

Results from a 2016 Survey of Federally Qualified Health Centers (FQHCs) About Use of Dental Residents and Dental Student Externs to Expand Capacity to Provide Oral Health Services

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ABSTRACT

Objectives: Recruiting and retaining an oral health workforce is essential for federally qualified health centers (FQHCs) to respond to increasing demand from safety net patients for oral health services. Recruiting dentists is thought to be generally problematic, partly due to the locations of health centers. This study sought to understand the impacts of participation by FQHCs with dental residency programs as well as community service learning/externships for dental students on service capacity.

Methods: The study used an electronic survey of 1,275 FQHCs to compile data on oral health service capacity, the types of services provided to patients, and participation with residency or student externship programs.

Results: The survey response rate was 25.8%. Among respondents, 81% provided oral health services directly to patients with 59% providing 4 or more types of services. The average number of operatories in an FQHC was 6 with a range of 1 to 204 operatories. Almost 15% of FQHCs participated with dental residency programs; among those, 55% had hired at least one new dentist who had completed a residency at the FQHC. The participation rate with dental student extern programs was 39%; 44% of those programs had hired at least one dental student for work in the FQHC after graduation.

Participation with residency and externship programs was limited by geographic proximity to dental education programs, by space in the dental clinic, and by the availability of dentists to precept.

Conclusions: Hosting dental students and residents improves FQHCs' capacity to provide services and also provides a pipeline for new workforce.

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INTRODUCTION

One strategy of FQHCs to ensure sufficient workforce capacity to meet patient demand for oral health services was participation in dental student externship/community service learning programs and/or dental residency programs. Dental residents and student externs enlarged workforce capacity, improved workflows, and increased efficiency of oral health service delivery in many of the health centers.

Working with diverse patients in community health settings exposed students and residents to high needs populations and performing a large number of surgical and restorative procedures for high needs patients appeared to result in greater confidence and increased competence with providing those services. Dental students and residents were also a potential source of new workforce for safety net health centers.

This study aimed to describe FQHC's participation in dental education and dental residency programs and to describe whether this participation created a pipeline for recruitment of dentists to work in safety net organizations.

METHODS

This study used a web-based survey. An email solicitation was sent to dental directors or chief executive officers of 1,257 health centers with FQHC designation in 2014. Ninety seven emails were undeliverable, reducing the number of possible respondents to 1,178.

Survey data was analyzed using descriptive statistics, chi-square testing, t-tests, and Wilcoxon signed-rank tests. Significance was defined as $P < 0.05$ using 2-tailed tests.

RESULTS

At survey closure, 304 FQHCs had completed the survey for a response rate of 25.8%.

About 81% of FQHCs provided direct dental services to patients in their clinics. More than 88% provided oral health preventive services.

Nearly 60% of FQHCs provided 4 or more types of oral health services.

Table 1. Oral Health Services Provided at FQHCs by Types of Patients Served

One or More Oral Health Services Provided (n=296)	Children 0-20 FQHCs		Adults <65 years FQHCs		Adults >65 years FQHCs		All FQHCs	
	n	%	n	%	n	%	n	%
a. Screening services	252	85.1%	230	77.7%	228	77.0%	261	88.2%
b. Referral services	261	88.2%	256	86.5%	252	85.1%	269	90.9%
c. Vouchers for services from community dentists	28	9.5%	37	12.5%	36	12.2%	39	13.2%
d. Preventive services	256	86.5%	245	82.8%	239	80.7%	263	88.9%
e. Diagnostic services	241	81.4%	238	80.4%	233	78.7%	249	84.1%
f. Restorative services	225	76.0%	231	78.0%	224	75.7%	239	80.7%
g. Oral surgery services	165	55.7%	180	60.8%	176	59.5%	186	62.8%
h. Emergency/walk in services	225	76.0%	228	77.0%	225	76.0%	237	80.1%
i. Denture services	102	34.5%	169	57.1%	169	57.1%	175	59.1%
j. Other	43	14.5%	42	14.2%	40	13.5%	51	17.2%

RESULTS (cont.)

