Accuracy of Physicians' Screening and Referral for Early Childhood Caries. KM PIERCE*, RG ROZIER, WF VANN. Dept. of Pediatric Dentistry and Health Policy and Administration, UNC-Chapel Hill.

Purpose: To determine the accuracy of pediatric primary care providers' screening and referral for Early Childhood Caries.

Methods: The sample included 258 Medicaid-eligible children (mean age = 1.7 yrs) receiving routine medical care at a private pediatric practice. The eleven pediatric primary care providers at this practice received two hours of training in infant oral health. Both a pediatric dentist a pediatric primary care provider conducted a dental screening on each child and recorded carious teeth and whether a dental referral was needed. Sensitivity and specificity compared the providers' screenings to the gold standard (pediatric dentist) in three categories: caries at the tooth-level, caries at the patient-level and referral.

Results: Twenty-five children (9.7%) had one or more cavitated lesions. The providers achieved a sensitivity and specificity of 0.48 and 0.97 respectively at the tooth-level and 0.76 and 0.95 respectively at the patient-level. When determining which children needed a dental referral, the providers achieved a sensitivity of 0.63 and a specificity of 0.97. The providers referred only 70% of the children they identified with evidence of disease.

Conclusions: After two hours of training in infant oral health, the pediatric primary care providers in this study achieved an adequate level of accuracy in identifying children with cavitated carious lesions. Their accuracy in identifying affected teeth was inadequate but this is not the purpose of screening. Further research is needed to determine how to improve dental referrals by pediatric primary care providers. Results of our study suggest pediatric primary care providers can significantly contribute to the overall oral health of young children by the identification of those children who need to be seen by a dentist.