Integrating Silver Diamine Fluoride into Health Systems: Insights from a MaineHealth Pilot

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Background:
Silver diamine fluoride (SDF), a nationally recognized treatment for slowing and arresting dental caries, was piloted in two MaineHealth primary care practices to address limited pediatric dental care access. This initiative, in partnership with From the First Tooth, targeted patients aged 2–21 and created a framework for broader systemwide adoption.

Methods:
A seven-domain framework guided integration: leadership approval, service approval, electronic medical record (EMR) integration, billing integration, development of consent and patient education materials, workflow optimization, and provider training. Tasks were delineated within each domain and implemented in a stepwise manner. Pilot sites included a rural health center and a pediatric clinic with a residency program and a patient population in which more than 50% of patients are non-English speaking.

Results:
SDF was successfully integrated into the MaineHealth system. Leadership and service approvals were obtained, and EMR templates were built for proper documentation in EPIC. Billing codes were incorporated for both commercial and Medicaid insurance. Educational materials were created with a focus on caregiver health literacy. Tailored workflows addressed the needs of the practices, and providers received hands-on training from dental professionals. Both pilot sites have incorporated SDF assessment and application into their pediatric workflows. As of 3/24/2025 49 patients have received SDF treatment.

Discussion:
The integration framework establishes a strong foundation for expanding SDF within MaineHealth. The release of AAP SDF guidance and the Smiles for Life Curriculum has increased interest among healthcare providers, positioning MaineHealth to meet growing demand.

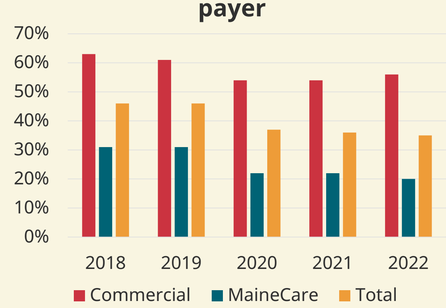
Future Direction:
In 2025, From the First Tooth will partner with MaineHealth to train an additional six pediatric primary care practices within the health system. Additionally, the SDF toolkit, outlining the integration framework, will be used to support non-MaineHealth practices to onboard SDF within their practice.



Using an integration framework established a strong foundation for future SDF expansion within pediatric primary care for Maine's largest health system

Scan QR code to access SDF integration toolkit

Percent of insured children in Maine with a dental home by payer



Source: MHDO APCD Claims and Eligibility 2018-2022 run date December 12, 2023.
Definitions: *Insured children* is defined as being enrolled for dental benefits for 11 or more months. *Dental home* is defined as At least one periodic or comprehensive oral exam AND At least one cleaning/prophylaxis

Number of insured children in Maine with a dental home

	2018	2019	2020	2021	2022
Commercial					
# of children insured	78,116	80,195	84,919	82,961	83,038
# with a dental home	49,244	48,996	45,746	44,867	46,376
% with a dental home	63%	61%	54%	54%	56%
MaineCare					
# of children insured	89,119	87,839	100,886	115,248	122,496
# with a dental home	27,442	27,637	22,364	25,633	24,609
% with a dental home	31%	31%	22%	22%	20%
Total					
# of children insured	167,235	168,034	185,805	198,209	205,534
# with a dental home	76,686	76,633	68,110	70,500	70,985
% with a dental home	46%	46%	37%	36%	35%

Source: MHDO APCD Claims and Eligibility 2018-2022 run date December 12, 2023.
Citation: Fox, K. S., Kumarage, A., McGuire, C., & Stultz, E. (2024). Assessing Maine children's access to a dental home: Dental insurance does not guarantee receipt of dental care. University of Southern Maine, Muskie School of Public Service Catherine E. Cutler Institute, Population Health & Health Policy

SDF Primary care training and application (2023-2025)

Number of providers trained	**65**
Number of practices trained	**8**
Number of practices actively applying SDF	**2**
Number of patients that have received SDF	**49**