The average number of dental operatories in FQHCs' dental clinics that were co-located or adjacent to a primary care clinic was 2.3.

Table 2. Number of Dental Operatories in FQHCs

Oral Health Services Provided in Fixed Dental Clinic(s)	In the Same or Adjacent Buildings to a Primary Care Clinic (Co-located)		In a Location Separate From a Primary Care Clinic	
	FQHCs		FQHCs	
	n	%	n	%
Number of fixed clinics				
1	95	42.4%	56	64.4%
2	61	27.2%	17	19.5%
3	36	16.1%	7	8.1%
4	14	6.3%	2	2.3%
5 or more	18	2.7%	5	5.8%
Total	224	100.0%	87	100.0%
Mean (Minimum-Maximum)	2.3 (1-18)		1.8 (1-11)	
Median (25 th -75 th percentiles)	2 (1-3)		1 (1-2)	
Number of operatories				
1 to 5	69	30.8%	37	42.5%
6 to 10	70	31.3%	23	26.4%
11 to 20	54	24.1%	22	25.3%
21 or more	31	13.8%	5	5.8%
Total	224	100.0%	87	100.0%
Mean (Minimum-Maximum)	11.8 (1-85)		11.5 (1-204)	
Median (25 th -75 th percentiles)	8 (5-16)		6 (4-12)	

Approximately 15% of FQHCs participated with dental residency programs and 39% participated with dental student externship programs.

Two-thirds of the FQHCs (66.7%) that hosted dental residency programs also participated with dental student externship programs.

Table 3. Number of FQHCs Participating in Dental Education Programs

Dental Education Programs	Dental Residency Program(s)		Dental Student Externship Program(s)		Dental Residency and/or Student Externship Program(s)	
	FQHCs		FQHCs		FQHCs	
	n	%	n	%	n	%
Yes	39	14.7%	104	39.1%	117	43.2%
No or unsure	226	85.3%	162	60.9%	154	56.8%
Total	265	100.0%	266	100.0%	271	100.0%

The benefits to the FQHC from hosting dental programs included an increased capacity to meet the oral health needs of the FQHC's patients, the opportunity to recruit new dentists to the FQHC, flexibility in scheduling patients in the dental clinic, and a positive contribution to staff retention.

