



From the First Tooth

A Statewide Children's Oral Health Initiative

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Funded by the Sadie & Harry Davis Foundation, led by MaineHealth

OVERVIEW

Early childhood caries is the most widespread, chronic disease among U.S. children. Approximately four out of ten Maine children will have a cavity by third grade. Consequences of untreated tooth decay include pain, infection, impaired speech, delays in learning, problems with eating, and reduced quality of life. Childhood dental disease is preventable with early intervention. With a shortage of dental health professionals across Maine, medical homes play a vital role in improving pediatric oral health.

From the First Tooth (FTFT) is a statewide children's oral health program funded by the Partnership for Children's Oral Health and administered by MaineHealth. Its goal is to eliminate dental disease among Maine children by greatly increasing the number of children 6 months through 5 years who receive preventive oral health care. Since its inception in 2011, FTFT has been working with primary care practices to integrate the following into well-child visits so children have a continuum of preventive oral health care starting at their first tooth:

1. Oral health evaluation/risk assessment
2. Application of fluoride varnish
3. Parent / caregiver education
4. Referrals to a dentist.

METHODS

Primary care practices join FTFT through a five step process:

1. Practice outreach and recruitment
2. Orientation to the FTFT program and assessment of practice readiness
3. Staff training
4. Program piloting
5. Plan-Do-Study-Act follow up

Practice participation status is tracked in a database and practices are categorized as either:

- **Hardwired:** Implementing the oral health risk assessment/evaluation, fluoride varnish application, parent/caregiver education, and referral to a dentist
- **Partially Implemented:** Implementing either the oral health risk assessment/evaluation or fluoride varnish application
- **Ever Trained:** Received either in-person or virtual training
- **Not Trained:** No interaction with FTFT

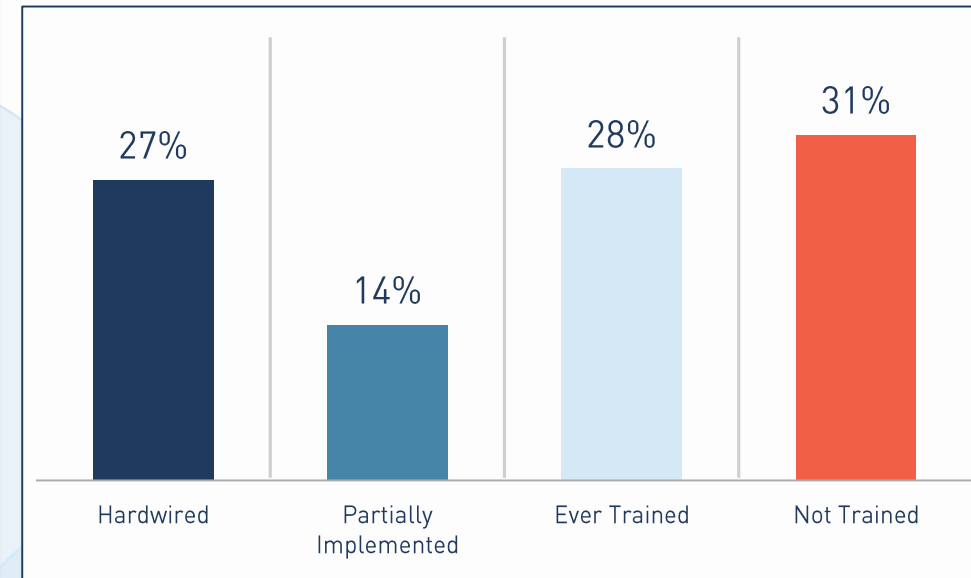
Programmatic impact is monitored through three MaineCare claims measures:

1. % of MaineCare members with an oral health evaluation and/or fluoride varnish application during a well-child visit for children age 12-47 months
2. % of children who have received at least 4 fluoride varnish applications by age 4
3. % of children reached by the program ages 12-23 months

