

SURVEY OF HEALTH CENTER ORAL HEALTH PROVIDERS

DENTAL SALARIES, PROVIDER SATISFACTION, AND
RECRUITMENT AND RETENTION STRATEGIES

Kenneth Anthony Bolin, DDS, MPH

Baylor College of Dentistry

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PMB: 329 3700 Quebec Street, Unit 100

Denver, CO 80207-1639

303-957-0635

www.nnoha.org

info@nnoha.org

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The **mission** of the
National Network for
Oral Health Access (NNOHA)
is to **improve the**
oral health status
of the **underserved**
through **advocacy** and
support for Health Centers.

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EXECUTIVE SUMMARY

As part of a Cooperative Agreement with the Health Resources and Services Administration (HRSA), NNOHA worked with Baylor College of Dentistry in 2009 to develop and administer a survey of Health Center dental providers.

The purpose of the survey was to provide information and analysis on dental salaries, provider satisfaction, and recruitment and retention strategies at Health Centers throughout the country. The survey was mailed to Health Centers with dental programs, and was completed by 578 dentists, 120 dental hygienists, and 338 executive directors.



Highlights of the key findings included:

- This survey shows us that the majority of Health Center oral health providers are satisfied with their careers. 80.2% of dentists and 93.3% of dental hygienists indicated intent to remain in Health Center practices.
- The number one reason for choosing the Health Center career indicated among dentists and dental hygienists was that they “Felt a mission to the dentally underserved population.”
- The majority of respondents indicated high satisfaction with their benefits and work environment such as the quality of support staff. 39.1% of Executive Directors reported having at least one dentist vacancy, and of those vacancies, 52.3% were greater than six months duration.
- 26.7% of the dentists indicated their salaries were within the range of \$95,000–\$110,000 (not including benefits). 35.5% of the dental hygienists stated their salaries were within the \$50,001–\$60,000 category.
- The majority of responding clinicians have been practicing dentistry or dental hygiene for 10 or more years.
- Many respondents used to work in private practices prior to participating in Health Center careers. Simultaneously, a high percentage of respondents have come to Health Center settings right after graduating from school.

- Providers with more years of experience or who had been employed by the Health Center longer indicated an intention to stay in their position.
- Providers that came to Health Centers because they felt a sense of mission, who reported directly to the CEO of the Center instead of a Medical Director, felt they had sufficient administrative, clerical support and adequate facilities and equipment were more likely to indicate they intended to stay.

The results showed that salary alone is not the main reason for which oral health care providers choose to leave or remain in Health Center practices. Many intangible factors play roles in determining the providers' satisfaction in their career. While some of the factors contributing to provider dissatisfaction are pre-existing, others are adjustable. The daily work environment and reporting structures, among other things, should be evaluated to ensure stronger sense of autonomy and satisfaction among the dental providers in order to improve recruitment and retention rates at Health Center oral health programs. Overall, the report finds a high number of providers satisfied with their careers and the Health Center setting.

INTRODUCTION & METHODOLOGY

The 2009 national survey of dental providers and Executive Directors of Health Centers was begun in March 2009. The survey was commissioned by the National Network for Oral Health Access (NNOHA) and funded by a Health Resources and Services Administration (HRSA) Cooperative Agreement. A committee appointed by the NNOHA Board of Directors provided input and approval of the survey instruments and assisted the primary investigator in developing the survey instruments (Appendices 1 & 2).

Surveys were mailed to Dental Directors and Executive Directors from a master list provided by NNOHA. An introductory letter from the Executive Director of NNOHA was included in the initial survey mail-out. After four to five weeks, a second survey was mailed to those who did not respond with an invitation letter from the investigator. In each of these mailings, a self-addressed, stamped envelope was included to encourage all dental providers in the clinic or organization to respond. The same method was used with Executive Directors of the Health Centers. After another four weeks, reminder postcards were sent to all non-respondents.

The unduplicated response rate for the dental providers was 51.4% (406/790) and 43.1% (338/784) for the Executive Directors. A frequency analysis was performed on all questions contained in the survey instruments. Questions receiving low numbers of responses are omitted in this report and summary data is supplied. Statistical analyses were performed using SPSS 15.0, and associations are included in the results only when the results were significant at or below the $\alpha=.05$ level. Selected tables or figures are provided in the narrative of the report and appendices are provided for all other analyzed data. The survey instruments are also provided in the appendices.



The background is a solid blue color. There are three overlapping circles of varying sizes in the upper left and center. A large, curved, semi-circular shape is at the bottom right.

PART I
Survey for
Dentists
& Dental
Hygienists

A. OVERVIEW OF RESPONDENTS

Part I of the survey was completed by 578 dentists and 120 dental hygienists. This section introduces the overview of respondents, including areas they work in, years of practice, and gender.

Demographically, the survey respondents were distributed across all 10 HRSA regions and were from urban, suburban, and rural areas (Appendices 3 & 4). The mean number of years since graduation from dental or dental hygiene school was 17.2 years, with a median of 15.0 years. A slight majority of dentists were male (53.3%). This gender ratio in Health Center dentists is very different from the total U.S. dentist population: 179,154 males (76.8%) and 44,144 females (18.9%).¹ The vast majority of dental hygienists were female (95.8%). Both groups of providers had been actively practicing for 10 years or longer, with 59.8% of the dentists and 52.5% of the dental hygienists in this category; however, the median number of years of practice in community health dentistry was less: 5 years and 4 years for dentists and dental hygienists, respectively (Appendix 5).

When asked to describe their current employment in Health Center oral health programs, 63.1% of the dentists and 83.9% of the dental hygienists reported that their current position was their first and only clinical/dental position held. Those who reported having been in at least one previous Health Center dental position numbered 26.5% for dentists and 12.7% for dental hygienists, and 10.5% of dentists vs. 3.4% of dental hygienists reported having worked in two or more previous positions in Health Center employment.

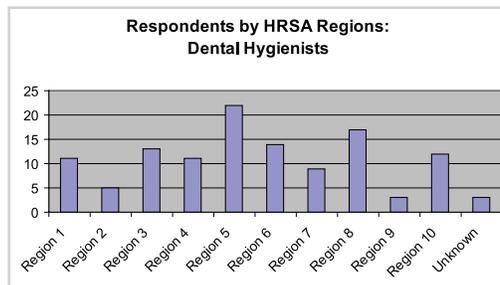
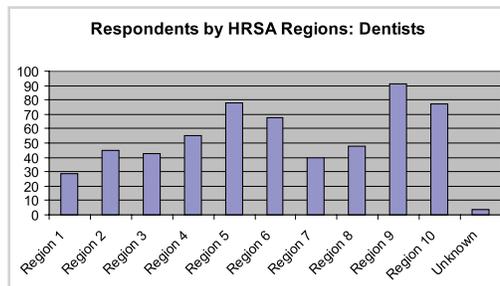
A majority of the dentists and dental hygienists had been in private practice in some form immediately prior to their employment by CHC practices (Page 7, Table 1). The percentages of dentist respondents indicating receipt of National Health Service Corps (NHSC) scholarships (10.3%), NHSC loan repayment (19.3%), and state loan repayment assistance (14.3%) contrasted with dental hygienist responses of 2.5%, 5.0%, and 7.5% for those types of programs respectively. Dental Directors comprised 45.5% of the respondents (317/701), and staff dentists numbered 37.2% (259/701). Dental hygienists made up the remaining 17.1% (120/701) of respondents.

1. Respondents by HRSA Regions

The survey covered all 10 HRSA Regions. Among dentists, many were from Regions 5, 6, 9, and 10, while Regions 5, 6, and 8 were highly represented among dental hygienists.

HRSA Regions are as follows:

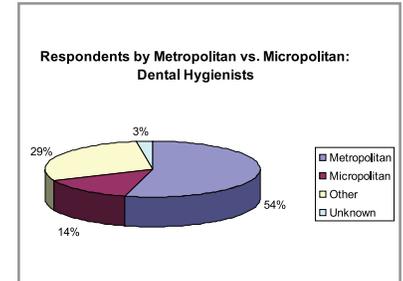
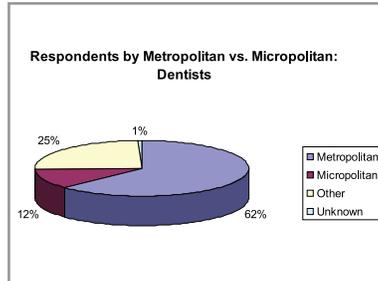
- Region I ME, NH, VT, MA, RI, CT
- Region II NY, NJ, PR, VI
- Region III PA, MD, DE, DC, VA, WV
- Region IV KY, TN, NC, SC, GA, FL, AL, MS
- Region V MN, WI, IL, IN, MI, OH
- Region VI NM, TX, OK, AR, LA
- Region VII NE, KS, IA, MO
- Region VIII MT, ND, SD, WY, CO, UTI
- Region IX NV, CA, AZ, HI
- Region X WA, OR, ID, AK



¹ Kaiser State Health Facts – United States: Number of Dentists by Gender, 2008: <http://www.statehealthfacts.org/profileind.jsp?ind=443&cat=8&rgn=1>. (U.S. total includes the territories and 9,836 persons whose gender is unknown. Data includes all licensed dentists.)

