# **Oral Health Services by FQHC Providers Regarding Early Childhood Caries**

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# **Objectives:**

Early childhood caries (ECC) is a preventable, common condition that causes pain and infection if untreated. Prevention of ECC relies on preventive oral health services (OHS). This study identifies variables associated with federally qualified health center (FQHC) medical providers' provision of OHS and confidence in delivering these services.

#### Methods:

A 62-item online survey was developed and distributed to FQHC medical providers nationwide. Provided OHS scores were summed and dichotomized as "few"=0-4 vs. "many"=5-6. Confidence in providing OHS was dichotomized as "more confident" vs. "less confident." Descriptive and bivariate analyses were conducted (alpha=0.05).

#### **Results:**

Eighty surveys were received. Respondents included: Nursing Assistants/Medical Assistants-25%, Nurse Practitioners (NPs)/Physician Assistants (PAs)/Assistant Physicians (APs)-29%, Physicians-30%, and Registered Nurses (RNs)/Licensed Practical Nurses (LPNs)-16%. Sixty-seven percent of respondents had oral health training. Approximately 63% reported >50% of their child patients are on Medicaid. Forty-three percent of respondents provided few OHS, while 57% provided many. OHS and confidence in providing OHS varied by clinical role. NPs/PAs/APs and Physicians were more likely than Nursing/Medical Assistants and RNs/LPNs to provide OHS (87% and 86% vs 5% and 33%; p < 0.001) and express more confidence in doing so (55% and 57% vs 11% and 8%; p < 0.001). Providers with oral health training were more likely than those without training to provide oral health education (77% vs. 54%; p=0.041) and evaluate children's teeth (66% vs. 42%; p=0.046). Respondents who treated >50% children with Medicaid were more likely than respondents who treated fewer children with Medicaid to refer to dentists (92% vs 74%, p=0.049), educate on preventive oral care (79% vs 56%, p=0.032), and provide many oral health services (67% vs 41%, p=0.030).

## **Conclusions:**

The provision of oral health services and confidence varied among providers based on their clinical role, oral health training and percent children they treated with Medicaid. Further research is needed to increase OHS provided by non-dental providers.

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## References:

- 1. AAPD (2008). "Definition of early childhood caries (ECC)." The Reference Manual of Pediatric Dentistry.
- 2. WHO (2022). World Health Organization global oral health status report: Towards universal health coverage for oral health by 2030.
- 3. Fleming, E and Afful, J. (2018). "Prevalence of total and untreated dental caries among youth: United States, 2015-2016." NCHS Data Brief(307): 1-8.
- 4. Nowak, AJ, Christensen, J, Mabry, T, Townsed, J, and Wells, M (2019). Pediatric dentistry: Infancy through adolescence (Sixth ed.). Elsevier.