The information in this document was accurate at the time of this printing. As regulations and information regarding Health Centers are not static, NNOHA recommends that readers verify any critical information related to state regulations and take into account that changes may have occurred since the time of this printing.
EXECUTIVE SUMMARY

National Network for Oral Health Access (NNOHA) developed and administered a survey of Health Center oral health providers and executive directors. The purpose of the survey was to provide information and analysis on oral health provider salaries, oral health provider satisfaction, and recruitment and retention strategies at Health Centers throughout the country. The survey was distributed to NNOHA membership electronically. The survey had 342 respondents including 67 dentists, 60 dental hygienists, and 118 dental directors.

Highlights of key findings are:

- The majority of Health Center oral health providers are satisfied with their careers. 80% of respondents indicated the intention to stay employed at their health center for the next 3 or more years.
- The number one reason for choosing Health Center careers indicated among dentists and dental hygienists was that they “felt a mission to the dentally underserved population.”
- The majority of respondents indicated a high degree of satisfaction with their benefits and work environments, such as the quality of support staff.
- 45% of executive leadership reported having at least one dentist vacancy, and of those vacancies, 47% were longer than 6 months in duration.
- Seventy-one percent of dental directors and nearly 39% of dentists indicated that their salaries were greater than $140,000 per year (excluding benefits). While the most common salary range for dental hygienists was within the $60,001–$70,000 range, 29.8% indicated that their salaries were greater than $70,000 per year (excluding benefits).
- Nearly half of the respondents rotated through a Health Center oral health program before working at a Health Center (48.9%).
- Almost half of the respondents worked in private practices before working at Health Centers (47.5%). In addition, 28.2% of respondents came to Health Centers immediately after graduating from school.
- More than half of the respondents have been employed at their health center for over 5 years (54.9%).
- The majority of respondents rated their facilities in terms of physical appearance and condition as excellent or good (74.3%).

Survey results suggest that salary alone is not the main reason that oral health providers choose to leave or remain at Health Centers. Other factors also affect providers’ satisfaction with their careers. While some factors contributing to provider dissatisfaction cannot be changed, others can. To improve recruitment and retention rates at Health Center oral health programs, oral health providers’ work environments and the quality of their interactions with medical colleagues, among other things, should be evaluated, and, when possible, improved. Overall, however, we found that a large number of oral health providers were satisfied with their work.
INTRODUCTION AND METHODOLOGY

Health Centers are public or private not-for-profit organizations that provide preventive and primary health services to populations with limited access to health care. The Health Center designation is available only to programs that meet certain federal requirements and that receive federal grant funds under Section 330 of the Public Health Service Act.

In 2017, there were 1,373 Health Centers receiving Section 330 funding nationwide. Of these, an estimated 1,071 Health Centers (78%) had a dental program, defined as having at least a 0.5FTE dentist or provided 500 dental encounters in 2017. Health centers provided oral health care to over 6 million patients and medical care to more than 22 million patients. In that same year, Health Centers employed 4,882.42 full-time-equivalent (FTE) dentists, 2,497.90 FTE dental hygienists, and 31.38 FTE dental therapists.

In 2014, the National Network for Oral Health Access (NNOHA) published a report on a 2013 survey key questions related to Health Center oral health provider recruitment and retention strategies, salaries, and job satisfaction. The 2013 national survey was conducted under a Cooperative Agreement with the Health Resources and Services Administration (HRSA). This paper summarizes and reviews the results the most recent national survey of Health Center oral health providers and executive directors that NNOHA conducted in 2018.

Health Centers nationwide experience challenges in recruiting and retaining health providers, including dentists and dental hygienists. For this reason, Health Centers are eager to find ways to improve oral health providers’ job satisfaction, such as attracting candidates who are likely to remain at Health Centers, offering competitive salaries and benefits, and providing satisfying work environments. We hope that this paper will be of use to Health Centers that are seeking to improve their ability to recruit and retain oral health providers.
Survey Distribution
The NNOHA Practice Management Committee provided input on and approved the survey instruments and helped the primary investigator develop the survey instruments (appendices). The workgroup made minor changes to the 2013 survey questions and substantial changes to the survey-distribution and data-collection methodology. NNOHA e-mailed the 2018 survey to all NNOHA members (2,354). The survey was completed on the SurveyMonkey platform. The survey included different tracks for the respondents depending on the type of provider and their role in the health center.

Survey Response
There was a total of 342 respondents. Respondents to the survey included 67 staff dentists, 60 dental hygienists, and 118 executive dental leadership. There were 39 respondents who did not report their positions. Some (58) respondents did not complete the entire survey.

Survey Results
This paper will present the results from the 2018 Workforce Membership Survey. The narrative section of this paper provides selected tables and figures; additional analyses and the survey instruments are included in the appendices.

ii The survey link was emailed to 2,354 NNOHA members. A reminder to complete the survey was sent 3 times from August to September 2018.

iii Percentages in tables and graphs may not equal 100% due to rounding.
A. Overview of Respondents

The entire Part I of the survey was completed by 281 oral health providers, including 117 (41.6%) dental directors, 66 (23.5%) staff dentists, 60 (21.4%) dental hygienists, and 38 (13.5%) individuals in unreported positions.

1. Respondents by HRSA Regions

Dentist (N=183) and dental hygienist (N=60) respondents represented all 10 HRSA regions (Figure 1). The states within each HRSA region are listed in Table 1.

Figure 1. Oral Health Provider Responses by HRSA Region

The highest number of dental hygienist respondents were from Region VIII (28.3%). Many dentist respondents were from Region V (18.0%) and IX (20.8%).

Table 1. HRSA Regions

<table>
<thead>
<tr>
<th>Region</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region I</td>
<td>Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut</td>
</tr>
<tr>
<td>Region II</td>
<td>New York, New Jersey, Puerto Rico, Virgin Islands</td>
</tr>
<tr>
<td>Region III</td>
<td>Pennsylvania, Maryland, Delaware, District of Columbia, Virginia, West Virginia</td>
</tr>
<tr>
<td>Region IV</td>
<td>Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi</td>
</tr>
<tr>
<td>Region V</td>
<td>Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio</td>
</tr>
<tr>
<td>Region VI</td>
<td>New Mexico, Texas, Oklahoma, Arkansas, Louisiana</td>
</tr>
<tr>
<td>Region VII</td>
<td>Nebraska, Kansas, Iowa, Missouri</td>
</tr>
<tr>
<td>Region VIII</td>
<td>Montana, North Dakota, South Dakota, Wyoming, Colorado, Utah</td>
</tr>
<tr>
<td>Region IX</td>
<td>Arizona, California, Hawaii, Nevada</td>
</tr>
<tr>
<td>Region X</td>
<td>Alaska, Oregon, Idaho, Washington</td>
</tr>
</tbody>
</table>

---

iv N may differ per question. Respondents may have only completed parts of Part I.
v. Dentist (DDS), Dental hygienist (RDH), Dental Director (DD)
2. Length of Time Practicing Dentistry/Dental Hygiene
A majority of dental directors (N=115), staff dentists (N=61), and dental hygienists (N=57) respondents had been practicing dentistry or dental hygiene for 10 or more years.

