

**Holding up the Oral Health Safety Net:
The role of NHSC alumni dentists in North Carolina**

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Abstract

Background. Insufficient availability and uneven geographic distribution of dentists and their low rates of participation in North Carolina's (NC) Medicaid program limit access to oral health care for rural and low income residents. Despite recent increases in dentists' Medicaid participation due to fee upgrades, access is constrained as NC's Medicaid eligible population outstrips the growth of the dental workforce. As a federal resource, the National Health Service Corps (NHSC) is one mechanism that is intended to increase the supply of dentists prepared and motivated to improve access.

Objectives. We sought to assess if NHSC dentists who had completed a service obligation (NHSC alumni) in NC differed from other primary care dentists who started practice in NC between 1990-1999 (comparison) and how NHSC status and other background factors affected continued work with underserved populations.

Methods. All 19 NHSC alumni and 50 comparison dentists were surveyed about their motivations, satisfactions, practice patterns, and clientele; 68% of each group responded, with all NHSC alumni responding to selected items in a telephone follow-up. The two groups were compared using difference of means tests. Multivariate linear and logistic regression models were employed to examine the effects of dentists' NHSC status, race, motivations, and incentives on current work in a safety net settings and level participation in the Medicaid program.

Results. Compared to similar dentists, NHSC alumni are more likely to be African-American, fluent in Spanish, not from suburban origins, and motivated to "provide care in an underserved area" and to "work where I could really make a difference to a community's oral health." NHSC alumni currently have a clientele (more children, Hispanic patients) and service delivery style (more walk-ins, shorter appointments, and longer waits for scheduled appointments) distinct from their peers. NHSC alumni were far more likely than comparison dentists to be in "safety net practices" (84% vs. 23%) and have more publicly insured patients (60% vs. 19%). Although NHSC alumni dentists are as likely as their peers to be female (44%) with comparable patient hours and workloads, they have lower annual incomes than comparison dentists (\$121K vs. \$166K). Yet sources and levels of job satisfaction, including satisfaction with compensation, are comparable to other young dentists. Consistent with previous research, multivariate analyses suggested that dentists' current level of participation in public insurance programs and practice in safety net settings is affected by their race, altruistic motivations, and financial incentives as well as previous NHSC participation.

Conclusions. As a federal resource, the NHSC complements recent state initiated policies aimed at increasing access to oral health services for underserved populations in both public and private practice settings in NC. Health workforce planners and dental educators aiming to encourage dentists to start out in and remain in rural and "safety net" settings should coordinate their efforts and vigorously recruit African-Americans and others wanting to work in underserved communities to amplify the financial incentive of NHSC loan repayment.