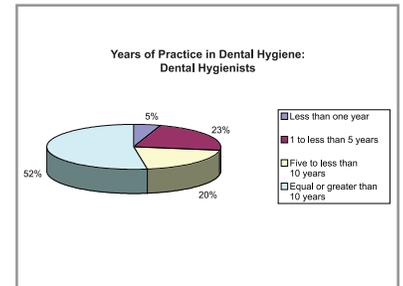
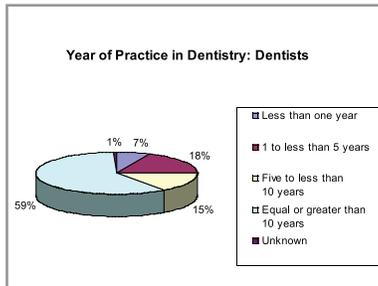
2. Working in a Metropolitan Area or Micropolitan Area

A metropolitan area contains a core urban area of 50,000 or more population. On the other hand, a micropolitan area contains an urban core of at least 10,000 (but less than 50,000) population.



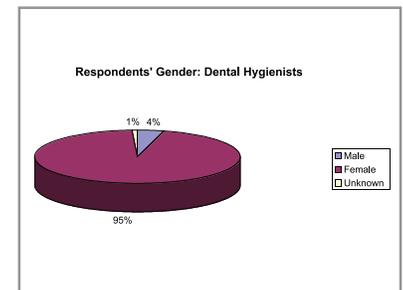
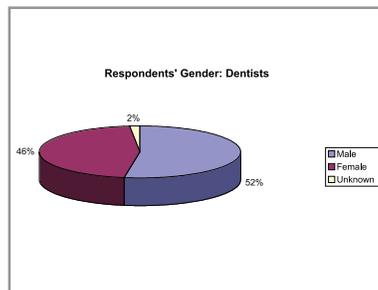
3. How long have you been practicing dentistry/dental hygiene?

For both dentists and dental hygienists, a majority of respondents have practiced dentistry or dental hygiene for 10 or more years.



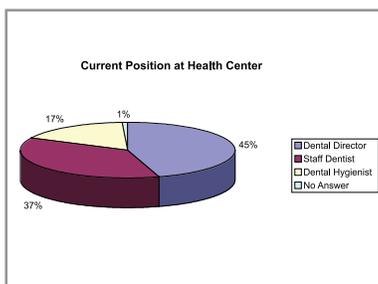
4. Gender of Respondents

There were slightly more males among the dentists that responded to the survey than females. In contrast, a great majority of dental hygienists (95%) were females.



5. What is your current position at the Health Center?

The survey was completed by 578 dentists (including 317 Dental Directors and 259 staff dentists) and 120 dental hygienists.



6. How many years have you been practicing community health care dentistry?

Average number of years practicing was 7.95 for dentists and 5.35 for dental hygienists. The median years were 5 years and 4 years for dentists and dental hygienists, respectively.

7. What was your primary dental practice activity immediately prior to practicing in a community health care setting?

Many respondents used to work in private practices prior to participating in Health Center careers. Among the dentists, 31% (179 respondents) were a private practice owner, partner, or associate dentist, while 18% (104 respondents) were a private practice/employee dentist.

Simultaneously, a high percentage of respondents have come to Health Center settings right after graduating from school. For both dentists and dental hygienists, Dental Student/Dental Hygiene Student was the second most common answer: 23.3% of dentists and 24.2% of dental hygienists.

Table 1: Dental Practice Activity Immediately Prior to Health Center Practice

DENTIST	FREQUENCY	%
Private practice owner/partner/associate	179	31.9
Dental student	134	23.9
Private practice employed dentist	104	18.5
Local, state, public health agency/other community dental center	57	10.2
Grad dental program/specialty program	46	8.2
Commissioned Officer PHS/Military	36	6.4
Retired	5	0.9
Total	561	100
DENTAL HYGIENIST	FREQUENCY	%
Private practice associate or employee	83	70.4
Dental hygiene student	29	24.6
Local, state, public health agency/other community dental center	6	5.0
Total	118	100

8. Did you receive a NHSC scholarship, NHSC loan repayment, or state loan repayment?

The National Health Service Corps (NHSC) loan repayment was most commonly used among the dentists. Not many dental hygienists used the NHSC programs, and the state loan repayment was most common for them.

Table 2: Loan Repayment

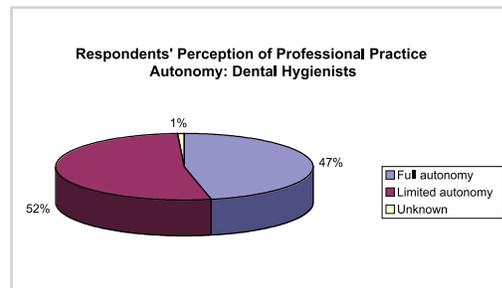
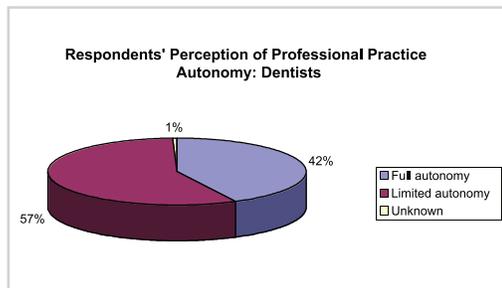
	NHSC SCHOLARSHIP	NHSC LOAN REPAYMENT	STATE LOAN REPAYMENT
Dentist	10.2%	19.4%	14.2%
Dental Hygienist	2.5%	5.0%	7.5%

B. REASON FOR WORKING AT HEALTH CENTERS & SENSE OF AUTONOMY

Dental providers were asked to rank their top reasons for choosing a career in Health Center dentistry. The number one response indicated among dentists and dental hygienists was “Felt a mission to the dentally underserved population.” Additional response percentages of reasons for choosing Health Center dental practices cited by dentists and dental hygienists are displayed in Appendix 6.

The number one response indicated among dentists and dental hygienists for working in a Health Center was that they “Felt a mission to the dentally underserved population.”

A majority of both the dentists (57.3%) and the dental hygienists (52.9%) felt their autonomy had some limitations in the treatment of their Health Center patients. This mirrors the results of a previous study of dentists working in Health Center practices.² The respondents’ reasons for this perception of limited autonomy are found in Table 3.



The **number one**
response indicated

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“Felt a **mission** to the
dentally **underserved**
population.”

Table 3: Perception of Limited Autonomy in Treating Patients

REASON CITED	% DDS	% RDH
Degree of patient compliance with treatment plans/appointment attendance	39.2	47.1
Limited access to specialists	34.3	36.1
Restrictive Medicaid policies/requirements	32.4	22.7
Limited scope of services due to budget constraints (i.e., lab services)	24.8	16.8
Limited ability to provide comprehensive care due to budgetary issues	23.6	21.0
Limited treatment offered at my Health Center	21.7	19.3
Limited input into policy and budget decisions regarding dental services	8.0	10.9
Limited patient population served at my Health Center	6.9	4.2
Lack of guidance in exercising professional judgment in treatment of patients	2.3	2.5

The top three factors were the same for dentists and dental hygienists: (1) Degree of patient compliance with treatment recommendations or appointment attendance; (2) Limited access to specialists; and (3) Restrictive Medicaid policies/requirements. In contrast, a low percentage of respondents listed “Lack of sufficient guidance to be able to exercise professional judgment in the treatment of dental patients” or “Limited patient population served at my Health Center.”

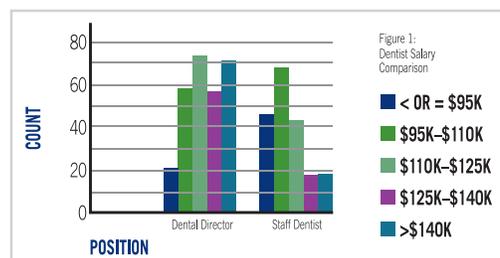
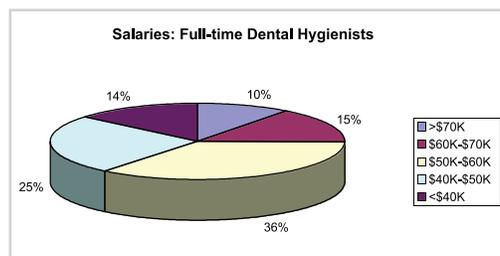
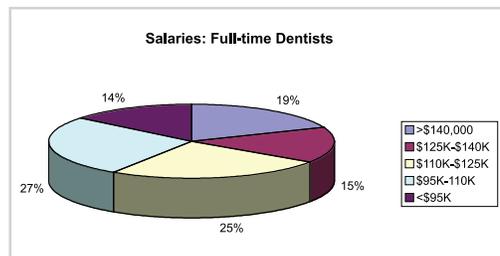
C. SALARIES & BENEFITS

1. Salaries

Dentists and dental hygienists were asked questions about salary for full-time employed positions and hourly wages for non-salaried or part-time employed positions. Non-salaried or part-time dentists reported a mean hourly wage of **\$63.17** with a median of **\$60/hour**. Dental hygienists reported a mean hourly wage of **\$29.64** with a median of **\$30/hour**.