Figure 2: Experience by Health Professional Type

3. Number of Years Practicing Community Health Care Dentistry
The majority of dental directors (46.6%), staff dentists (64.2%) and dental hygienists (90.0%) reported their current position as the only position they have had in community health care dentistry.

Most dental hygienists (N=60) and dentists (N=67) reported practicing community health care dentistry for equal to or longer than 1 year, but less than 5 years. The majority of dental directors (N=116), on the other hand, reported greater than or equal to 10 years.

Figure 3. Number of Years Practicing Community Health Care Dentistry
4. Gender

The majority of dentist respondents were female (62.0%, N=184). These ratios are markedly different from national ratios of dentists: 67.6% male and 30.5% female. A large majority of dental hygienist respondents were female (96.7%, N=60).

5. Primary Dental Practice Activity Immediately Before Practicing in a Community Health Care Setting

Nearly half dentist (44.0%, N=184) and most dental hygienist respondents (66.7%, N=60) respondents were in some form of private practice immediately before starting work at Health Centers (Figures 3 and 4). For both dentists and dental hygienists, the second most common answer was that they were students before starting work at Health Centers. Those who responded “Other” specified as working for a temporary placement agency, career in a different field, and dental school faculty.

Figure 4. Dentists’ Practice Activity Immediately Before Starting at Health Center (N=184)

Figure 5. Dental Hygienists Activity Immediately Before Starting at Health Center (N=60)

6. Rotation Through a Health Center Oral Health Program While Student
Many respondents rotated through a Health Center oral health program before working at a Health Center, including 58.8% of dentists (N=182), and 36.7% of dental hygienists (N=60).

7. Receipt of National Health Service Corps Scholarship or Loan Repayment, or Receipt of State Loan Repayment
Many survey respondents participated in National Health Service Corps (NHSC) loan repayment or scholarship funding (Figure 6 and 7). Some dental directors (19.0%), dentists (16.9%), and dental hygienists (10.1%) received loan repayment from a state program.

Figure 6. National Health Service Corps Scholarship Program Participation

![Chart showing participation in the National Health Service Corps Scholarship Program](image)

Figure 7. National Health Service Corps Loan Repayment Participation

![Chart showing participation in the National Health Service Corps Loan Repayment Program](image)
B. Reason for Working at Health Center and Sense of Autonomy

Respondents were asked to rank their top reasons for choosing a career in community health center dentistry or dental hygiene. The number one response indicated by dentists and dental hygienists was "Felt a mission to the dentally underserved population."

Table 2. Main Reason Attracted to Health Center Oral Health Practice

<table>
<thead>
<tr>
<th>Reason</th>
<th>Dentist (N=182)</th>
<th>Dental Hygienist (N=60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt a mission to the dentally underserved population</td>
<td>51.6%</td>
<td>53.3%</td>
</tr>
<tr>
<td>Loan repayment was available in Community Health Center practice</td>
<td>12.1%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Attracted by work schedule/leave policies/fringe benefits of Community Health Center practice</td>
<td>9.3%</td>
<td>18.3%</td>
</tr>
<tr>
<td>Wished to practice dentistry/dental hygiene in a community based setting</td>
<td>7.7%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Unsatisfied with associate/employee dentist or dental hygienist arrangements currently available</td>
<td>5.5%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Sold private practice, or retired from government service</td>
<td>4.9%</td>
<td>0%</td>
</tr>
<tr>
<td>Wished to offer oral health care within an interdisciplinary environment</td>
<td>4.4%</td>
<td>0%</td>
</tr>
<tr>
<td>Did not want to invest capital in a private practice or borrow money for a private practice</td>
<td>3.8%</td>
<td>0%</td>
</tr>
<tr>
<td>Was unsure about next career steps</td>
<td>0.5%</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

Previously published peer-reviewed studies have shown that a number of dentists working in Health Centers did not feel they had full autonomy in treating patients. This survey asked both dentists and dental hygienists to rate how they perceived their level autonomy in treating Health Center patients on a scale of 1-5, 1 being very limited autonomy and 5 being full autonomy. The mean score for dentists was 3.74 and 3.65 for dental hygienists. Reasons cited by respondents who felt that their autonomy was limited are in Table 3.

Table 3. Perception of Degree of Autonomy in Treating Patients

<table>
<thead>
<tr>
<th>Reason Cited for Perception of Limited Autonomy in Treating Patients</th>
<th>Dentist (N=182)</th>
<th>Dental Hygienist (N=60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of patient compliance with treatment recommendations or appointment attendance</td>
<td>46.7%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Scope of treatment offered at my Health Center</td>
<td>31.3%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Amount of access to specialists</td>
<td>35.2%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Types of services limited due to budget constraints (i.e. lab services)</td>
<td>22.0%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Degree of comprehensive care that can be provided</td>
<td>13.2%</td>
<td>18.3%</td>
</tr>
<tr>
<td>Degree of input into policy and budget decisions regarding dental services</td>
<td>22.5%</td>
<td>15.0%</td>
</tr>
<tr>
<td>My state’s Medicaid policies/requirements</td>
<td>45.1%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Degree of guidance from management in the treatment of patients</td>
<td>8.8%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Number of encounters required</td>
<td>24.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Not aligned with the culture of the team</td>
<td>4.9%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Not applicable – I feel that I have full autonomy</td>
<td>20.9%</td>
<td>26.7%</td>
</tr>
</tbody>
</table>

*Totals number more than 100% due to multiple responses.*
C. Salaries and Benefits

1. Salaries
Respondents were asked to choose 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 nine salary categories for statistical purposes. Similarly, dental hygienists were grouped into six salary categories.

Figure 8. Distribution of Dental Director Salary (N=103)

Figure 9. Distribution of Dentist Salary (N=59)
Respondents were asked questions about hourly wages for non-salaried or part-time employed positions. Table 4 shows hourly wages.

Table 4. Hourly Wages for Non-Salaried or Part-Time Dentists and Dental Hygienists

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentist</td>
<td>$73.16</td>
<td>$74.30</td>
</tr>
<tr>
<td>Dental Hygienist</td>
<td>$36.15</td>
<td>$35.00</td>
</tr>
</tbody>
</table>

2. Benefits

Health Centers offered a wide range of benefits to oral health providers (Table 5). The mean continuing education reimbursement amount for dental directors $2,163, dentists $1,916, and for dental hygienists $1,208. The median number of days offered for vacation was 20 days for dental directors, dentists, and dental hygienists. The median number days offered for sick leave was 5 for dental directors, 2 for dentists, and 4.5 for dental hygienists.