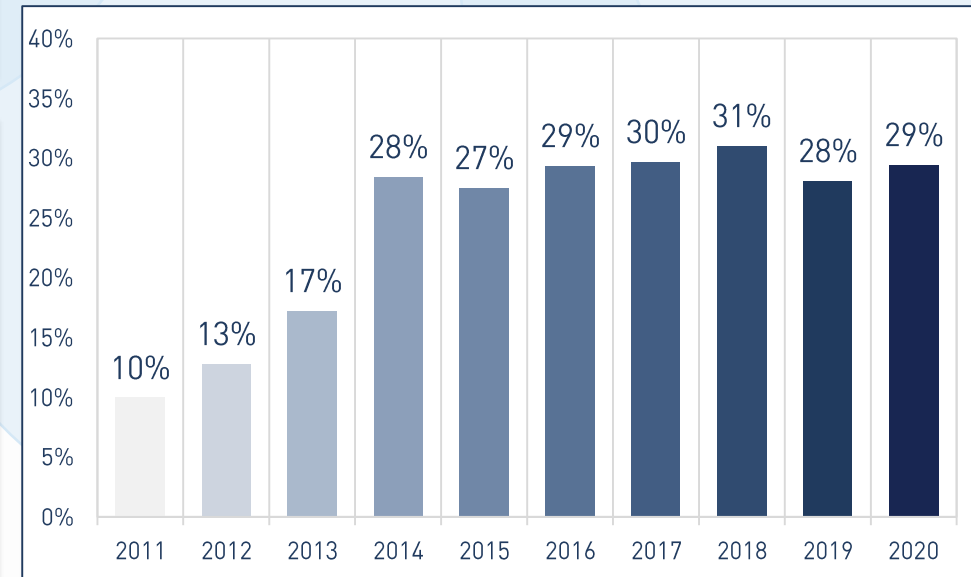
RESULTS

- **Graph 1 provides a** breakdown of the implementation status for the 290 practices tracked in the FTFT database. 41% of practices are implementing the FTFT program at various levels, 69% of practices have been trained by FTFT, and 31% of practices have not been trained.
- **Graph 2 shows the following:**
 - % of MaineCare members with an oral health evaluation and/or fluoride varnish application increased 197% from 2011 to 2020 (9.9% to 29.4%)
 - Since 2014, these rates have remained between 27% and 31% on a consistent basis

Graph 1. Percentage of primary care practices by participation status



Graph 2. Percentage of children with an oral health evaluation and/or fluoride varnish application during a well-child visit for children 12-47 months

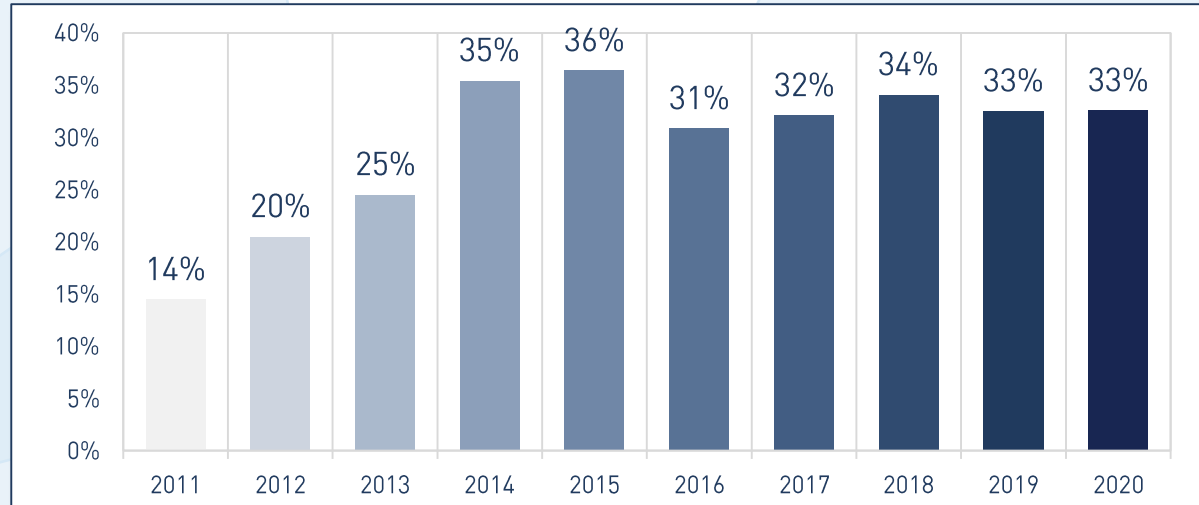


Data source: MaineCare claims data from the University of Southern Maine Muskie School