Providers were asked to select from a categorical selection of salary ranges that would indicate their gross pre-tax annual salary, not including the value of benefits. All dentists were grouped into five salary categories for statistical purposes. The category of \$95,000–\$110,000 had the highest percentage of respondents at 26.7%. Next was the category of \$110,001–\$125,000 (24.6%), followed by >\$140,000 (19.0%). Respondents choosing \$125,001–\$140,000 numbered 15.5%, with the last category of <\$95,000 numbering 14.3% of those responding. A comparison of Dental Directors’ vs. staff dentists’ salaries is found in Figure 1.

Similarly, dental hygienists were grouped into five salary categories. The \$50,001–\$60,000 category (35.5%) was the largest category chosen by respondents. This was followed by \$40,000–\$50,000 (25.2%), then by \$60,001–\$70,000 (15.0%). Fourteen percent of the respondents reported a salary of <\$40,000, and, lastly, 10.3% of dental hygienists reported an annual salary of >\$70,000.



² Bolin KA, Shulman JD. Nationwide survey of work environment perceptions and dentists' salaries in community health centers. J Am Dent Assoc. 2005 Feb;136(2):214-20.

2. Benefits

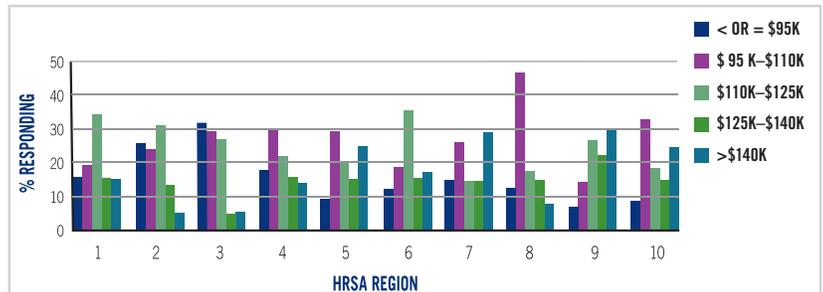
Continuing education (CE) allowances were offered to 92.8% of dentists and to 86.8% of dental hygienists with a median number of five days allowed for both groups. A median of \$2,000 of CE expense was reimbursed for dentists and a median of \$800 of CE expense was reimbursed for dental hygienists. The median number of days offered for vacation and sick leave combined was 26 days for dentists and 24 days for dental hygienists.

Table 4: Work Environment Indicators Responses of Dentists and Dental Hygienists Answering “Yes”

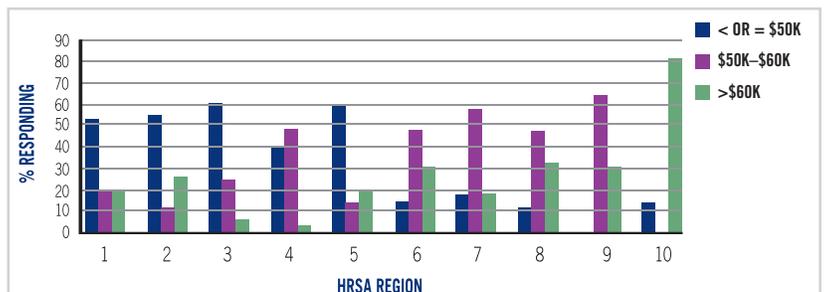
	#DENTIST	%DENTIST	#RDH	%RDH
Continuing Education Allowance	518/558	92.8	92/106	86.8
Salary Incentive Plan Offered	196/563	34.8	28/114	24.6
403b or Similar Plan Offered	498/555	89.7	94/108	87.0
403b or Similar Plan Match	364/546	66.7	68/105	64.8
Adequate Insurance Coverage	413/519	79.6	74/96	77.1
Adequate Amount of Leave Time	457/540	84.6	89/108	82.4
Professional Dues Reimbursed	334/557	60.0	42/114	36.8
Adequate Number of Dental Assistants	406/563	72.1	86/115	74.8
Adequate Quality of Dental Assistants	463/555	83.4	95/116	81.9
Adequate Clerical Support	403/559	72.1	78/116	67.2
Adequate Administrative Support	434/551	78.8	95/117	81.2
Number of Dentists	401/561	71.5	88/117	75.2
Number of Dental Hygienists	306/519	59.0	95/116	81.9

3. Salaries by Region

The chart below shows the normalized ratios of dentist salaries by HRSA Region (N=481). The region with the largest percentage of dentist salaries at or below \$95K is Region 3. The region with the largest percentage of dentist salaries above \$140K is Region 9.



The following chart shows the normalized ratios of RDH salaries by HRSA Region (N=104). The region with the highest percentage of RDH salaries at or below \$50K is Region 3. The region with the highest percentage of RDH salaries above \$60K is Region 10.



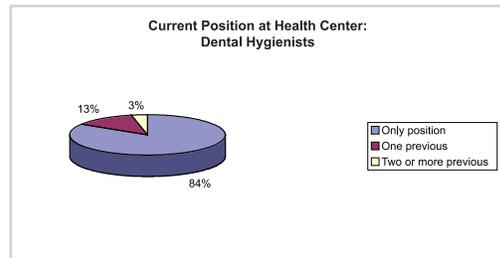
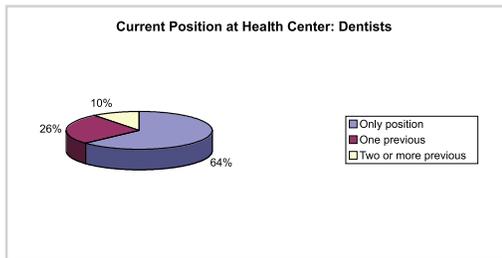
D. EXPERIENCE IN HEALTH CENTERS

All providers were queried about their perceptions of work environment and perquisites available to them in Health Center practices. Perception of facility quality, including building condition and appearance, was very good or good in 72.6% (411/566) of the dentists' responses, and in 69.8% (83/119) of the dental hygienists' responses. Similarly, the perception of the condition of available dental equipment and supplies was very good or good in 71.3% (401/562) of dentists' responses and in 67.2% (80/119) of the hygienists' responses. A complete breakdown of these responses is found in Appendix 7. On-call weekend and evening duties were reported as occurring either "seldom" or "never" by 79.7% of the dentist respondents, but 19.3% felt the on-call duties were "often" or "too often." Dental hygienists reported on-call duties as "never" 94.1% of the time.

1. How would you describe your current employment in Health Center dental care?

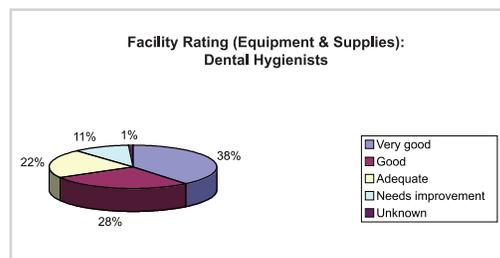
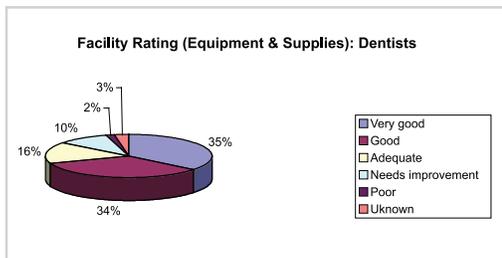
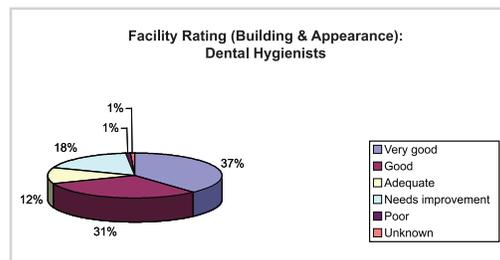
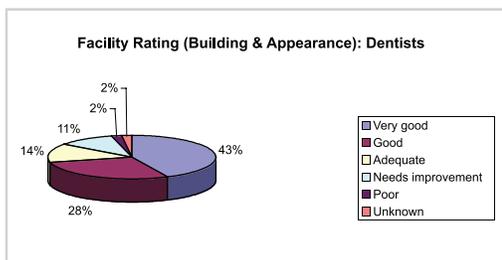
Respondents were asked to choose from the following options:

- My current position is the only position I have had in Health Center dental care.
- I have been in at least one other Health Center position prior to my current position in Health Center dental care.
- I have been in two or more other Health Center positions prior to my current position in Health Center dental care.