Table 5. Benefits: Responses of Dentists and Dental Hygienists Answering “Yes”

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Dentists</th>
<th>Dental Hygienists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing education allowance</td>
<td>98.4% (N=183)</td>
<td>93.2% (N=56)</td>
</tr>
<tr>
<td>Salary/production incentive plan offered</td>
<td>29.4% (N=170)</td>
<td>21.1% (N=57)</td>
</tr>
<tr>
<td>Retirement benefits (403b, 401k, or similar) offered</td>
<td>96.1% (N=181)</td>
<td>98.3% (N=60)</td>
</tr>
<tr>
<td>Retirement benefit match</td>
<td>84.7% (N=170)</td>
<td>96.3% (N=54)</td>
</tr>
<tr>
<td>Adequate leave time</td>
<td>76.2% (N=181)</td>
<td>84.7% (N=59)</td>
</tr>
<tr>
<td>Adequate medical insurance coverage</td>
<td>81.5% (N=168)</td>
<td>92.5% (N=53)</td>
</tr>
</tbody>
</table>
3. Salaries by Region

Figure 11 shows the normalized ratios of 2018 dentist salaries by HRSA Region. The region with the largest percentage of dentist salaries at or below $80K was Region II. The region with the largest percentage of dentist salaries above $190K was Region IV.

Figure 11. Normalized Ratios of Dentist Salaries by HRSA Region (N=161)

<table>
<thead>
<tr>
<th>Region</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

Figure 12 shows the normalized ratios of dental hygienist salaries by HRSA Region. The region with the largest percentage of dental hygienist salaries at or below $30K was Region VI. The region with the largest percentage of dental hygienist salaries above $80K was Region III. Note the small n value (N=50) when looking to determine national trends.

Figure 12. Normalized Ratios of Dental Hygienist Salaries by HRSA Region (N=50)

<table>
<thead>
<tr>
<th>Region</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>
D. Experience in Health Centers

Respondents were asked about their perceptions about work environment and perquisites available to them in Health Centers.

1. Perceptions of Facility Appearance and Conditions

A large majority of respondents (both dentists and dental hygienists) rated their facilities as excellent or good, both in terms of physical building condition and appearance and in terms of equipment condition and oral health supplies (Figures 13–16).

Figure 13. Dentists’ Perceptions of Facility Appearance and Condition (N=177)

Figure 14. Dental Hygienists’ Perceptions of Facility Appearance and Condition (N=57)
Figure 15. Dentists’ Perceptions of Equipment Condition and Oral Health Supplies (N=175)

Figure 16. Dental Hygienists’ Perceptions of Equipment Condition and Oral Health Supplies (N=57)
2. Workplace Environmental Indicators
Similarly, as illustrated by Table 5, respondents were generally satisfied with oral health program staffing and support in their workplaces.

Table 6. Perception of Workplace Environmental Indicators: Responses of Dentists and Dental Hygienists Who Answered “Adequate”

<table>
<thead>
<tr>
<th>Workplace Environmental Indicator</th>
<th>Dentists N=178</th>
<th>Dental Hygienists N=54</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of dental assistants</td>
<td>61.8%</td>
<td>64.8%</td>
</tr>
<tr>
<td>Quality/experience of dental assistants</td>
<td>70.2%</td>
<td>73.1%</td>
</tr>
<tr>
<td>Number of Expanded Function Dental Assistants</td>
<td>55.8%</td>
<td>65.8%</td>
</tr>
<tr>
<td>(in states where permitted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of dental therapists (in states where</td>
<td>41.7%</td>
<td>50.0%</td>
</tr>
<tr>
<td>permitted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerical support: reception, records, billing</td>
<td>56.3%</td>
<td>70.4%</td>
</tr>
<tr>
<td>Administrative support, including electronic</td>
<td>67.6%</td>
<td>87.3%</td>
</tr>
<tr>
<td>health records</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of dentists employed</td>
<td>71.2%</td>
<td>65.5%</td>
</tr>
<tr>
<td>Number of dental hygienists employed</td>
<td>74.7%</td>
<td>86.0%</td>
</tr>
<tr>
<td>Assistant to dentist ratio</td>
<td>65.0%</td>
<td>80.8%</td>
</tr>
<tr>
<td>Interaction with medical staff</td>
<td>65.5%</td>
<td>79.6%</td>
</tr>
</tbody>
</table>

3. Night or Weekend On-Call Responsibilities
On-call weekend and evening duties were perceived as occurring either “seldom” or “never” by 80.7% of the dentist respondents, but 19.3% perceived that on-call duties were “often” or “very often.”

4. Administrative Duties
A series of questions aimed at oral health providers who have administrative duties (n=153) were designed to determine perceptions about adequacy of time allowed to fulfill those duties, time spent in clinical care, and time spent in administrative work. The mean number of hours spent in direct patient care for providers with administrative duties was 27.1 hours per week, with a mean of 11.7 hours performing administrative work. Figure 17 shows perceptions of time allowed to fulfill administrative duties.

Figure 17. Oral Health Professionals: Perception of Enough Time to Complete Administrative Duties (N=169)
Health Centers employ different types of organizational structures and chains of command. In most cases, dental directors were accountable to individuals with the following titles: chief executive officer/executive director: 54.9%, chief medical officer/medical director: 22.1%, chief operating officer/director of operations: 9.7%, chief dental officer: 7.1%, and 6.2% did not specify.

5. Access to Specialists
Respondents were asked about the availability of and perceived need for specialists. Specialists perceived as most needed were oral surgeons (52.0%) followed by pediatric dentists (25.3%). More information about perceived need for specialists is shown in Table 7.

Table 7. Specialists Perceived as Most Needed (All Respondents)

<table>
<thead>
<tr>
<th>Type of Specialist</th>
<th>N = 273</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral surgeon</td>
<td>142</td>
<td>52.0</td>
</tr>
<tr>
<td>Pediatric dentist</td>
<td>69</td>
<td>25.3</td>
</tr>
<tr>
<td>Endodontist</td>
<td>34</td>
<td>12.5</td>
</tr>
<tr>
<td>Periodontist</td>
<td>18</td>
<td>6.6</td>
</tr>
<tr>
<td>Orthodontist</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Prosthodontist</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>None are needed</td>
<td>4</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Table 8 outlines the types of specialists that respondents reported as being available at Health Centers. While most (67.6%) responded that no specialists were available at the Health Center, when specialists were available, the type most often available was pediatric dentist (21.6%).

