

Trends in the Provision of Oral Health Services by Federally Qualified Health Centers

Simona Surdu, MD, PhD and Margaret Langelier, MSHSA

Introduction/Background

Federally Qualified Health Centers (FQHCs) provide access to oral health services through a variety of configurations including direct service provision to patients in fixed clinics, through affiliated mobile and portable oral health programs, and with vouchers or referrals to oral health services from community dentists. The Health Resources and Services Administration (HRSA) has supported FQHCs interested in directly providing oral health services, awarding over \$55 million in oral health expansion grants to date. In 2016, HRSA will provide an additional \$100 million to FQHCs for expansion of oral health infrastructure. The objective of this research was to summarize trends in the direct provision of oral health services by FQHCs over recent years and factors that predict the likelihood of an FQHC providing direct general and/or specialty oral health services. The following provides an analysis of oral health service capacity in FQHCs and differences among health centers and across states in direct delivery of oral health services between 2011 and 2014.

Methods

This study is based on an analysis of Health Center Grantee Data in HRSA's Uniform Data System (UDS) during the period from 2011 to 2014 as well as primary survey data collected by OHWRRC through a survey of FQHCs conducted in 2016. Other data elements were gathered from a variety of sources, including the annual survey of Medicaid providers from the Medicaid/Medicare/Children's Health Insurance Program (CHIP) Services Dental Association, the American Community Survey, and the Area Health Resource File. Literature describing barriers and facilitators to direct provision of oral health services by FQHCs was reviewed and summarized. The statistical analyses incorporated population demographic and socioeconomic variables, Medicaid eligibility rates, measures of rurality, supply of dentists and dental hygienists, and Medicaid coverage of dental benefits for adults in a state, among other factors. The study also assessed geographic differences in FQHC engagement with direct delivery of oral health services. Analyses were conducted using SAS v9.4. Statistical significance was defined as $P < .05$ using 2-tailed tests.

Findings

Proportion of FQHCs Providing Direct Oral Health Services, 2011-2014

- The proportion of FQHCs in the Midwest (+1.6% change), the Northeast (+6.6% change), and the West (+3.7% change) providing direct oral health services increased over the 4-year period, while the percentage of FQHCs providing direct dental services in the South (-14.8% change) declined.

Conclusions and Policy Implications

- 1) The proportion of FQHCs in the Midwest, the Northeast, and the West providing direct oral health services increased over the 4-year period. In contrast, there was a noticeable decline in the South.
- 2) The study findings suggested a significant positive association between the state coverage of dental benefits for Medicaid-eligible adults and the provision of direct oral health services by FQHCs.
- 3) The proportion of FQHC patients receiving preventive oral health services increased, while the proportion receiving restorative, oral, and emergency dental services decreased over the 4-year period.
- 4) The study findings showed a significant positive association between provision of direct oral health services by FQHCs and percentage of patients with low income, proportion of children on Medicaid/CHIP insurance, FQHCs' dental staffing ratios and capacity, state dental hygiene scope of practice, and federal funding.
- 5) The results of this study will be useful for policymakers considering strategies to enable access to oral health services for underserved populations.

- FQHCs in the Midwest (OR=1.43), Northeast (OR=1.56), and West (OR=1.82) were significantly or borderline significantly more likely to offer direct dental services in states with an extensive dental benefit compared with those with a limited dental benefit. FQHCs in the South (OR=1.09) were more likely to provide direct dental services in states with a limited Medicaid dental benefit for adults than in states with no dental coverage or an emergency-only dental benefit.
- There was a significant positive association between provision of direct oral health services by FQHCs and percentages of patients with incomes at or below 150% of federal poverty level (FPL) and percentages of patients 17 years old and younger without medical insurance or on Medicaid/CHIP insurance or other public insurance nationwide.

Proportion of Patients Receiving Direct Oral Health Services in FQHCs, 2011-2014

- Nationwide, the proportion of FQHC patients who received any direct oral health service increased between 2011 (25.0%) and 2014 (25.9%). The magnitude of this trend (+3.6% change) was affected by the data from the South.
- There was a noticeable increase in the proportion of FQHC patients in the Midwest (+27.5% change) and in the Northeast (+23.5% change) receiving a direct oral health service over the 4-year period. FQHCs in the West showed a positive trend but on a smaller scale, with a 2.7% positive change. There was a notable decline in the proportion of FQHC patients in the South (-21.1% change) receiving any direct dental service over the 4-year period.

Types of Direct Oral Health Services Provided to Patients in FQHCs, 2011-2014

- The proportion of FQHC patients in the nation receiving preventive oral health services increased (+3.3% change) between 2011 and 2014, while the proportion receiving restorative (-1.3% change), oral surgery (-7.4% change), and emergency dental (-11.7% change) services decreased.

Types of Direct Oral Health Services Provided to Dental Patients in FQHCs, 2011-2014

- More than 80% of dental patients in FQHCs providing direct oral health services received an oral examination in 2014, and 46.2% received a preventive service. Just over one-quarter (28.3%) received restorative services at an FQHC in that year.

Average Number of Dental Visits Per Dental Patient at FQHCs Providing Direct Oral Health Services, 2011-2014

- The average number of dental visits in 2014 for patients in FQHC providing direct oral health services was 2.40 visits. The average number of visits per patient was lowest in the South (2.26) and highest in the West (2.56).

Oral health staffing ratios in FQHCs providing direct oral health services, 2011-2014

- The number of full-time equivalent (FTE) dentists increased by 9.0% nationally; the numbers of FTE dental hygienists increased by 17.2%, and the number of FTE dental assistants/aides increased by 12.7%.
- The proportion of FQHC patients accessing any dental services was positively and significantly associated with oral health staffing ratios in FQHCs in all regions.
- Dental hygiene scope of practice in a state was positively and significantly associated with the likelihood of FQHCs providing dental care to patients (7% increase for every 10-point increase in the dental hygiene scope-of-practice index).

Capacity of FQHCs to Provide Direct Oral Health Services, 2011-2014

- The average number of patients per FTE oral health provider was significantly lower (414 vs 434) while the average number of operatories per 1,000 patients was significantly higher (1.44 vs 0.79) in FQHCs providing direct oral health services that treated a 23.5% or higher percentage of patients than in those that treated fewer.
- The proportion of FQHC patients accessing any direct dental services was significantly associated with capacity in FQHCs providing direct oral health services in all regions.

Funding and Provision of Oral Health Services, 2011-2014

- The funding from ACA Capital Development Grants, including School-Based Health Center Capital Grants, was positively and significantly associated with the likelihood of FQHCs providing direct dental care to patients (1.1% average increase for every \$100,000 increase in the revenue from these federal grants).

Conclusions

The data analyzed for this study show that FQHC patients in the Midwest, the Northeast, and the West are increasingly accessing oral health services. Measures of regional differences in capacity to serve patients showed an overall decline among FQHCs in the South in volume, workforce capacity, and ability to provide dental services. As a result, this region demonstrates lower levels of oral health services utilization. These analyses also suggest promising impacts of recent federal funding initiatives to increase the infrastructure and workforce capacity of FQHCs to provide oral health services. It will be important to continue to track growth of the dental service delivery to understand the effect of more recent investments by the federal government in oral health grants to these health centers.