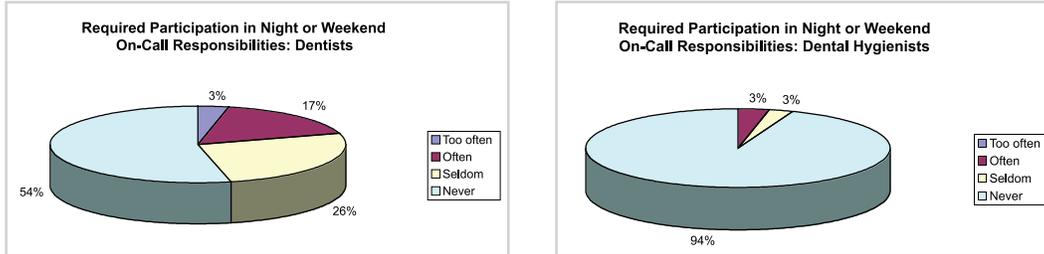
2. How would you rate your present facility overall in terms of physical building condition & appearance, as well as in terms of equipment condition & dental supplies?

A great majority of respondents (both dentists and dental hygienists) rated their facilities as very good or good, both in terms of physical building condition and appearance and equipment condition and dental supplies.



3. Are you required to participate in night or weekend on-call responsibilities?

Approximately half of dentists answered that they are never required to participate in on-call responsibilities at night or over the weekend, while some stated they are often or seldom required. Three percent felt that they are required to participate too often. In contrast, an overwhelming majority of dental hygienists stated they are not required to participate in on-call responsibilities.



4. Dental Clinic Staffing and Support

Participants were asked to rate if the following aspects of staffing and support were adequate at their dental clinics. The results show that both dentists and dental hygienists are highly satisfied with the clinical staffing and support. However, when it comes to the number of dental hygienists, there was a gap between dentists (59.0% answering as “Adequate”) and dental hygienists (81.9% answering as “Adequate”). Reimbursement for membership dues was reported for 60.0% (334/578) of the dentist respondents and for 36.8% (42/114) of the dental hygienists. Other indicators and perceptions of work environment are displayed in Table 4 (see p. 10).

5. Professional Organizations

Dentists and dental hygienists were asked about the professional organizations to which they belonged. The top two professional organizations in which dentists had memberships were the American Dental Association (ADA): 69.1% (398/576), and the Academy of General Dentistry (AGD): 22.4% (129/576). According to the ADA, approximately 70% of all dentists belong to the organization, so this result mirrors the general trend. The third largest response was “None” at 20.0% (115/576). Dental hygienists responded that the number one organization with which they held membership was the American Dental Hygienists’ Association (ADHA) at 53.3% (64/120). The number two choice of the dental hygienists was “None” with 43.3% (52/120) of the responses.

A trend was detected in dentists’ membership in their primary professional association. Staff dentists’ membership in the ADA decreased as years of experience increased, and Dental Directors’ membership in the ADA peaked at ≥ 1 but < 5 years, then dropped with more years of experience (Table 5). In contrast, the ADA reports that the majority of private practice dentists maintain their membership in organized dentistry throughout their careers.

Table 5: ADA Membership by Total Years of Practice (Dentists)

TOTAL YEARS OF DENTAL PRACTICE	ADA MEMBER (%)
DENTAL DIRECTOR	
Less than one year	75
≥ 1 but < 5 years	89
≥ 5 but < 10 years	76
≥ 10 years	71
STAFF DENTIST	
Less than one year	83
≥ 1 but < 5 years	78
≥ 5 but < 10 years	53
≥ 10 years	51

6. Administrative Duties

A series of questions aimed primarily to dentists who have administrative duties, typically the dental director, were asked to determine perceptions regarding adequacy of administrative time allowed to conduct those duties, time spent in clinical care, and time spent in administrative work. The mean number of hours worked in direct patient care for these dentists was 31.5 hours/week, and these dentists spent a mean of 7.5 hours in administrative work. Dental directors with administrative duties perceived that there was enough or more than enough time to complete these duties in 29% (97/335) of responses, but 71% (238/335) indicated there was not enough time or no time allowed for those duties. The top three job titles of the person to whom Dental Directors were directly accountable were CEO/Executive Director: 65.5% (224/342), CMO/Medical Director: 16.1% (55/342), and COO/Director of Operations: 6.4% (22/342).

E. JOB SATISFACTION

As a proxy measure of provider job satisfaction, the survey asked if there was intent to remain employed in a Health Center-based dental practice: 80.2% (449/560) of dentists and 93.3% (111/119) of dental hygienists indicated intent to remain in Health Center practices. For those dentists who intended to leave Health Center practice, 61.1% planned to do so in the next 2–5 years, 29.2% within one year, and 9.7% planned to leave as soon as possible. Only four dental hygienists (0.7%) planned to leave: one indicated as soon as possible and three indicated leaving in the next 2–5 years. Providers were asked for what they hoped to change if they ever decided to leave Health Center practices, or, for those who indicated intent to leave, the reasons chosen for planning to do so. These results are shown in Tables 6 and 7.

Table 6: Reasons Given for Intent to Leave Health Center Practice (Dentists)

Enter private practice	53.6%
Need to increase salary	50.9%
Increase scope of practice	36.6%
Desire more autonomy	34.8%
Need a change in work hours	26.8%
Plan on retiring	13.0%

Table 7: Reasons Given for Intent to Leave Health Center Practice (Dental Hygienists)

Need to increase salary	75.0%
Need a change in work hours	50.0%
Increase scope of practice	37.5%
Enter private practice	37.5%
Desire more autonomy	12.5%
Plan on retiring	N/A

*Totals are more than 100% due to multiple responses.



PART II
Survey for
Executive
Directors

The simultaneously administered survey for Health Center Executive Directors had a response rate of 43.1% (338/784). The responses categorized by HRSA Region and population of the Health Centers' primary mailing addresses were similar to the provider responses in that all regions and population classifications were represented (Appendices 3 & 4). A frequency analysis was performed on all questions and summary data are reported. Questions that received too few answers to be meaningfully analyzed are not reported. The Executive Director survey intended to validate reported salaries from the dental providers' self-reported salaries in the separately administered survey, as well as determine vacancy rates for dental provider positions, identify methods used to recruit new hires, and quantify benefits allowed to current employees that encourage retention.

A. NUMBER OF DENTISTS & DENTAL HYGIENISTS

Executive Directors were asked how many dentists and dental hygienists were currently employed and what the budgeted numbers of positions were in their organizations. The mean and median numbers of full-time dentists employed were 2.7 and 2.0, respectively, and the mean and median full-time dentists' positions budgeted were 3.4 and 2.5, respectively. Correspondingly, the mean and median numbers of full-time dental hygienists employed were 1.3 and 1.0, respectively, with the mean and median number of positions budgeted being 1.6 and 1.0, respectively.

B. DENTAL VACANCIES

Of the 338 Executive Directors surveyed, 132 (39.1%) reported having at least one dentist vacancy, and of those vacancies, over half (52.3%) were of greater than six months duration. In contrast, only 47 Executive Directors (13.9%) reported at least one dental hygienist vacancy, and of those vacancies, 40.4% were of greater than six months duration at the time of the survey. An additional 12 Executive Directors (3.6%) reported more than one vacancy in the dental component of their Health Centers. In addressing these vacancies, the most commonly used method indicated by Executive Directors for recruiting dentists was "Working with the NHSC" (28.1%), while the most commonly used method for recruiting dental hygienists was "Newspaper advertisement" (10.1%). Other cited methods were "Networking with Primary Care Associations," and "Community Health Center web postings."

Table 8: Dental Vacancies by Region

REGION	DENTIST VACANCIES (%) N=131/337	RDH VACANCIES (%) N=46/337
1	45.2	16.1
2	29.6	None Reported
3	28.6	14.3
4	41.2	3.9
5	38.3	12.8
6	51.3	5.1
7	61.9	19.0
8	38.1	14.3
9	31.7	2.4
10	25.0	12.5

Executive Directors were asked how many applicants had applied for any current vacancy for a dentist and/or dental hygienist and how many firm offers had been made to fill the vacancy. The median number of applicants for the vacant dentist position was 4.0 and the median number of firm offers made was 1.0. The main reason given by applicants for rejecting a firm offer of employment was "salary/benefits inadequate." Corresponding information for the dental hygienist position was insufficient for analysis due to the low numbers of vacancies and few responses of Executive Directors. A breakdown of the number and duration of vacancies for dentists and dental hygienists is found in Appendix 8.

C. SALARIES AND BENEFITS OF DENTISTS & DENTAL HYGIENISTS

Executive Directors were asked about salaries and benefits of dentists and dental hygienists for both budgeted vacant positions and for the highest-paid person filling existing positions. The budgeted salary for a dentist with 10 or more years of experience had a mean of \$145,015 and a median of \$120,000, with the highest-paid dentist on staff earning a mean of \$124,765 and median of \$122,209. The median fringe benefit amount for these dentists was 24% in addition to the salary reported. The budgeted salary for a dental hygienist with 10 or more years of experience had a mean of \$58,357 and a median of \$61,046, while the highest-paid hygienists' salaries reported had a mean of \$57,533 and a median of \$58,120. Median fringe benefits as an additional percentage of the reported salary totaled 23%.