Table 8. Availability of Specialists (All Respondents)

<table>
<thead>
<tr>
<th>Type of Specialist</th>
<th>N = 278</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral surgeon</td>
<td>26</td>
<td>9.4</td>
</tr>
<tr>
<td>Pediatric dentist</td>
<td>60</td>
<td>21.6</td>
</tr>
<tr>
<td>Endodontist</td>
<td>14</td>
<td>5.0</td>
</tr>
<tr>
<td>Periodontist</td>
<td>9</td>
<td>3.2</td>
</tr>
<tr>
<td>Orthodontist</td>
<td>10</td>
<td>3.6</td>
</tr>
<tr>
<td>Prosthodontist</td>
<td>7</td>
<td>2.5</td>
</tr>
<tr>
<td>Other (i.e. pathologist)</td>
<td>9</td>
<td>3.2</td>
</tr>
<tr>
<td>None of these are available</td>
<td>188</td>
<td>67.6</td>
</tr>
</tbody>
</table>

6. Assistant-to-Dentist Ratios
All respondents were asked to quantify the assistant-to-dentist ratio as an additional measure of job satisfaction perception, with the assumption being that having an optimal ratio improves productivity and can lead to increased job satisfaction. Figure 18 shows ratios.
7. Minimum Number of Encounters
All respondents were asked if their Health Center’s administration required a minimum number of annual encounters and what that number was. A majority (68.4%) stated they had been informed by someone in their Health Center’s administration that there was a minimum annual encounter requirement per provider. Figure 19 shows the ranges of encounters expected for dentists and dental hygienists. The majority of dentists (37.2%) reported that their expected number of encounters is 2,501-3,000 encounters a year. For dental hygienists, most responded (31.1%) the expected number of encounters as 1,501-2,000 encounters a year.

8. Professional Organizations
All respondents were asked about the professional organizations to which they belonged. The top two professional organizations in which both dental directors and dentists had memberships were the American Dental Association and National Network for Oral Health Access. The top professional organization in which dental hygienists were members was the American Dental Hygienists’ Association. Many respondents stated “other,” which included organizations such as the Special Care Dentistry Association, the American Dental Education Association, primary care associations, and regional or state dental or dental hygiene associations. Organization membership percentages are shown in tables 9–11.
Table 9. Dental Director Membership in Professional Organizations (N=118)

<table>
<thead>
<tr>
<th>Membership Organization</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Network for Oral Health Access</td>
<td>94</td>
<td>79.7</td>
</tr>
<tr>
<td>American Dental Association</td>
<td>86</td>
<td>72.9</td>
</tr>
<tr>
<td>American Dental Hygienists Association</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>National Dental Association</td>
<td>7</td>
<td>5.9</td>
</tr>
<tr>
<td>Hispanic Dental Association</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>American Association of Public Health Dentistry</td>
<td>7</td>
<td>5.9</td>
</tr>
<tr>
<td>Academy of General Dentistry</td>
<td>16</td>
<td>13.6</td>
</tr>
<tr>
<td>American Public Health Association</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>American Academy of Pediatric Dentistry</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>None of these</td>
<td>5</td>
<td>4.2</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>11.0</td>
</tr>
</tbody>
</table>

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

Table 10. Staff Dentist Membership in Professional Organizations (N=67)

<table>
<thead>
<tr>
<th>Membership Organization</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Network for Oral Health Access</td>
<td>36</td>
<td>56.7</td>
</tr>
<tr>
<td>American Dental Association</td>
<td>40</td>
<td>59.7</td>
</tr>
<tr>
<td>American Dental Hygienists Association</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>National Dental Association</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>Hispanic Dental Association</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>American Association of Public Health Dentistry</td>
<td>3</td>
<td>4.5</td>
</tr>
<tr>
<td>Academy of General Dentistry</td>
<td>17</td>
<td>25.4</td>
</tr>
<tr>
<td>American Public Health Association</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>American Academy of Pediatric Dentistry</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>None of these</td>
<td>8</td>
<td>11.9</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>10.4</td>
</tr>
</tbody>
</table>

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

Table 11. Dental Hygienist Membership in Professional Organizations (N=60)

<table>
<thead>
<tr>
<th>Membership Organization</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Network for Oral Health Access</td>
<td>12</td>
<td>20.0</td>
</tr>
<tr>
<td>American Dental Association</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>American Dental Hygienists Association</td>
<td>28</td>
<td>46.7</td>
</tr>
<tr>
<td>National Dental Association</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hispanic Dental Association</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>American Association of Public Health Dentistry</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Academy of General Dentistry</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>American Public Health Association</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>American Academy of Pediatric Dentistry</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>None of these</td>
<td>22</td>
<td>36.7</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>6.7</td>
</tr>
</tbody>
</table>

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

Reimbursement for membership dues by Health Center practices was reported for 65.7% of the dentist respondents (N=172) and for 62.2% of the dental hygienist respondents (N=45).
E. Job Satisfaction

As a proxy measure of provider job satisfaction, respondents were asked how long they intended to remain employed at Health Centers. Figures 20 and 21 show timelines for dentists and dental hygienists to stay employed at Health Centers. The majority of dentists (55.5%) and dental hygienists (69.6%) intended to stay employed at health centers for more than 7 years.

Figure 20. Dentists’ Intended Timelines to Stay at Health Centers (N=146)

Figure 21. Dental Hygienists’ Intended Timelines to Stay at Health Centers (N=46)
Respondents who indicated intention to leave their health center within the next 5 years were asked what factors were affecting their decision to leave. The highest reason for leaving within the next 5 years for dentists was burnout (21.6%). For dental hygienists, the highest reasons were needing to increase income (20.0%). Those who responded “other” specified reasons such as: location of clinic, pursuing a specialty career, lack of paid maternity leave, challenging work hours, inadequate support staff, and not working to the top of their scope. Results are shown in Table 12.

Table 12. Reason for Intent to Leave Health Center Practice in 5 Years or Less

<table>
<thead>
<tr>
<th>Reason</th>
<th>Dentist (N=185)</th>
<th>Dental Hygienist (N=60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout</td>
<td>21.6%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Need to increase income</td>
<td>20.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Professionally unsatisfied with leadership of health center</td>
<td>16.2%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Plan on retiring</td>
<td>14.1%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Increase my scope of practice</td>
<td>13.0%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Need a change in work hours</td>
<td>11.9%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Desire more practice autonomy</td>
<td>11.9%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Entering private practice</td>
<td>9.2%</td>
<td>3.3%</td>
</tr>
<tr>
<td>I think encounter rates are too high</td>
<td>3.8%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Desire to participate in resident education</td>
<td>3.2%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Academic/research</td>
<td>2.7%</td>
<td>11.7%</td>
</tr>
<tr>
<td>I do not intend to leave my health center in 5 years</td>
<td>35.1%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Other</td>
<td>8.1%</td>
<td>11.7%</td>
</tr>
</tbody>
</table>

*Totals are more than 100% due to multiple responses.*
PART II: SURVEY FOR EXECUTIVE LEADERSHIP

Of the survey respondents, 103 indicated that they were executive leadership (CEO, Dental Director, etc.) These respondents completed a separate component of the survey designed to determine vacancy rates for oral health provider positions, identify methods used to recruit new hires, and quantify benefits allowed to current employees that encourage retention. Part II of this document will provide the results of the executive leadership survey.

