

## Background

Early childhood caries (ECC) is the most prevalent chronic disease in children in the United States.<sup>1</sup> Many adults are not aware of the appropriate time to begin taking their children to the dentist, which contributes to the severity of ECC.<sup>2,3</sup> The American Academy of Pediatrics (AAP) recommends that pediatricians perform oral health risk assessments at every well-child visit beginning at age 6 months.<sup>4</sup> Pediatricians serve as a valuable resource in identifying children at high risk for dental disease and providing appropriate referrals.<sup>5,6,7</sup>

*The purpose of this study was to evaluate the concordance between pediatrician and pediatric dentist documentation of dental caries in children aged 0–18 years.*

## Methods

### Study population:

- A retrospective chart review was conducted at Boston Medical Center (BMC).
- Inclusion: patients aged 0–18 years with both a dental exam at the BMC Shapiro Pediatric Dental Clinic AND a physical exam at BMC Pediatrics within one year prior (May 2023 – May 2025).
- A total of 226 eligible subjects were included.

### Data collection and analysis:

- Data were obtained through manual chart review by two independent reviewers.
- Variables: demographics, DMFT values, physician caries documentation (0 = no mention, 8 = mentioned/no caries, 9 = mentioned/yes caries), insurance type, behavioral diagnoses, THRIVE findings.
- A behavioral diagnosis was defined as any of the following ICD-10 coded diagnoses documented in the medical record: autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD), or developmental delay.
- Sensitivity and specificity were calculated for pediatrician caries detection.

**Table 1. Description of study sample (n=226)**

Characteristic	% (N) or mean
<b>Gender (N)</b>	
Male	55.1% (N=124)
Female	44.9% (N=101)
<b>Age (years)</b>	
Mean	7.7 ± 4.2 years
<b>Insurance type</b>	
Medicaid	94.7% (N=213)
Private or employer based	5.3% (N=12)
<b>Behavioral diagnosis</b>	
Diagnosis listed	21.3% (N=48)
No diagnosis listed	78.7% (N=177)
THRIVE positive finding	43.6% (N=98)

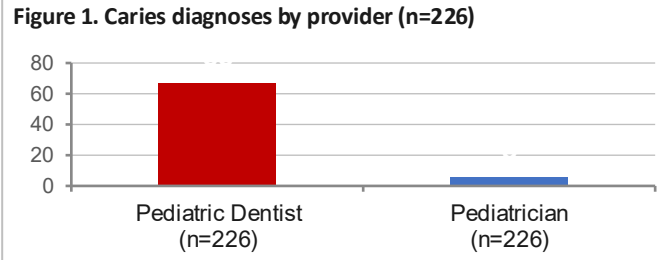
## Results

**226**  
Eligible subjects included

**29%**  
Had caries diagnosed by a dentist (n=66)

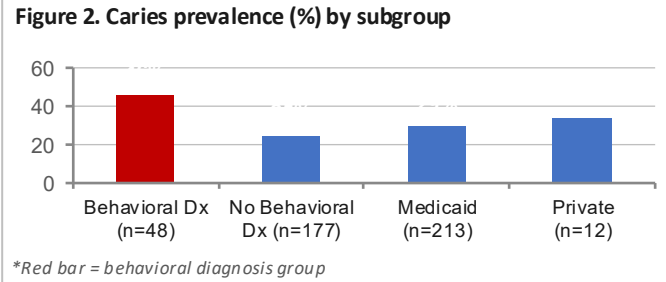
**2%**  
PCP charts documented caries screening (n=5)

**4.5%**  
Sensitivity of PCP caries detection



**Table 2. PCP diagnostic performance for caries detection**

	Dentist: CARIES (+)	Dentist: NO CARIES (-)
PCP: YES (+)	<b>3</b> <i>True Positive</i>	<b>0</b> <i>False Positive</i>
PCP: NO/SILENT (-)	<b>63</b> <i>False Negative</i>	<b>160</b> <i>True Negative</i>



\*Red bar = behavioral diagnosis group

**Sensitivity: 4.5% (3/66) | Specificity: 100% (160/160)**  
 Only 2% of pediatrician charts (n=5) documented any dental caries assessment. Of the 5 that did, 3 accurately detected caries, 1 accurately identified no caries, and 1 was a false negative.

**Mean DMFT = 4.5** among caries-positive patients | Range: 1–16

## Discussion

- Most pediatricians (98%) did not document dental caries screening, despite AAP guidelines recommending oral health assessment at every well-child visit beginning at age 6 months.
- Pediatrician sensitivity for caries detection was only 4.5%— dentists cannot rely on physician documentation when assessing a patient’s caries history.
- Patients with behavioral diagnoses had nearly twice the caries prevalence (45.8% vs. 24.9%), underscoring the need for targeted oral health screening in this high-risk group.
- Absent documentation may reflect time constraints, limited training, or low awareness of oral-systemic connections among primary care providers.

## Conclusions

- Most pediatricians did not document caries screening, highlighting a critical gap in interdisciplinary care.
- Dentists should not rely solely on physician documentation; direct assessment and patient/parent interview remain essential.
- Patients with behavioral diagnoses are a high-risk group warranting enhanced oral health surveillance and coordinated care.
- Closed-loop communication systems and integration of dental and medical records should be considered to improve patient safety and outcomes.

## References



Please scan for references