Contract dentists were used in 20.3% of Health Centers (64/315). The lowest median hourly wage reported was \$68.00 and the highest median hourly wage was \$75.00. In contrast, only 4.5% (14/309) of the Executive Directors reported using contract dental hygienists who were not employees. The lowest and highest median hourly wage was \$30.00.



PART III
Analysis &
Discussion

A. SUMMARY OF ASSOCIATIONS

There were no significant associations with providers intending to leave Health Center practices related to the HRSA region or the population of the location in which the center was located. Similarly, there were no statistically significant associations between salary reported for either dentists or dental hygienists and intention to leave Health Center practices. There were also no significant associations with the variables of NHSC scholarship receipt or federal loan repayment assistance. There was no association with the dentist's position in the Health Center and intent to leave.

For other satisfaction indicators, there were no significant associations with perception of on-call responsibilities and intent to leave, and no associations with the variables of number of dental assistants, experience/quality of dental assistants, number of dentists, or number of dental hygienists employed with intent to leave Health Center practice. There was no significant difference between the salaries of dentists cross tabulated with the population category of the Health Center in which they were employed.

Using the dependent variable "intend to stay" in Health Center practice as an indicator of job satisfaction, there was no significant association by region in 9 of the 10 regions. In Region 3, there was a significant positive association with intent to stay. (Nominal regression model: $p < .05$; OR 3.70; 95% CI 1.02, 13.38).

Table 9: Intent to Remain in Health Center by HRSA Region

HRSA REGION	INTENT TO REMAIN IN HEALTH CENTER		TOTAL
	YES	NO	
1	33	5	38
2	44	5	49
3	50	3	53
4	46	16	62
5	84	15	99
6	66	16	82
7	35	14	49
8	46	18	64
9	80	13	93
10	72	16	88
TOTAL	556	121	677

Significant associations were found between intent to leave the Health Center practice and the following variables: gender, years of Health Center practice, years of total experience, level of autonomy in practice, pre-existing altruistic motivation, pre-existing value placed on loan repayment, and receiving state loan assistance. There were statistically significant associations between intent to leave and perceptions of adequacy of these following indicators: administrative support, clerical support (including reception, records, and billing), quality of facility, and condition of dental equipment and supplies. Finally, there was a significant association with the type (title) of supervisor to which the Dental Director directly reported and intent to leave the Health Center.



B. DETAILS OF STATISTICALLY SIGNIFICANT ASSOCIATIONS

Gender: A significant association was found with the variable of gender cross-tabulated with the dependent variable “intend to remain in Health Center dentistry.” χ^2 : $p=.019$.

Logistic regression model: Males were significantly more likely to indicate intent to leave Health Center practices than females ($p=.02$; OR 1.6; 95%CI:1.07,2.39).

Years in Health Center: The intent to leave Health Center practice was significantly associated with years of employment in a Health Center practice. Providers planning to stay in Health Center practice had a mean experience of 8.12 years and those planning to leave had a mean experience of 4.65 years ($p<.001$, Independent samples t-test, equal variances not assumed).

Years of Experience: The intent to leave the Health Center practice was significantly associated with the level of experience (total years of practice) for both dentists and dental hygienists. χ^2 : $p<.01$.

Logistic regression model: Using the reference category of ≥ 10 years, OR=1, the Odds Ratios for intending to leave the Health Center practice according to experience categories were as follows:

≥ 5 years but < 10 years	OR 2.79 (95%CI: 1.60,4.88) $p<.0001$ in all categories
≥ 1 year but < 5 years	OR 3.94 (95%CI: 2.38,6.50)
Less than 1 year	OR 7.43 (95%CI: 3.73,14.80)

Autonomy: For practitioners who felt they did not have full autonomy in the treatment of patients, there was a significant association with intent to leave the Health Center practice. χ^2 : $p<.001$

The logistic regression model indicates that those who felt they had limited autonomy in the treatment of patients were more likely to indicate an intention to leave the Health Center practice ($p<.0001$; OR 2.64; 95%CI:1.70,4.10).

Pre-existing Altruistic Motivation: There was a significant difference between groups of providers who stated that they “felt a mission to the dentally underserved” as their number one ranked reason for choosing the Health Center practice vs. those who did not. χ^2 : $p<.001$

Logistic regression model: Those who did not indicate a pre-existing altruistic motivation were more likely to indicate intent to leave the Health Center practice than those who did indicate such a motivation ($p<.001$; OR 2.63; 95%CI: 1.62,4.24).

Pre-existing Value Placed on Loan Repayment: There was a significant difference between groups of providers who stated that the number one reason they chose the Health Center practice was “loan repayment was available in Health Center practice” and those who did not. χ^2 : $p<.001$

Logistic regression model: Those who selected loan repayment as their first ranked reason for choosing the Health Center practice were more likely to indicate an intention to leave the Health Center practice ($p<.001$; OR 3.63; 95%CI: 2.16,6.17).

Recipient of State Loan Repayment: There was no statistical association between the independent variables of NHSC Scholarship Recipient and Recipient of Federal Loan Repayment with the dependent variable of “intend to leave Health Center practice”; however, there was a significant association between Recipient of State Loan Repayment and Intent to leave Health Center practice. The data does not necessarily reveal that loan repayment is a factor in providers intending to leave. Rather, analyzing results from all loan repayment-related questions, it seems that those who valued loan repayment as a pre-existing reason for choosing Health Center practices have a significantly higher “intent” to leave the practice.

Logistic regression model: Those who received state loans were more likely to indicate an intention to leave the Health Center practice than those who did not receive state loans ($p=.008$; OR 1.99; 95%CI:1.19,3.32).

Administrative Support: A significant association was found in the perception of administrative support available and the intent to stay in the Health Center practice. χ^2 : $p<.0001$.

Logistic regression model: Those who perceived that the administrative support available was adequate in the Health Center practice were more likely to indicate an intention to remain in that practice than those who perceived administrative support as inadequate ($p<.0001$; OR 2.31; 95%CI: 1.49,3.58).

Clerical Support: An association was found in the perception of clerical support (including reception, records, and billing) and intent to stay in the Health Center practice. χ^2 : $p=.001$

Logistic regression model: Those who perceived that the clerical support in the Health Center practice was adequate were more likely to intend to remain in the practice than those who judged that support to be inadequate ($p=.001$; OR 1.98; 95%CI: 1.31,2.99).

Repayment Services

NHSC Scholarships

The National Health Service Corp (NHSC) is a program of the U.S. Department of Health and Human Services. NHSC provides scholarships for students who, in return, commit to serve a minimum of two years service at an approved site in a high-need Health Professional Shortage Area soon after they graduate. <http://nhsc.hrsa.gov/scholarship>

Federal Loan Repayments

Congress has authorized a loan forgiveness program for public service employees which forgives some student debt for providers who work in Health Centers and other non-profit, public health, or military organizations.

State Loan Repayments

Most states have developed student loan repayment programs for dentists who treat underserved populations. The amount of funding and criteria varies by state.

Rating of Facility: A significant association was found in the rating of the Health Center facility by providers and intent to remain in the Health Center practice. χ^2 : $p < .0001$.

Logistic regression model: Those who rated their facility as very good or good were more likely to indicate an intent to remain in the Health Center practice than those providers who rated the facility as less than very good or good ($p < .0001$; OR 2.23; 95%CI: 1.48,3.37).

Rating of Equipment Condition and Supplies: A significant association was found in the provider rating of equipment and supplies vis-à-vis intent to remain in the Health Center practice. χ^2 : $p < .0001$

Logistic regression model: Those providers who perceived the equipment condition and supplies at their Health Center practice were very good or good were more likely to indicate an intent to stay in the practice than those providers who rated those items as less than very good or good ($p < .0001$; OR 2.88; 95%CI: 1.91,4.33).

Type of Reporting Hierarchy of the Health Center: A significant association was found in the title of the supervisor to whom the Dental Director reports (CEO/Executive Director vs. CMO/Medical Director) and intent to leave the Health Center practice. χ^2 : $p < .05$

Logistic regression model: Dental Directors who reported to a CMO/Medical Director were 2.2 times more likely to indicate intent to leave the Health Center practice than those Dental Directors who reported to a CEO/Executive Director ($p = .019$; OR 2.2; 95% CI: 1.1,4.4).



C. DISCUSSION

In this study, we explore some of the obvious questions that may come to mind when dealing with salary/job satisfaction surveys related to dental providers.

1. How much effect does salary have on dentists' and dental hygienists' job satisfaction levels?
2. Do the environmental surroundings of the workplace have a significant effect on job satisfaction?
3. Do any specific job duties that may be particular to one group have a significant effect on job satisfaction?
4. Is any part of the structure of the health system, its governance, or customer/client/patient characteristics of significant concern in the retention of experienced staff?
5. Are there pre-existing attributes of dentists and dental hygienists that may affect job satisfaction?
6. How can we measure job satisfaction?

The question "Do you intend to remain in Community Health Center-based dentistry" was used as a proxy for job satisfaction. Since planning on leaving a job might be the ultimate result of job dissatisfaction, response to this statement was used as the dependent variable in cross-tabulation, logistic regression, and independent samples t-test association models of statistical analysis. All tests were done using the significance level of $\alpha = .05$. The results that 8 in 10 dentists and 9 in 10 dental hygienists responding to this survey do not intend to leave their respective Health Center practices is an improvement over a previously published survey administered in 2003.³ This shows a remarkably high job satisfaction rate among the Health Center oral health providers.