Figure 22. HRSA Regions by Executive Leadership (N=103)

A. Number of Oral Health Providers
All respondents had an oral health component. Respondents were asked how many dentists, dental hygienists, dental assistants, and dental therapists their Health Center currently employed and what the budgeted numbers of positions were in their Health Center. Only 4 respondents stated that dental therapists were included in their state practice act. No respondents employed dental therapists or had them budgeted. Table 14 shows the number of employed and budgeted oral health positions. Full time equivalent is defined as 30 hours per week for this survey.

Table 14. Budgeted and Employed Oral Health Positions

<table>
<thead>
<tr>
<th>Position</th>
<th>FTE Budgeted: Mean</th>
<th>FTE Budgeted: Median</th>
<th>Number Employed: Mean</th>
<th>Number Employed: Median</th>
<th>Number Employed: Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentist, full time</td>
<td>7.3</td>
<td>5.3</td>
<td>6.7</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Dental Hygienist, full time</td>
<td>3.9</td>
<td>3.0</td>
<td>4.2</td>
<td>3.0</td>
<td>1</td>
</tr>
<tr>
<td>Dental Assistant, full time</td>
<td>15.5</td>
<td>11.0</td>
<td>14.9</td>
<td>11.5</td>
<td>3</td>
</tr>
<tr>
<td>Dental Therapists, full time</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Among all 103 respondents, 35 (34.0%) indicated that their Health Center employed three or fewer FTE dentists, 7 (6.8%) indicated that their Health Center employed no FTE dental hygienists, and 5 (4.9%) indicated that their Health Center had no budgeted dental hygienist positions. The number of assistant positions budgeted was not materially different from the number of assistants employed, suggesting that there were few if any assistant position vacancies at the time of the survey. There were 47 (45.6%) respondents who indicated that they employ Expanded Function Dental Assistants (EFDAs). Table 15 shows the number of EFDAs employed among Health Centers.

### Table 15. Expanded Function Dental Assistants in Health Centers (N=47)

<table>
<thead>
<tr>
<th>EFDAs in Health Centers</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.5</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

### B. Oral Health Vacancies

The survey asked how many vacancies currently existed for both dentist and dental hygienist positions in each Health Center oral health program. About forty-four percent (44.4%) of respondents reported having at least 1 dentist vacancy and 19.8% of respondents reported having at least 1 dental hygienist vacancy. Figure 23-26 show the percentages and durations of dentist and dental hygienist vacancies.

**Figure 23. Executive Directors Reporting a Dentist Position Vacancy (N=99)**

Of the respondents who reported having at least one dentist position vacancy, the majority (52.8%) reported that the position or positions had been vacant for 6 months or less. Nine respondents reported having more than one dentist position vacancy (9.1%).

**Figure 24. Duration of Dentist Position Vacancies (N=53)**
In contrast, only 19 executive directors (19.8%) reported at least one dental hygienist vacancy. Figure 25 shows percentages of dental hygienist position vacancies, and Figure 26 shows duration of these vacancies.

Figure 25. Executive Directors Reporting a Dental Hygienist Position Vacancy (N=96)

Among respondents who reported having at least one dental hygienist position vacancy, 13 (68.4%) reported that the position or positions had been vacant for 6 months or less. Based on the results, it is assumed that Health Centers have more difficulty recruiting dentists than dental hygienists.
Health Center executives were asked to identify the most commonly used methods for recruiting dentists and dental hygienists. The most common method for recruitment of both dentists (55.8%) and dental hygienists (50.0%) were online recruitment websites such as Indeed, Monster, and Craigslist. Other common recruitment methods for dentists were the NNOHA job bank (44.2%), community health center website postings (40.4%), and the National Health Service Corps (40.4%). For recruitment of dental hygienists, another common recruitment method was Primary Care Associations (38.9%).

Table 16. Most Commonly Used Recruitment Methods for Oral Health Providers

<table>
<thead>
<tr>
<th>Recruitment Method</th>
<th>Dentist Vacancy (N=62)</th>
<th>Dental Hygienist Vacancy (N=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNOHA job bank</td>
<td>44.2%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Working with National Health Service Corps</td>
<td>40.4%</td>
<td>5.6%</td>
</tr>
<tr>
<td>CHC website postings</td>
<td>40.4%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Posting at dental schools</td>
<td>38.5%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Speaking to students/residents about community based dentistry</td>
<td>32.7%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Professional headhunters</td>
<td>32.7%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Newspaper advertisement</td>
<td>30.8%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Networking through Primary Care Associations</td>
<td>28.8%</td>
<td>38.5%</td>
</tr>
<tr>
<td>Dental journal advertisement (state or national)</td>
<td>26.9%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Social media</td>
<td>23.1%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Hosting dental externs in dental clinic</td>
<td>21.2%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Staffing or temp agencies</td>
<td>21.2%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Displays at job fairs/dental conventions</td>
<td>11.5%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Online recruitment websites (Indeed, Monster, Craigslist, etc.)</td>
<td>55.8%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Other</td>
<td>5.6%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

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

Respondents were asked which recruitment method was the most successful for their organization. The most successful method reported was online recruitment websites for both dentist vacancies (37.5%) and dental hygienist vacancies (75.0%).

Respondents were also asked how many applicants had applied for any current dentist or dental hygienist jobs and how many firm offers the Health Center had made to fill vacancies. Table 17 shows the median and number of applicants and firm offers. Respondents indicated the primary reason for dentists rejecting firm offers of employment was "salary/benefits inadequate", while dental hygienists' primary reason was "location of community health center."

Table 17. Number of Applicants and Firm Offers for Oral Health Positions

<table>
<thead>
<tr>
<th>Position</th>
<th>Applicants: Median</th>
<th>Firm Offers: Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentist, full time</td>
<td>6.5</td>
<td>1</td>
</tr>
<tr>
<td>Dental Hygienist, full time</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>
D. Salaries and Benefits of Dentists, Dental Hygienists, and Dental Leadership

Executive leadership were asked about dentists’ and dental hygienists’ salaries and benefits for the highest-paid person filling existing positions. Tables 18-20 show the mean and median salaries for staff dentists, staff dental hygienists, and dental leadership (Dental director, Chief Dental Officer, VP of Dental services, etc.) by experience.

