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**THE EFFECTS OF WIC ON DENTAL MEDICAID UTILIZATION BY CHILDREN JY LEE\*, RG ROZIER, WF VANN Jr. Departments of Pediatric Dentistry and Health Policy Analysis, UNC at Chapel Hill.**

Limited oral health services use by Medicaid recipients is a major barrier to resolving the early childhood caries crisis and presents a major public policy challenge. This is well-documented in recent reports from the General Accounting Office, Office of Technology Assessment and the Office of the Surgeon General. The USDA's Women, Infants and Children (WIC) program reaches a population of low-income mothers and children under five years of age. WIC supports nutrition, feeding practices, health education/promotion and referral for dental care. In North Carolina (NC) all WIC centers provide oral health education and dental screening of the child at enrollment and at semi-annual re-certification. Therefore, NC-WIC is well-positioned to identify children at high dental caries risk and make referrals to help gain access to care.

**OBJECTIVE:** The objective of this study was to evaluate the relationship WIC to the use of dental services and costs compared with Medicaid pre-school aged children not in WIC and assess its potential to improve access to dental care.

**METHODS:** A longitudinal cohort was studied using five large databases for children 0-5 years including: birth records from 1992, Medicaid enrollment and claims files from 1992-97, WIC masterfiles from 1992-97 and the Area Resource File. This study treated each child as the unit of analysis. Random effects panel data technique models were incorporated into the estimation equations and simultaneous equations were used to control for selection bias.

**RESULTS:** A total of 49,783 children with over 200,000 claims met the inclusion criteria and were enrolled in the study. A range of 40%-66% of children were WIC participants throughout the study period. NC-WIC children: 1) used more preventive and diagnostic services ( $P=0.01$ ), 2) had fewer dental-related emergency room and hospital visits ( $P=0.001$ ), 3) used more restorative services ( $P=0.01$ ), and 4) had lower dental-related expenditures ( $P=0.05$ ). Ethnicity, mother's age and education, family income and availability of dental professionals in county of residence acted as modifiers.

**CONCLUSIONS:** We conclude that NC-WIC was influential in assisting Medicaid children gain access to the oral health care system and provided cost-savings to the Medicaid program. These findings have significant policy implications for young children covered by Medicaid. Supported by AHRQ Grant T32-HS-0032, MCH Grant 6T83-MC-00015-07, AAPD Foundation and OMNII Pharmaceuticals through the OMNII Fellowship program.