We see from the analysis of this most recent survey data that salary alone is not the main reason for which dental health care providers choose to leave or remain in Health Center practices. The reported statistically significant associations are revealing in that they give us a glimpse of the characteristics of dissatisfied providers, i.e. providers intending to leave Health Center practices: they are more likely to be male, less experienced, are relatively recent hires, and report to medical directors. Loan repayment is significant for recruiting new providers, but those providers who remain at a center long-term indicate a greater importance placed on mission. Providers signifying an intention to leave further indicated they are also somewhat dissatisfied with the day-to-day work environment in which they find themselves, specifically the mechanics of the way the practice works administratively and clerically, and with the tools supplied to them to do their work.

The results provide an interesting insight for potential recruitment strategies. For instance, Health Centers may increase their retention rate by recruiting more experienced providers or those with strong sense of mission. While items such as salary and loan repayment are important first steps into drawing new providers into a Health Center, providers that stay long-term have values over and above salary. It is also important to remember that some of the factors contributing to provider dissatisfaction are adjustable. The daily work environment and reporting structures, among other things, should be evaluated to ensure stronger sense of autonomy and satisfaction among the dental providers.

Similar to the previous study, almost 4 in 10 responding Executive Directors are reporting at least one dentist vacancy. The fact that the majority of dentists and dental hygienists that are currently working in Health Center practices are more



experienced and came from private practice settings may indicate that recruitment efforts should be aimed at that labor source in addition to working with the NHSC, PCAs, and dental school/dental hygiene school postings. More recruiting efforts could be directed to popular professional journals or other venues that private practice dentists and dental hygienists are exposed to on a regular basis.

The data suggest that initial hires in Health Center practices are interested in higher starting salaries.⁴ Longer-term employed dentists and dental hygienists do not appear to indicate dissatisfaction with current salaries and benefits. Recent data released from the ADA Survey Center reminds us of how large the compensation differential is between private practice and Health Center practice, with the average net income of a full-time private practice general dentist in 2007 reported at \$215,850. Executive Directors need to be aware of the income opportunities that exist in the marketplace, and be proactive in articulating the advantages and benefits available in nonprofit corporate practices that are not available in private practice. Benefits such as vacation time, paid holidays, tax-advantaged retirement plans, and other benefits are not provided in independently owned practices, but rather must be self funded—in effect, boosting the total compensation offered by Health Center facilities.

Finally, the data suggest that intangibles—the inner satisfaction or motivation that is difficult to measure—play an important role in the initial recruitment and in the retention of Health Center dental providers, and that some of these intangibles are pre-existing and difficult to identify with recruitment or marketing plans that may be devised. NNOHA believes that this study provides some useful information and insights on the trends of Health Center dental workforce and its implications, which can be used creatively to develop recruitment and retention strategies suited to the unique needs of each oral health program.

Eight in 10 dentists
and **9 in 10** dental hygienists
intend to stay in their
respective Health Center practices.
This shows a **remarkably**
high job satisfaction
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health providers.



³ Bolin KA, Shulman JD. Nationwide survey of work environment perceptions and dentists' salaries in community health centers. J Am Dent Assoc. 2005 Feb;136(2):214-20; and Bolin KA, Shulman JD. Nationwide survey of dentist recruitment and salaries in community health centers. J Health Care Poor Underserved. 2004 May;15(2):161-9.

⁴ According to the Executive Director survey, of 122 firm offers that were rejected, 37, or 30%, identified "salary and benefits inadequate" as the reason for rejection.

The background is a solid blue color. It features three overlapping circles of varying sizes and positions: one in the top-left corner, one in the top-center, and one in the middle-right. A large, curved, blue shape is positioned in the bottom-right corner, resembling a thick, curved arrow or a stylized 'C' shape.

APPENDICES

APPENDIX 1

SURVEY QUESTIONS FOR DENTISTS & DENTAL HYGIENISTS: *CONFIDENTIAL*

1. What year did you graduate from dental/dental hygiene school? _____
2. How long have you been practicing dentistry/dental hygiene?
 - a. Less than one year
 - b. ≥ 1 but <5 years
 - c. ≥ 5 but <10 years
 - d. ≥ 10 years
3. What is your gender? M F
4. What was your primary dental practice activity immediately prior to practicing in a Community Health Care setting?
(Please choose the one best answer.)
 - a. Dental Student/Dental Hygiene Student
 - b. Graduate dental program/specialty program
 - c. Private practice/owner, partner, associate dentist
 - d. Private practice/employee dentist or employee dental hygienist
 - e. Commissioned Officer in Military or Public Health Service
 - f. Owner/partner in collaborative dental hygiene practice
 - g. Local/state public health agency/other community dental center
 - h. Retired
5. Please answer yes or no to the following statements:

a. I have received NHSC scholarship funding	Y	N
b. I have received or am receiving NHSC loan repayment funding	Y	N
c. I have received or am receiving loan repayment from a state program	Y	N
6. What were your primary reasons for choosing a practice opportunity with a Community Health Care organization?
(Please rank your top three choices with numbers 1, 2, or 3 in order of their importance to you.)
 - a. Felt a mission to the dentally underserved population.
 - b. Wished to offer oral health care within an interdisciplinary environment.
 - c. Wished to practice dentistry/dental hygiene in a community based setting.
 - d. Did not want to invest capital in a private practice or borrow money for a private practice.
 - e. Attracted by work schedule/leave policies/fringe benefits of Community Health Center practice.
 - f. Loan repayment was available in Community Health Center practice.
 - g. Sold private practice, or retired from government service.
 - h. Unsatisfied with associate/employee dentist or dental hygienist arrangements currently available.
7. Recognizing the sometimes limited fiscal and human resources of a Community Health Center, how do you perceive your professional practice autonomy in the treatment of Community Health Center dental patients?
 - a. I feel that I have full professional practice autonomy in the treatment of CHC dental patients.
 - b. I feel limited to some degree in terms of my professional practice autonomy in the treatment of Community Health Center dental patients.
8. If you feel limited to some degree in terms of professional practice autonomy, which of the following do you feel contributes to this?
(Choose all that apply.) If you feel you have full professional practice autonomy, skip to question 9.
 - a. Degree of patient compliance with treatment recommendations or appointment attendance.
 - b. Limited treatment offered at my CHC.
 - c. Limited patient population served at my CHC.
 - d. Limited access to specialists.
 - e. Limited scope of services due to budget constraints (i.e., lab services).
 - f. Limited ability to provide comprehensive care due to budgetary constraints.

Question 8 continues on following page >

> Question 8, continued

- g. Limited input into policy and budget decisions regarding dental services.
 - h. Restrictive Medicaid policies/ requirements.
 - i. Lack of sufficient guidance to be able to exercise professional judgment in the treatment of dental patients.
9. What is your current position in the Community Health Center dental department?
- a. Dental Director
 - b. Staff Dentist
 - c. Dental Hygienist

If you are the dental director (or if you are the only staff dentist) please answer the following four questions. Otherwise, proceed to question #14.

10. Do you feel you have enough administrative time set aside out of the clinic to manage operations of the dental component of the Community Health Center? (i.e., committee work, management team meetings, staff evaluations, recruitment of dental personnel, and other non-patient care issues).
- a. More than enough time
 - b. Not enough time
 - c. No time allowed
11. How many clinic hours (direct patient care) do you usually work on a weekly basis? _____
12. How many administrative hours do you usually work on a weekly basis? _____
13. What is the job title of the person to whom you are you directly accountable? _____
(e.g., executive director, director of operations, medical director, other.)
14. Are you offered continuing education time and expense reimbursement to maintain your credentials?
- a. Yes: #days _____ \$ _____
 - b. No time or CE expense reimbursement
15. How many days are currently offered to you annually for vacation time/paid leave? _____
16. How many sick days are you offered annually? _____
17. Is sick leave/personal leave adequate?
- a. Yes
 - b. No
18. Do you believe your major medical insurance benefits are adequate?
- a. Yes
 - b. No
19. Are you offered any retirement benefits through a 403b plan or similar plan?
- a. Yes
 - b. No
20. Does your employer offer a match to your 403b or other similar plan?
- a. Yes
 - b. No
21. Is there a salary incentive (production incentive) program for the dental patient care in place?
- a. Yes
 - b. No
22. For full-time dentists only: What is your yearly gross pre-tax salary, not including benefits? Pre-tax salary is defined as gross wages before income tax or Social Security/Medicare taxes are deducted.
- | | | | |
|-------------------------|-------------------------|-----------------------|------------------------|
| (a) <\$65,000 | (b) \$65,001–\$80,000 | (c) \$80,001–\$95,000 | (d) \$95,001–\$110,000 |
| (e) \$110,001–\$125,000 | (f) \$125,000–\$140,000 | (g) >\$140,000 | |
23. For full-time dental hygienists only: What is your yearly gross pre-tax salary, not including benefits? Pre-tax salary is defined as gross wages before income tax of Social Security/Medicare taxes are deducted.
- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| (a) <\$30,000 | (b) \$30,001–40,000 | (c) \$40,001–\$50,000 | (d) \$50,001–\$60,000 |
| (e) \$60,001–\$70,000 | (f) \$70,001–\$80,000 | (g) >\$80,000 | |