Table 18. Salaries for Dentists by Level of Experience

<table>
<thead>
<tr>
<th></th>
<th>Entry Level &lt; 1 year</th>
<th>1 to 5 years</th>
<th>5 to 10 years</th>
<th>&gt;10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentist, mean</td>
<td>$108,000.00</td>
<td>$138,923.10</td>
<td>$147,279.70</td>
<td>$161,185.30</td>
</tr>
<tr>
<td>Dentist, median</td>
<td>$108,000.00</td>
<td>$141,000.00</td>
<td>$149,000.00</td>
<td>$150,800.00</td>
</tr>
</tbody>
</table>

The highest paid staff dentist earned a mean of $151,526.80 and median of $148,000.00.

Table 19. Salaries for Dental Leadership by Level of Experience

<table>
<thead>
<tr>
<th></th>
<th>Entry Level &lt; 1 year</th>
<th>1 to 5 years</th>
<th>5 to 10 years</th>
<th>&gt;10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Leadership, mean</td>
<td>N/A</td>
<td>$142,250.00</td>
<td>$160,666.40</td>
<td>$150,471.50</td>
</tr>
<tr>
<td>Dental Leadership, median</td>
<td>N/A</td>
<td>$152,500.00</td>
<td>$163,000.00</td>
<td>$155,000.00</td>
</tr>
</tbody>
</table>

The highest paid dental leadership, as reported by executive leadership, earned a mean of $153,028.80 and median of $159,835.00. No respondents indicated that their highest paid dental leadership had less than 1 year experience since graduation of dental school. The results in Table 18 and 19 indicate that salary for staff dentists increases with experience.

Table 20. Salaries for Dental Hygienists by Level of Experience

<table>
<thead>
<tr>
<th></th>
<th>Entry Level &lt; 1 year</th>
<th>1 to 5 years</th>
<th>5 to 10 years</th>
<th>&gt;10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Hygienist, mean</td>
<td>N/A</td>
<td>$73,667.20</td>
<td>$80,943.75</td>
<td>$71,454.34</td>
</tr>
<tr>
<td>Dental Hygienist, median</td>
<td>N/A</td>
<td>$75,000.00</td>
<td>$75,000.00</td>
<td>$72,000.00</td>
</tr>
</tbody>
</table>

The highest paid dental hygienist, according to executive leadership, earned a mean of $74,252.24 and median of $73,240.50. No respondents indicated that their highest paid dental hygienist had less than 1 year experience since graduation of dental hygiene school.

Twenty-four respondents (24.5%) stated that they use contract dentists. The lowest mean and median hourly wages reported were $120.73 and $80.00, respectively. The highest mean and median hourly wages reported $143.20 and $100.00.

In contrast, only 1 (1.0%) respondent reported using contract dental hygienists. The mean and median hourly wages are not included due to having only 1 respondent use contract dental hygienists.
Respondents were asked to provide benefits for highest-paid dentists, dental hygienists, and dental leadership as an indication of benefits for other Health Center oral health provider staff. Table 21 shows those who answered "Yes" to benefits offered to oral health providers as reported by executive leadership.

Table 21. Benefits Offered to Oral Health Providers

<table>
<thead>
<tr>
<th></th>
<th>Medical/Dental Insurance</th>
<th>Other Insurance (i.e., disability, life, etc.)</th>
<th>Malpractice Insurance Reimbursement</th>
<th>Dental License Reimbursement</th>
<th>Paid NNOHA Membership</th>
<th>Number of Paid Holidays (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Dentist</td>
<td>98.0%</td>
<td>96.0%</td>
<td>75.3%</td>
<td>88.2%</td>
<td>63.7%</td>
<td>8.8</td>
</tr>
<tr>
<td>Dental Leadership</td>
<td>99.0%</td>
<td>95.9%</td>
<td>96.0%</td>
<td>87.5%</td>
<td>82.5%</td>
<td>9.1</td>
</tr>
<tr>
<td>Staff Dental Hygienist</td>
<td>95.4%</td>
<td>93.2%</td>
<td>74.7%</td>
<td>80.7%</td>
<td>47.7%</td>
<td>8.5</td>
</tr>
</tbody>
</table>
In an effort to gain better understanding of the workforce trends within Health Centers, the NNOHA Workforce Membership Survey was released. This survey is conducted every 3 to 5 years to compare trends and to learn what factors contribute to provider job satisfaction. The survey was distributed to all NNOHA membership. The survey was open for 45 days between July to September 2018. The members were incentivized to complete the survey with a random drawing for a $50 Amazon Gift Card. The survey had 342 respondents that included 67 dentists, 60 dental hygienists, and 118 dental directors. Many respondents did not complete the entire survey. This section will discuss the results of the survey.

Survey respondents were asked to indicate when they intended to leave Health Center dentistry. Of the survey respondents, 8 in 10 dentists and 9 in 10 dental hygienists planned to stay at their Health Center for 7 years or more. These results are similar to the findings in 2010 and 2013. These results assume that dentists and dental hygienists who work in Health Centers are highly satisfied with their employment. There were many reasons that respondents were attracted to a career in Health Centers. Of the survey respondents, more than half of both dentists and dental hygienists selected “Felt a mission to the dentally underserved population” as their main reason for being attracted to Health Center oral health practice. These results show that the Health Center mission of serving underserved populations is a driving factor for oral health providers to work at a Health Center.

When asked about degree of autonomy in treating patients in Health Centers, only 4 in 10 dentists and 2 in 10 dental hygienists responded with the perception of having full autonomy in treating patients. The highest reason for citing limited autonomy in treating patients was “Level of patient compliance with treatment recommendations or appointment attendance” for both dentists and dental hygienists. Dentists also cited “My state’s Medicaid policies/requirements” as a primary reason for limited autonomy in treating patients. HRSA region 9 had the most respondents with this reason for limited autonomy in patient treatment.

Survey respondents were asked to provide their current gross annual salary in a range. The majority of dental directors self-reported a salary of $155,000-$175,000 while the salary range self-reported by staff dentists was $110,00-$140,000. Most dental hygienists self-reported a salary range of $60,001-$70,000. The salary range for dental directors and dental hygienists has increased compared to 2010 and 2013. The results for staff dentists was similar to 2010 and 2013. Executive leadership indicated that salaries for dental leadership increased with more years of experience. This finding was the same for dentists and dental hygienists with less than 1-year experience to 10 years of experience. However, the results from the survey did not show an increased salary for dentists and dental hygienists with over 10 years of experience compared to oral health providers with less years of experience. This is possibly due to outliers in the data.

