlumX Metrics

Abstract

Background

The caries arrest that can be achieved by using silver diamine fluoride (SDF) offers a minimally invasive and inexpensive alternative to traditional restorative caries treatment. The authors evaluated how the dentinal staining that is associated with SDF influences the acceptance of this treatment among parents of young children in the New York City metropolitan area.

Conclusions

Staining on posterior teeth was more acceptable than staining on anterior teeth. Although staining on anterior teeth was undesirable, most parents preferred this option to advanced behavioral techniques such as sedation or general anesthesia.

Abstract
Key Words
References
Biography
Biography
Biography
Biography
<https://jada.ada.org/home>

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How do you assess if a tooth is suitable?

- **Pulpitis: inflammation of the pulpal tissue inside a tooth**
 - Reversible, heightened response to stimuli that returns to normal within a few seconds
 - Irreversible, heightened and lingering response, often results in a dull ache or throbbing pain following the stimulus
- Kids are generally not great at describing their pain, questions you can ask:
 - "Has this tooth ever woken you up when you are sleeping?"
 - "Have you not wanted to play because this tooth was hurting you?"
 - "Have you been able to eat your food normally?"
 - "Does this tooth ever feel like it has a heartbeat?"
- Questions to ask parents/guardians
 - "Have you noticed them avoiding eating, brushing or using that side of their mouth?"
 - "Have you noticed them holding their face or cheek?"
 - "How frequently are they complaining about the tooth?"

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Evaluating Pulpitis

Reversible

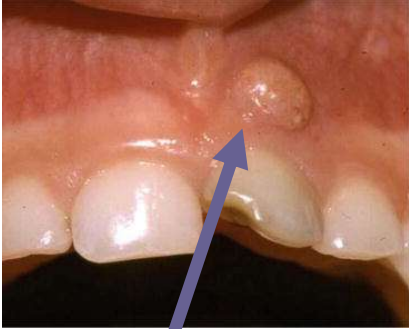
- The pain is only present when there is a stimulus like food lodged in the cavity, brushing helps
- You cannot illicit a painful response
- Patient generally non-avoidant to normal activities involving the mouth like eating and brushing
- The tooth can be tapped on with some force without pain

Irreversible


- Clinical signs of abscess or polyp
- Little to no tooth structure remaining
- Pain is spontaneous as well as from stimuli
- Palpation of the gingiva causes pain
- Tapping on or placing firm pressure on the tooth causes pain

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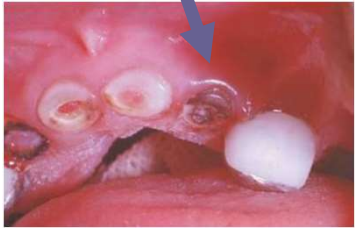
Findings that Contraindicate SDF Application



Draining abscess/fistula



Polyp or exposed pulpal tissue




Little to no remaining tooth structure

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How do you use it?

- No removal of decay is required
- Any obvious food or debris should be removed, if possible, prior to placement
- **PROVIDE INFORMED CONSENT THAT MAKES COLOR CHANGE CLEAR!**



Patient name: _____

Date of Birth: _____


Informed Consent for Silver Diamine Fluoride (SDF)

THE BENEFITS OF SDF

- SDF is a liquid antibiotic that can help stop tooth decay and relieve tooth sensitivity.
- SDF can help prevent the need for fillings or other more invasive treatment on a tooth.
- SDF is easy to use and does not hurt. There is no need to numb or drill teeth.

THE PROCEDURE

- The affected area of the tooth is dried.
- A small amount of SDF is placed on the affected area and allowed to dry for 1 minute.
- There may be a metallic taste that will go away quickly.
- After application of SDF, no eating or drinking for one hour.



DO NOT USE SDF IF

- THERE IS AN ALLERGY TO SILVER
- There are painful sores or raw areas on the gums or in the mouth.

RISKS RELATED TO SDF INCLUDE, BUT ARE NOT LIMITED TO:

- The affected area will stain gray to black permanently as shown in the photos. Healthy tooth structure will not stain, only the unhealthy area. This means the SDF is working.
- Tooth-colored fillings and crowns may discolor if SDF is applied to them. Normally this color change is temporary and can be polished off.
- If applied to the skin or gums, a brown stain may appear that causes no harm but will not immediately wash off. The stain will gradually disappear (within 1-3 weeks).
- SDF might not stop tooth decay and the decay process may progress. In that case the tooth will require further treatment such as repeat SDF, a filling, crown, root canal treatment, or extraction.

ALTERNATIVES TO SDF INCLUDE, BUT ARE NOT LIMITED TO:

- No treatment. May lead to worsening decay with continued deterioration of tooth structure, cosmetic appearance, and/or worsening symptoms.
- Depending on the location and extent of decay, other treatment may include placement of fluoride varnish, a filling, crown, extraction, or referral for advanced treatment.

I CERTIFY THAT I HAVE READ AND FULLY UNDERSTAND THIS DOCUMENT AND I HAVE THE CHANCE TO HAVE ANY QUESTIONS ANSWERED.
I consent and authorize WCDC to use Silver Diamine Fluoride to help stop tooth decay.

Patient/parent/legal guardian

Witness

Patient/parent/legal guardian's Signature

Witness signature

Date

Date

Waterville Community Dental Center, 2 Evergreen Dr., Oakland, ME 04063
207-881-5861

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What do you need

- SDF
- Dappen Dish
- Microbrush/brush
- Cotton rolls or gauze
- Topical Fluoride Varnish
- Eye protection
- Bib/barrier for clothing
- Teeth should be generally dry, use gauze to dry off teeth well
- Cotton rolls or extra gauze can be helpful to retract the tongue for lower teeth
- It should sit for 1 minute after being placed then covered with a fluoride varnish, be sure you are applying BEFORE you apply varnish as the varnish creates a barrier the SDF won't be able to penetrate
- Fluoride varnish is helpful to mask the taste and can be applied earlier than one minute if the patient is wiggly or uncooperative



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Advantage Arrest Silver Diamine Fluoride 38%

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- Back In Black T-Shirt
- Dental Identification Kit
- DenteShield Sealants & Primer
- Elevate Tongue Cleaners
- FluoriMax NaF Varnish
- FluoriMax 5000 Toothpaste
- Just Right 5000 Toothpaste
- Stance Stannous Fluoride Rinse
- TePe EasyPick
- TePe Interdental Brushes
- TePe Specialty Brushes

Advantage Arrest Silver Diamine Fluoride 38% GEL - Unit-Dose Ampules



Advantage Arrest Silver Diamine Fluoride 38% - Three 3 mL Bottle Kit



Advantage Arrest Silver Diamine Fluoride 38% - Unit-Dose Ampules



Advantage Arrest Silver Diamine Fluoride 38% - 8 mL Bottle



Advantage Arrest Applicators (100 pk)



Advantage Arrest Applicators (100 pk)



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Application Technique



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