24. If you are paid an hourly rate rather than a salary, or if you are not a full-time dentist or dental hygienist, what is your approximate hourly pay?
 (a) Hygienist \$ _____ /hr (b) Dentist \$ _____ /hr
25. To which of the following professional organizations do you belong? (Circle all that apply.)
 (a) American Dental Association (e) American Association of Public Health Dentistry
 (b) American Dental Hygienists' Association (f) Academy of General Dentistry
 (c) National Dental Association (g) American Public Health Association
 (d) Hispanic Dental Association (h) None of these
26. Does your employer reimburse your membership dues in any of the above organizations?
 (a) Yes (b) No (c) N/A
27. How many years have you been practicing Community Health Care dentistry? _____
28. How would you describe your current employment in CHC dental care?
 (a) My current position is the only position I have had in CHC dental care.
 (b) I have been in at least one other CHC position prior to my current position in CHC dental care.
 (c) I have been in two or more other CHC positions prior to my current position in CHC dental care.
29. How would you rate your present facility overall in terms of physical building condition and appearance?
 a. Very good b. Good c. Adequate d. Needs improvement e. Poor
30. How would you rate your present facility overall in terms of equipment condition & dental supplies?
 a. Very good b. Good c. Adequate d. Needs improvement e. Poor
31. Are you required to participate in night or weekend on-call responsibilities?
 a. Too often c. Seldom b. Often d. Never
32. Please rate the following regarding dental clinic staffing and support.
- | | | |
|--|----------|------------|
| a. Number of dental assistants | Adequate | Inadequate |
| b. Quality/experience of dental assistants | Adequate | Inadequate |
| c. Clerical support: reception, records, billing | Adequate | Inadequate |
| d. Administrative support | Adequate | Inadequate |
| e. Number of dentists | Adequate | Inadequate |
| f. Number of dental hygienists | Adequate | Inadequate |
33. Do you intend to remain in Community Health Center-based dentistry?
 a. Yes b. No
34. If answer is "no" to question 33, how soon do you plan to leave? (Choose one answer.)
 a. As soon as another opportunity opens up.
 b. Within the next year.
 c. Within the next 2–5 years.
35. If answer is "no" to question 33, what are you hoping to change? (Circle all answers that apply.)
 a. Plan on retiring
 b. Need to increase salary
 c. Need a change in work hours
 d. Increase my scope of practice
 e. Entering private practice
 f. Desire more practice autonomy

APPENDIX 2

EXECUTIVE DIRECTOR SURVEY QUESTIONS: *CONFIDENTIAL*

1. How many dentists are currently employed in the dental component? _____
2. How many are full-time (32 or more hours per week)? _____
3. How many dentist positions (# FTE) are currently budgeted? _____
4. How many dental hygienists are currently employed in the dental component? _____
5. How many are full-time (32 or more hours per week)? _____
6. How many dental hygienist positions (# FTE) are currently budgeted? _____

If no dentist positions are vacant, please skip to question #15.

If no dentist or dental hygienist positions are vacant, please skip to question #23.

For the dentist vacancy, please answer the following eight questions.

7. What is the duration of the dentist vacancy as of this survey date?
 - a. Less than 6 months
 - b. 6–12 months
 - c. >12–24 months
 - d. More than 24 months
8. What methods/sources have been used to recruit for/fill this vacant position? (Circle letters of all that have been used.)
 - a. Newspaper advertisement
 - b. Dental journal (state or national) advertisement
 - c. Posting at dental schools
 - d. Speaking to students/residents about community based dentistry
 - e. Hosting dental externs in the dental clinic
 - f. Displays at job fairs/dental conventions
 - g. Professional headhunters
 - h. Staffing or temp agencies
 - i. Working with National Health Service Corps
 - j. Networking through Primary Care Associations
 - k. CHC website postings
 - l. NNOHA job bank
9. What method has been the most successful for your center? _____
10. How many applicants have responded to any of the above methods during the entire time since the position became vacant? _____
11. How many applicants have been made firm offers for the vacancy? _____
12. If firm offers have been made but rejected, what were the reasons given? (Choose all that apply.)
 - a. Salary/benefits inadequate
 - b. Location of Community Health Center
 - c. Level of staffing of the dental clinic
 - d. Condition of equipment of dental clinic
 - e. No loan repayment available

13. The current budgeted annual salary amount for dentist vacancy, not including fringes is:
 a. Entry-level position < 1 yr \$ _____ b. >One to five years' experience \$ _____
 c. >Five to 10 years' experience \$ _____ d. More than 10 years' experience \$ _____
14. What is the estimated amount of fringes for this position as a percentage of salary? _____

If there is more than one dentist vacancy, please answer questions 7–14 for each additional vacancy on the back page or a separate page.

Please answer the following 8 questions for the dental hygienist vacancy. If N/A, skip to #23.

15. What is the duration of the dental hygienist vacancy as of this survey date?
 a. Less than 6 months b. 6–12 months c. >12–24 months d. More than 24 months
16. What methods have been used to recruit for this vacant position? (Circle letters of all that apply.)
 a. Newspaper advertisement
 b. Dental hygiene journal (state or national) advertisement
 c. Posting at dental hygiene schools
 d. Speaking to dental hygiene students about community based dentistry
 e. Hosting dental hygiene externs at the dental clinic
 f. Displays at job fairs/dental conventions
 g. Headhunter agencies
 h. Dental staffing or temp agencies
 i. Working with National Health Service Corps
 j. Networking through Primary Care Associations
 k. CHC website postings
 l. NNOHA job bank
17. Which method has been the most successful for your center? _____
18. How many applicants have responded to any of the above methods during the entire time since the position became vacant? _____
19. How many applicants have been made firm offers for the vacancy? _____
20. If offers have been made but rejected, what were the reasons given? (Choose all that apply.)
 a. Salary/benefits inadequate
 b. Location of Community Health Center
 c. Level of staffing of the dental clinic
 d. Condition of equipment of dental clinic
 e. No loan repayment available
 f. Other _____
21. The current budgeted amount for dental hygienist vacancy, not including fringes is:
 a. Entry- level position ≤ 1 yr \$ _____ b. >One to five years' experience \$ _____
 c. >Five to 10 years' experience \$ _____ d. More than 10 years' experience \$ _____
22. What is the estimated amount of fringes for this position as a percentage of salary? _____

If there is more than one dental hygienist vacancy, please answer questions 15–22 for each additional vacancy on the back page or on a separate page.

The last four questions apply to your current dental personnel.

23. Are there any contract labor (not employees) dentists retained on staff? Yes No
 If yes, lowest contract amount \$ _____ /hr
 If yes, highest contract amount \$ _____ /hr

24. Current highest-paid full-time dentist (employee, not contract labor).
- Annual salary (not including fringes) \$ _____
 - Medical/dental insurance benefits Yes No
 - Other insurance disability, life Yes No
 - # paid holidays _____
 - # vacation/personal leave days _____
 - Retirement plan (403b or other) Yes No
 - Malpractice insurance reimbursement? Yes No
 - Dental license fee reimbursement Yes No
 - Drug license fee reimbursement Yes No
 - Continuing education allowance \$ _____
 - Level of experience of this dentist (since dental school graduation)
 - one year or less
 - >one to five years
 - >five to ten years
 - more than ten years
25. Are there contract labor dental hygienists (not employees) on staff?: Yes No
 If yes, what is the lowest contract amount? \$ _____ /hr
 If yes, what is the highest contract amount? \$ _____ /hr
26. Current highest-paid full-time dental hygienist:
- Annual salary (not including fringes) \$ _____
 - Medical/dental insurance benefits Yes No
 - Other insurance disability, life Yes No
 - # paid holidays _____
 - # vacation/personal leave days _____
 - Retirement plan (403b or other) Yes No
 - Malpractice insurance reimbursement Yes No
 - Dental hygiene license fee reimbursement Yes No
 - Continuing education allowance \$ _____
 - Level of experience of this dental hygienist (since dental hygiene school graduation)
 - one year or less
 - >one to five years
 - >five to ten years
 - more than ten years

Thank you for your time in participating in this survey.

Answers for additional vacancies: Dentist _____ Dental Hygienist _____

What is the duration of the vacancy as of this survey date?

- Less than 6 months
- 6–12 months
- >12–24 months
- More than 24 months

What methods/sources have been used to recruit for/fill this vacant position? (Circle letters of all that have been used.)

- Newspaper advertisement
- Professional journal (state or national) advertisement
- Posting at dental/dental hygiene schools
- Speaking to students/residents about community based dentistry
- Hosting dental/dental hygiene externs in the dental clinic
- Displays at job fairs/dental conventions
- Professional headhunters
- Staffing or temp agencies
- Working with National Health Service Corps
- Networking through Primary Care Associations
- CHC website postings
- NNOHA job bank

What method has been the most successful for your center? _____

How many applicants have responded to any of the above methods during the entire time since the position became vacant? _____

How many applicants have been made firm offers for the vacancy? _____

If firm offers have been made but rejected, what were the reasons given? (Choose all that apply.)