Executive leadership completed a portion of the survey to determine the number of dental vacancies and the most successful methods of recruitment for those vacancies. There were 103 respondents who indicated they were executive leadership (i.e. Chief Executive Officer, Dental Director, Chief Dental Officer, Chief Operations Officer, etc.). Of the 103 respondents, only 4 indicated that their state practice acts included dental therapists. However, none of these respondents employed dental therapists or had them budgeted. This assumes that some Health Centers, although able to have dental therapists in their state, have not yet found an appropriate role for dental therapists in their organization. Nearly half of the respondents (45.6%) indicated using Expanded Function Dental Assistants (EFDAs).

There were a small number of respondents who stated that their Health Center did not employ any FTE dental hygienists and/or three or fewer FTE dentists. Of the respondents who indicated having three or less FTE dentists employed, 23% of them had contract dentists. None of the respondents who employed 0 FTE dental hygienists were using contract dental hygienists. For all positions, the mean and median budgeted positions and employed positions were similar suggesting that there were few vacancies at the time of the survey. This is mostly in line with the executive leadership responses for number of oral health vacancies. Of the respondents, 5 in 10 reported having no dentist vacancies and 8 in 10 reported having no dental hygienist vacancies. The majority of vacancies for both dentist and dental hygienist positions did not last for more than 6 months. These results suggest that oral health position vacancies are mostly filled quickly. Also, dental hygiene vacancies are less common than dentist vacancies in Health Centers. The results also suggest that Health Centers have more difficulty recruiting dentists than dental hygienists. The most common methods of recruiting oral health providers was online recruitment websites. This method was also the most successful for both dentist and dental hygienist positions.

The information presented in this paper is intended for Health Centers to use as they determine and modify strategies for recruitment and retention of oral health providers. Health Centers can use this information as a gauge to ensure that salaries and benefit packages are in line with survey respondents are they reflect a national sample. Additionally, this information can be useful in creating job descriptions and Health Center protocols and policies. The results of this survey is a small population sample of a large network of oral health providers. The information may not apply to each Health Center as each organization is unique. NNOHA hopes that these results are found useful and beneficial as Health Centers continue to find ways to recruit and retain oral health providers in order to provide quality oral health care to the patients they serve.
REFERENCES

Appendix A

Survey Questions for Oral Health Providers

1. What HRSA Region is your Community Health Center (CHC) dental program located? (Please use this link for reference)

2. 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

Questions for General Dentists, Dental Hygienists

3. How long have you been practicing general dentistry/dental hygiene?
   a. Less than 1 yr
   b. > or = to 1 year, but <5 years
   c. > or = to 5 years, but < 10 years
   d. > or = to 10 years

4. What is your gender?
   a. Male
   b. Female

5. What was your primary dental practice activity immediately prior to practicing in a health center?
   a. Dental student
   b. Dental hygiene student
   c. Graduate dental program/specialty program
   d. Private practice/owner, partner, associate
   e. Private practice/employee dentist or employee dental hygienist
   f. Commissioned Officer in Military or Public Health Service
   g. Owner/partner in collaborative dental hygiene practice
   h. Local/state public health agency/other community dental center
   i. Retired
   j. Other (please specify)

6. Did you rotate through a Health Center dental clinic while you were a student?
   a. Yes
   b. No

7. Please answer yes or no to the following statements
   a. I have received NHSC scholarship funding
   b. I have received or am receiving NHSC loan repayment funding
   c. I have received or am receiving loan repayment from a state program
   d. I have received or am receiving loan repayment from a private organization
   e. Not applicable

8. If you have completed NHSC loan repayment obligations, what year were they completed?
   a. Less than 1 yr
   b. > or = to 1 year, but <5 years
   c. > or = to 5 years, but <10 years
   d. > or = to 10 years
9. What were your primary reasons for choosing to work at a Health Center organization? Please rank your top 3 choices with numbers 1,2,3 in order of importance to you. Please leave the remaining choices blank.
   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.
   i. Was unsure about next career steps.

10. What is your current Full Time Equivalent (FTE) status?
   a. < 0.5FTE
   b. 0.6-0.9FTE
   c. 1.0FTE

11. How many years have you been practicing Community Health Center dentistry/dental hygiene?
   a. Less than 1 yr
   b. > or = to 1 year, but <5 years
   c. > or = to 5 years, but < 10 years
   d. > or = to 10 years

12. Please rate how you perceive your professional practice autonomy in the treatment of Health Center patients from 1-5. (1 being very limited autonomy, 5 being full autonomy)

13. Which of the following reasons contribute to your answer for questions 12? (Choose all that apply).
   a. Level of patient compliance with treatment recommendations or appointment attendance
   b. Scope of treatment offered at my Health Center
   c. Amount of access to specialists
   d. Types of services limited due to budget constraints (i.e. lab services)
   e. Degree of comprehensive care that can be provided
   f. Degree of input into policy and budget decisions regarding dental services
   g. My state’s Medicaid policies/requirements
   h. Degree of guidance from management in the treatment of patients
   i. Number of encounters required
   j. Not aligned with the culture of the team
   k. Other (please specify)
   l. Not applicable - I feel that I have full autonomy

14. What is your current position/title in the Health Center dental component?
   a. Chief Dental Officer or Vice President of dental services
   b. Dental director
   c. Staff dentist
   d. Dental hygienist
   e. Other (please specify)
15. Are you a Dental Director, Staff Dentist, or Dental Hygienist with administrative duties?
   a. Yes
   b. No *Skip to Question 21*

16. How do you feel about the amount of administrative time set aside outside of clinic to manage operations of the dental component? (i.e. committee work, management team meetings, staff evaluations, quality control issues, etc.)
   a. I feel I have enough time to do these activities
   b. I feel I don’t have enough time, but I am allowed some time for these activities
   c. I am not allocated any time outside of clinic to do these activities

17. How many clinic hours (direct patient care) do you usually work on a weekly basis?

18. How many administrative hours do you generally work during the work week?

19. How many administrative hours do you generally work outside of normal working hours on a weekly basis?

20. What is the job title of the person to whom you are directly accountable?
   a. Executive Director or Chief Executive Officer
   b. Chief Operations Officer
   c. Medical Director or Chief Medical Officer
   d. Dental Program Director or Chief Dental Officer
   e. Other (please specify)

21. Are there any specialists available in your dental department? (Indicate any who are employed or contracted)
   a. Oral surgeon
   b. Periodontist
   c. Orthodontist
   d. Pediatric dentist
   e. Prosthodontist
   f. Endodontist
   g. Other (please specify)
   h. None of these are available

22. Please rank what specialists are needed for your patients, 1=most needed, 6=least needed. If your health center contracts or employs a specialist, then please leave that specialist field blank.
   a. Oral surgeon
   b. Periodontist
   c. Orthodontist
   d. Pediatric dentist
   e. Prosthodontist
   f. Endodontist
   g. Other (please specify)
   h. None are needed