RESULTS CONTINUED

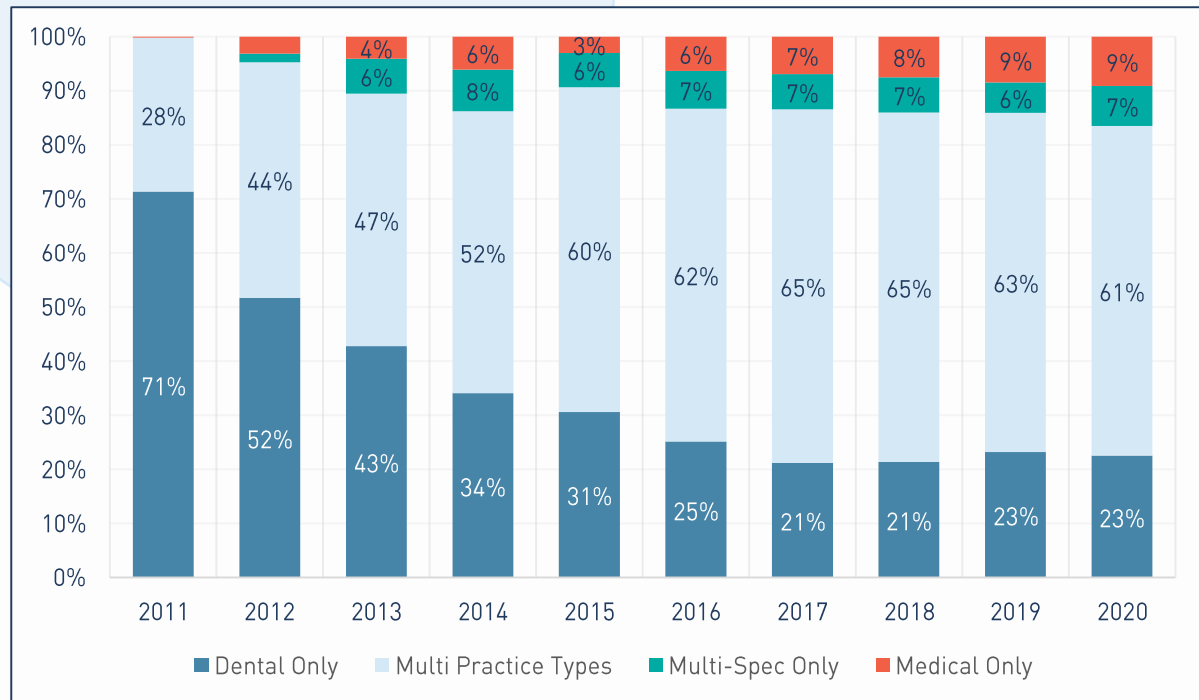
- Graph 3 highlights:
 - The % of children ages 12-23 months with at least one well-child visit who received either a oral health evaluation and/or fluoride varnish at any point during the year.
 - Since 2016, the rate of children reached by FTFT has remained consistently between 31% and 34%.
- Graph 4 details:
 - The % of MaineCare children who have received at least 4 fluoride varnish applications by age 4.
 - Since 2018, the % of 4x4 applications has dropped slightly from 30% to 24%.
- Graph 5 displays the location where a child received fluoride varnish (only in a dental home, only in a medical office, only in a multi-specialty office (FQHC) or in multiple practice locations). The trend since 2011 is for more medical offices to provide fluoride varnish.