- a. Salary/benefits inadequate
- b. Location of Community Health Center
- c. Level of staffing of the dental clinic
- d. Condition of equipment of dental clinic
- e. No loan repayment available
- f. Other _____

The current budgeted annual salary amount for vacancy, not including fringes is:

- a. Entry-level position < 1 yr \$ _____
- b. >One to five years' experience \$ _____
- c. >Five to 10 years' experience \$ _____
- d. More than ten years' experience \$ _____

What is the estimated amount of fringes for this position as a percentage of salary? _____



APPENDIX 3

HRSA REGION RESPONSE

HRSA Region Response Tabulation – Providers

PROVIDER	HRSA REGION	FREQUENCY	PERCENT
DENTIST	1	29	5.1
	2	45	7.8
	3	43	7.5
	4	55	9.6
	5	78	13.6
	6	68	11.8
	7	40	7.0
	8	48	8.4
	9	91	15.9
	10	77	13.4
	TOTAL		574
DENTAL HYGIENIST	1	11	9.4
	2	5	4.3
	3	13	11.1
	4	11	9.4
	5	22	18.8
	6	14	12.0
	7	9	7.7
	8	17	14.5
	9	3	2.6
	10	12	10.3
	TOTAL		117

HRSA Region Response Tabulation – Executive Directors

	HRSA REGION	FREQUENCY	PERCENT
EXECUTIVE DIRECTORS	1	31	9.2
	2	27	8.0
	3	35	10.4
	4	51	15.1
	5	47	13.9
	6	39	11.6
	7	21	6.2
	8	21	6.2
	9	41	12.2
	10	24	7.1
	TOTAL	337	100.0



APPENDIX 4

METROPOLITAN, MICROPOLITAN, & OTHER (RURAL) POPULATION

For the purposes of our study, “Metropolitan” includes at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties. “Micropolitan” areas have at least one cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties. If the respondent’s address did not include either of these classifications, it was coded “other” and we considered it to be “Rural.”

(From the Office of Management and Budget, Washington, D.C., entitled “Update of Statistical Area Definitions and Guidance on their uses,” OMB Bulletin No. 09-01, November 28, 2008.)

Provider Distribution

PROVIDER	POPULATION	FREQUENCY	PERCENT
DENTIST	Metropolitan	363	63.2
	Micropolitan	67	11.7
	Other (Rural)	144	25.1
	TOTAL	574	100.0
DENTAL HYGIENIST	Metropolitan	65	55.6
	Micropolitan	17	14.5
	Other (Rural)	35	29.9
	TOTAL	117	100.0

Executive Director Distribution

CHC	POPULATION	FREQUENCY	PERCENT
EXECUTIVE DIRECTOR	Metropolitan	202	59.9
	Micropolitan	36	10.7
	Other (Rural)	99	29.4
	TOTAL	337	100.0

APPENDIX 5

LENGTH OF TIME PRACTICING DENTISTRY/DENTAL HYGIENE

Years of Practice

PROVIDER	LENGTH OF TIME	FREQUENCY	PERCENT
DENTIST	Less than one year	39	6.8
	1 to less than 5 years	106	18.4
	5 to less than 10 years	86	15.0
	Equal to or more than 10 years	344	59.8
	TOTAL	575	100.0
DENTAL HYGIENIST	Less than one year	6	5.0
	1 to less than 5 years	27	22.5
	5 to less than 10 years	24	20.0
	Equal to or more than 10 years	63	52.5
	TOTAL	120	100.0

Length of Time Practicing Community Health Care Dentistry

DENTIST	Number of Valid	569	
	Number of Missing	9	
	Mean	7.95	
	Median	5.00	
	Mode	1	
	Percentiles	25	2.00
		50	5.00
		75	10.50
DENTAL HYGIENIST	Number of Valid	119	
	Number of Missing	1	
	Mean	5.35	
	Median	4.00	
	Mode	1	
	Percentiles	25	2.00
		50	54.00
		75	6.50

APPENDIX 6

REASONS CITED FOR CHOOSING HEALTH CENTER DENTISTRY

Main Reason Attracted to a Health Care Center Dental Career

	% DDS
Felt a mission to the dentally underserved population	39.1
Loan repayment was available in Health Center practice	13.6
Attracted by work schedule/leave policies/fringe benefits of Health Center practice	12.4
Wished to practice dentistry/dental hygiene in a community based setting	10.2
Did not want to invest capital in a private practice or borrow money for a private practice	6.9
Sold private practice, or retired from government service	6.5
Unsatisfied with associate/employee dentist or dental hygienist arrangements currently available	6.1
Wished to offer oral health care within an interdisciplinary environment	5.5

	% RDH
Felt a mission to the dentally underserved population	42.3
Attracted by work schedule/leave policies/fringe benefits of Health Center practice	28.8
Wished to practice dentistry/dental hygiene in a community based setting	14.4
Unsatisfied with associate/employee dentist or dental hygienist arrangements currently available	8.1
Loan repayment was available in Health Center practice	4.5
Wished to offer oral health care within an interdisciplinary environment	2.7
Did not want to invest capital in a private practice or borrow money for a private practice	N/A
Sold private practice, or retired from government service	N/A



APPENDIX 7

PERCEPTION OF FACILITY

Perception of Facility Appearance & Conditions

PROVIDER		FREQUENCY	PERCENT
DENTIST	Very good	249	44.0
	Good	162	28.6
	Adequate	80	14.1
	Needs Improvement	64	11.3
	Poor	11	1.9
	TOTAL	566	100.0
DENTAL HYGIENIST	Very good	46	38.7
	Good	37	31.1
	Adequate	14	11.8
	Needs Improvement	21	17.6
	Poor	1	0.8
	TOTAL	119	100.0

Perception of Facility Available Equipment & Supplies

PROVIDER		FREQUENCY	PERCENT
DENTIST	Very good	207	36.8
	Good	194	34.5
	Adequate	94	16.7
	Needs Improvement	58	10.3
	Poor	9	1.6
	TOTAL	562	100.0
DENTAL HYGIENIST	Very good	47	39.5
	Good	33	27.7
	Adequate	26	21.8
	Needs Improvement	213	10.9
	Poor	0	0.0
	TOTAL	119	100.0

APPENDIX 8

VACANCY NUMBERS & DURATIONS: DDS & RDH

Dentist Vacancy

		FREQUENCY	PERCENT	VALID PERCENT
Valid	Less than 6 months	63	18.6	47.7
	6–12 months	42	12.4	31.8
	>12–24 months	15	4.4	11.4
	>24 months	12	3.6	9.1
	Total	132	39.1	100.0
Missing	System	206	60.9	
TOTAL		338	100.0	

Interpretation: Of 338 Executive Directors surveyed, 132 (39.1%) reported having at least one dentist vacancy, and of those vacancies, 47.7% were of 6 months or less in duration at the time of the survey.

Dental Hygienist Vacancy

		FREQUENCY	PERCENT	VALID PERCENT
Valid	Less than 6 months	28	8.3	59.9
	6–12 months	7	2.1	14.9
	>12–24 months	3	0.9	6.4
	>24 months	9	2.7	19.1
	Total	47	13.9	100.0
Missing	System	291	86.1	
TOTAL		338	100.0	

Interpretation: Of 338 Executive Directors surveyed, 47 (13.9%) reported having at least one dental hygienist vacancy, and of those vacancies, 59.9% were of 6 months or less in duration at the time of the survey.



CREDITS

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Dr. Wayne Cottam (Chair)
Dr. David Rosenstein
Dr. Neal Demby
Dr. Rene Rosas
Dr. Cecilia Edwards
Dr. Larry Hill
Dr. Amy Lalick-Tomes
Dr. Bob Russell
Dr. Jim Sutherland
Anna Erikson
Mary Altenberg
Dr. Pat Mason-Dozier
Dr. Buddhi Shrestha
Dr. Steve Geiermann
Andrea Martin

The Law firm of Feldesman Tucker Leifer Fidell, LLP

NNOHA Project Officer:

Jay R. Anderson, DMD, MHSA
HRSA Chief Dental Officer
NNOHA Project Officer
janderson@hrsa.gov

NNOHA Staff:

Colleen Lampron, MPH
NNOHA Executive Director
colleen@nnoha.org

Terry Hobbs
NNOHA Project Director
terry@nnoha.org

Mitsuko Ikeda
NNOHA Project Coordinator
mitsuko@nnoha.org

Luana Harris-Scott
NNOHA Administrative Support
adminsupport@nnoha.org

The **mission** of the
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NATIONAL NETWORK FOR ORAL HEALTH ACCESS

PMB: 329 3700 QUEBEC STREET, UNIT 100

DENVER, CO 80207-1639

303-957-0635

WWW.NNOHA.ORG

INFO@NNOHA.ORG