23. Are you offered continuing education time and expense reimbursement to maintain your credentials/licenses?
   a. Yes
   b. No *Skip to Question 26*
24. Please indicate the amounts of days and dollar amount of reimbursement for CE.
   a. Number of days:
   b. $ reimbursed:

25. How many days are you currently offered annually for vacation or paid time off?
   a. Number of days:
   b. Other:

26. How many sick days annually are you offered?
   a. Number of days:
   b. Other:

27. Do you feel the amounts of sick leave/personal leave are adequate?
   a. Yes
   b. No

28. Do you think your major medical insurance benefits are adequate?
   a. Yes
   b. No
   c. N/A

29. Are you offered any retirement benefits through a 403b or 401k plan or similar plan?
   a. Yes
   b. No *Skip to Question 32*

30. Does your employer offer any match to your 403b, 401k, or similar plan?
   a. Yes
   b. No
   c. I don’t know

31. Is there a salary incentive (production incentive) program or plan for the practice offered to you?
   a. Yes
   b. No
   c. I don’t know

32. Are you a full-time employed dental director/staff dentist?
   a. Yes *Answer question 33 and 34, skip to question 38*
   b. No *Skip to Question 35*

33. What annual salary range most closely represents your starting pay at the time you were hired?
   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. $80,001-$95,000
   h. $95,001-$110,000
   i. $110,001-$125,000
   j. $125,001-$140,000
   k. $140,001-$155,000
   l. >$155,001
34. 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. <$80,000
   b. $80,001-$95,000
   c. $95,001-$110,000
   d. $110,001-$125,000
   e. $125,001-$140,000
   f. $140,001-$155,000
   g. $155,001-$175,000
   h. $175,001-$190,000
   i. >$190,001

35. Are you a full-time employed dental hygienist?
   a. Yes
   b. No *Skip to Question 38*

36. What salary range closest represents your starting pay at the time you were hired?
   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. $80,001-$95,000
   h. $95,001-$110,000
   i. $110,001-$125,000
   j. $125,001-$140,000
   k. $140,001-$155,000
   l. >$155,001

37. 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. <$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. $80,001-$95,000
   h. $95,001-$110,000
   i. $110,001-$125,000
   j. $125,001-$140,000
   k. $140,001-$155,000
   l. >$155,001
   h. Other (please specify)

38. If you are paid an hourly rate instead of a salary, or if you are not full-time, please indicate your approximate hourly pay. Or, leave this question blank.
   a. Dentist hourly pay:
   b. Dental hygienist hourly pay:

39. To which of the following professional national organizations do you belong? (Check all that apply)
   a. National Network for Oral Health Access
   b. American Dental Association
   c. American Dental Hygienist's Association
   d. National Dental Association
   e. Hispanic Dental Association
   f. American Association of Public Health Dentistry
   g. Academy of General Dentistry
   h. American Public Health Association
i. American Academy of Pediatric Dentistry
j. None of these
k. Other (please specify)

40. Does your employer reimburse your membership dues for any of the above organizations (not including CE dollars)?
   a. Yes
   b. No
   c. I don’t know

41. How would you rate your current facility or facilities overall in terms of physical building condition and appearance?
   a. Excellent
   b. Good
   c. Adequate
   d. Needs improvement
   e. Poor

42. How would you rate your current facility or facilities overall in terms of dental equipment condition and dental supplies (patient chairs, operator stools, handpieces, cavitrons, instruments, etc.)?
   a. Excellent
   b. Good
   c. Adequate
   d. Needs improvement
   e. Poor

43. How much time are you required to participate in night or weekend on-call responsibilities?
   a. Very often
   b. Often
   c. Seldom
   d. Never

44. Please rate the following regarding dental clinic staffing and support as adequate or inadequate.
   a. Number of dental assistants
   b. Quality/experience of dental assistants
   c. Number of Expanded Function Dental Assistants (in states where permitted)
   d. Number of dental therapists (in states permitted)
   e. Clerical support: reception, records, billing
   f. Administrative support, including electronic health records
   g. Number of dentists employed
   h. Number of dental hygienists employed
   i. Assistant to dentist ratio
   j. Interaction with Medical colleagues at your center

45. What is the assistant to dentist ratio in your practice? (e.g. if there are 3 assistants for 2 dentists the ratio is 3:2, or if there are 6 assistants for 3 dentists the ratio is 2:1, etc.)

46. Have you been informed by your administration that there is a minimum number of patients encounters that must be seen by each provider in the dental program?
   a. Yes
   b. No
47. What is the number of encounters you have been told must be seen annually by a full time dental hygienist?
   a. <500 encounters
   b. 501-1,000 encounters
   c. 1,001-1,500 encounters
   d. 1,501-2,000 encounters
   e. 2,001-2,500 encounters
   f. 2,501-3,000 encounters
   g. >3,000 encounters

48. What is the number of encounters you have been told must be seen annually by a full time dentist?
   a. <500 encounters
   b. 501-1,000 encounters
   c. 1,001-1,500 encounters
   d. 1,501-2,000 encounters
   e. 2,001-2,500 encounters
   f. 2,501-3,000 encounters
   g. >3,000 encounters

49. How long do you intend to stay at your health center?
   a. <12 months
   b. 1 year-3 years
   c. 3-5 years
   d. 5-7 years
   e. More than 7 years

50. If you plan to leave your health center within the next 5 years, what are factors affecting your decision to leave Health Center dental practice? (Choose all that apply) Please select N/A if you do not plan to leave within the next 5 years.
   a. Plan on retiring
   b. Need to increase income
   c. Need a change in work hours
   d. Increase my scope of practice
   e. Entering private practice
   f. Desire to participate in resident education and/or academic/research
   g. Desire more practice autonomy
   h. I think encounter rates are too high
   i. Burnout
   j. Professionally unsatisfied with leadership of health center
   k. Other (please specify)
   m. N/A
Appendix B

Survey Questions for Executive Leadership

1. How many dentists are currently employed in the dental component?
2. How many are full-time (30 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 dental hygienists are full-time (30 or more hours per week)?
6. How many dental hygienist positions (# FTE) are currently budgeted?
7. How many dental assistants are currently employed in the dental component?
8. How many dental assistants are full-time (30 or more hours per week)?
9. How many dental assistants are Expanded Function Dental Assistant (EFDA)?
10. How many dental assistant positions (#FTE) are currently budgeted?
11. Current highest paid full time staff dentist (employee, not contracted labor):
   a. Annual salary (not including fringes):
   b. Medical/dental insurance benefits:
      i. Yes
      ii. No
   c. Other insurance (i.e. disability, life):
      i. Yes
      ii. No
   d. # paid holidays:
   e. # vacation/personal leave days:
   f. Retirement plan:
      i. Yes
      ii. No
   g. Malpractice insurance reimbursement:
      i. