

## Survey of Federally Qualified Health Centers to Understand Participation with Dental Residency Programs and Student Externship Rotations

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**Objective:** In 2016, the Oral Health Workforce Research Center conducted a study to describe Federally Qualified Health Centers' (FQHCs) participation with dental education and dental residency programs as clinical rotation sites for dental student externs and/or residents. Of special interest was whether health centers employed any dental students and/or dental residents subsequent to their completion of clinical rotations in the FQHC.

**Design/Methods:** An extensive literature review was conducted to aid in determining pertinent questions for inclusion on the survey instrument. Staff at the OHWRC compiled a list of email addresses for dental or executive directors at each FQHC through an extensive Web search. The survey was sent to dental directors or executive staff at the 1,275 health centers with FQHC designation in 2014. Ninety-seven emails were returned as undeliverable, subsequent to the initial solicitation. The number of FQHCs that actually received the request to participate was 1,178. Reminder emails were sent to non-respondents approximately every two to three weeks. At survey closure in August 2016, 304 FQHCs had completed the survey for a response rate of 25.8%. Survey data was compiled, cleaned, and analyzed using SAS v.9.3. The characteristics of oral health service delivery in FQHCs and participation with dental student education and residency programs were evaluated using descriptive statistics including frequency, percentage, mean, range (minimum and maximum values), median and interpercentile range (25th and 75th percentiles). The analysis included tabulations and cross tabulations of several variables. The geographical distribution of respondent FQHCs to all FQHCs was examined using Chisquare testing. Chi-square, T-test and Wilcoxon signed-rank tests were employed to compare oral health service delivery in the FQHCs participating with a dental residency or a student externship program(s) to those not participating with a dental education program. Statistical significance was defined as p<0.05 using two-tailed tests.

## **Results:**

- Only 14.7% of FQHCs responding to the survey participated in dental residency programs, while 39.1% of FQHCs participated in extramural service learning through dental student externship programs.
- The benefits to the FQHC from hosting dental residents included an increased capacity to meet the oral health needs of the FQHC's patients (89.7%), the opportunity to recruit new dentists to the FQHC (89.7%), and flexibility in scheduling patients in the dental clinic (61.5%).
- The 3 most commonly cited benefits of hosting dental student externs at an FQHC were the opportunity to recruit new dentists to the FQHC (74.0%), an increased capacity of the FQHC to meet the oral health care needs of its patients (62.5%), and a positive contribution to staff retention (44.1%).
- Fifty-five percent of FQHCs sponsoring dental residency rotations had hired at least 1 new dentist following that dentist's completion of a dental residency at the clinic.
- The structural capacity of the FQHC impacted participation in dental residency or dental student externship programs. FQHCs hosting a dental education program had a significantly higher average number of full-time dentists providing services (5.03) compared with FQHCs without a dental education program (2.69).
- FQHCs hosting a dental externship and/or residency program had a significantly higher average number of fixed dental operatories co-located with the primary care clinic (15.48 vs 8.31) or in a separate location from a primary care clinic (14.49 vs 9.28) compared with those that did not host any residency or externship programs.
- FQHCs hosting a dental education program had a significantly higher prevalence of oral health services provided to children and/or adults compared with those who did not.
- There were significant positive associations between the FQHC's hosting of students and residents and the prevalence of providing preventive, diagnostic, restorative, oral surgery, emergency/walk-in, and denture services.
- There were no associations for screening, referral, or voucher services for patients in FQHCs.

**Conclusions:** Dental student externships and dental residencies serve as a pipeline for FQHCs to hire new dentists. It appears that participation in these clinical rotations is alleviating some of the difficulties encountered by FQHCs in recruiting dentists to work in the safety net. Experiences in safety net settings are valuable teaching tools for new dentists who have the opportunity, regardless of post-graduation practice choice, to include safety net patients in their private or public practice of dentistry.

**Key Words:** Dentists, Dental Education, Dental Residency, Dental Externship, FQHCs

**HWRC Website Link**: <a href="http://www.oralhealthworkforce.org/wp-content/uploads/2016/12/OWHRC\_FQHCs\_Dental\_Residency\_Programs\_and\_Student\_Externship\_Rotations\_2016.pdf">http://www.oralhealthworkforce.org/wp-content/uploads/2016/12/OWHRC\_FQHCs\_Dental\_Residency\_Programs\_and\_Student\_Externship\_Rotations\_2016.pdf</a>