Graph 3. Percentage of children reached with at least one well-child visit in the measurement year, by year, ages 12-23 months



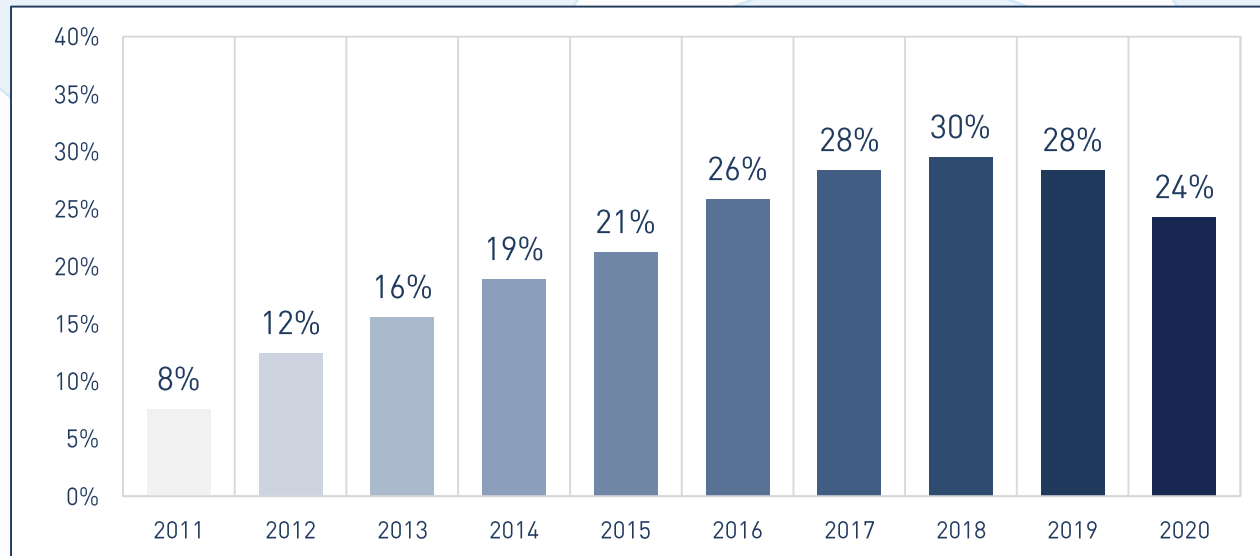
Data source: MaineCare claims data from the University of Southern Maine Muskie School

Graph 5. Percentage of children who have received at least 4 fluoride varnish applications by 4 years of age, by year, by provider type

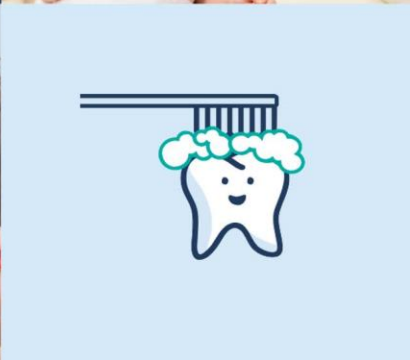


Data source: MaineCare claims data from the University of Southern Maine Muskie School

Graph 4. Percentage of children who have received at least 4 fluoride varnish applications by 4 years of age, by year



Data source: MaineCare claims data from the University of Southern Maine Muskie School



Discussion

Using the five-step onboarding process, FTFT has been implemented in slightly over 40% of primary care practices across Maine; the ultimate goal is, of course, 100%.

FTFT saw continuous program growth in its first five years (2011 to 2016). Since 2016, MaineCare claims data reflected in Graphs 2 and 3 has remained consistent. Though not surprising due to unprecedented dental office closures, the 2020 data shows a drop in the % of children with 4 fluoride varnish applications by age 4.

The growing strength of the FTFT program is shown in the following data points:

- During a global pandemic, the % of children with a well-child visit that received either an oral health risk assessment and/or fluoride varnish application did not waiver.
- Children receiving fluoride varnish either in the medical home or within a FQHC has grown over the years.

Next Steps

Data collected by FTFT is limited to what is available via MaineCare claims. To have a more comprehensive view of FTFT's reach, more oral health-related data is needed on uninsured and commercially insured children. Prevalence data tracking dental disease is also needed to understand the impact of the program clinically.

FTFT will continue to increase access to oral health prevention for all Maine children.

