Receipt of oral fluoride treatments from non-dental providers among Medicaid-eligible children in early childhood

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TOPIC/TARGET AUDIENCE: Public Health Professionals

ABSTRACT: Regular use of fluoride has proven to promote healthy tooth development in children. Fluoride supplementation, both topical and systemic improves oral health by preventing the onset of dental carries in early childhood years and is used to remineralize dental enamel past adolescence. The American Dental Association recommends oral fluoride supplementation, such as a fluoride varnish application, in the primary care setting for children at elevated caries risk. Risk of dental caries is higher among children in communities lacking water fluoridation. The main question in our study is to determine what percentage of children are receiving preventative dental services from non-dental providers. We want to know what services are being provided and show where areas of preventive dental care could improve. To assist us in answering our question we will explore the role non-dental providers' have in supplying preventative dental care and services, the accessibility families have in receiving fluoride supplementation, and tracking the adherence to oral fluoride once prescribed to families by looking at dental procedure claims. We are interested in studying Oregon communities without a fluoridated water supply. Our initial target group will be children residing in Portland Oregon's Multnomah County. By targeting families on Medicaid we aim to determine if children with high risk for dental carries have equal access to these preventive services. The study will explore the race/ethnicity of these children, their age, gender and place of residence. We will show if they have previously received preventative dental care and if they have had a history of dental carries. Claims recorded by Oregon Health Plans will serve as our data source. Data analyzed will include ICD-9 (diagnosis) codes, NDC (national drug codes), and CDT (current dental terminology) codes taken from medical and dental insurance claims. These de-identified codes will give us treatment identification and allow us to locate the procedures in interest. Through a 5% sample of our claim data our palmary results have shown less than 4% of children have ever been prescribed oral fluoride supplementation and that children in non-fluoridated communities show greater frequency of dental carry history compared to children living in fluoridated communities. Once this study is complete and upon learning these rates will assist at tracking trends for oral fluoride treatments, aid in long term support for fluoride use and will help pediatricians and other non-dental professionals to target extra preventive services to those children at highest risk for dental decay.

OBJECTIVE(S): Evaluate oral fluoride recipients among Medicaid eligible children in the Portland area.

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