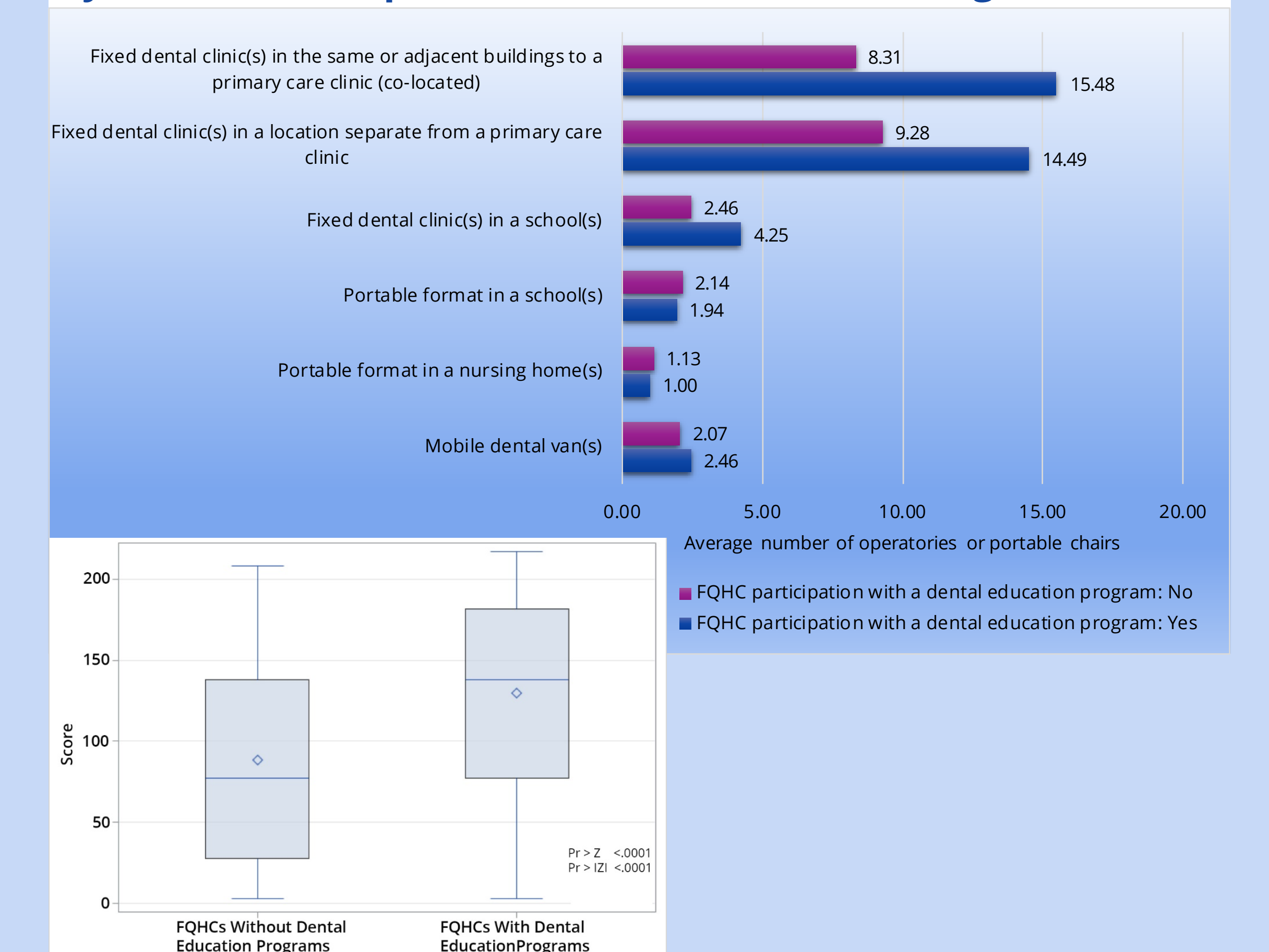
Table 4. Benefits for the FQHC From Hosting Dental Residency or Student Externship Programs

Benefits of Hosting a Dental Education Program	Dental Residency Program(s) FQHCs (n=39)		Dental Student Externship Program(s) FQHCs (n=104)	
	n	%	n	%
	Dental residents/student externs increase the FQHC's capacity to meet the oral health care needs of patients	35	89.7%	65
Hosting dental residents/student externs in clinical rotations positively contributes to staff retention	22	56.4%	46	44.2%
Hosting dental residents/student externs has a positive fiscal impact for the FQHC	22	56.4%	26	25.0%
Dental residents/student externs contribute to greater flexibility in scheduling patients in the clinic	24	61.5%	45	43.3%
Dental residents/student externs improve workflows in the clinic	15	38.5%	25	24.0%
Dental residents/student externs contribute to improved efficiencies for staff dentists	12	30.8%	33	31.7%
Dental residents/student externs provide an opportunity to recruit new dentists to the FQHC	35	89.7%	77	74.0%

RESULTS (cont.)

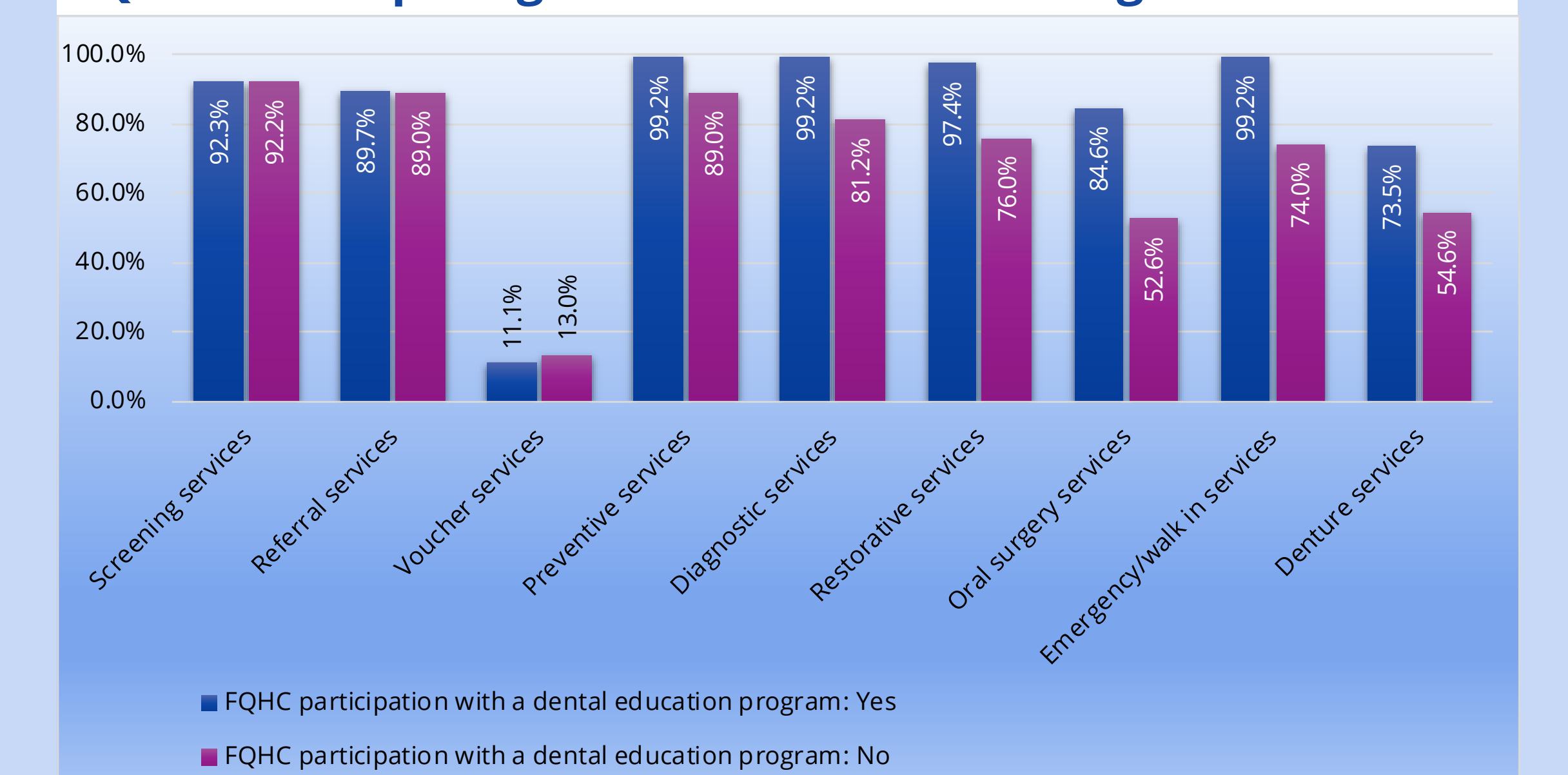
FQHCs hosting a dental education program had a significantly higher number of dental operatories compared to those without education programs.

Figure 2. Average Number of Operatories or Portable Chairs by FQHCs' Participation in Dental Education Programs



There were significant positive associations between the FQHC's hosting of students/residents and the prevalence of providing preventive, diagnostic, restorative, oral surgery, emergency/walk-in, and denture services.

Figure 3. Prevalence of Oral Health Services Provided by FQHCs Participating in Dental Education Programs



CONCLUSIONS

FQHCs that participated in dental education programs had more fixed dental clinics that were either co-located or separately located from a primary care health clinic and a greater number of dental operatories within those clinics.

Hosting dental students and residents improves FQHCs' capacity to provide services and also provides a pipeline for new workforce.

REFERENCE

Langelier M, Surdu S, Rodat C. Survey of Federally Qualified Health Centers to Understand Participation in Dental Residency Programs and Student Externship Rotations. Rensselaer, NY: Oral Health Workforce Research Center, Center for Health Workforce Studies, School of Public Health, SUNY Albany; December 2016.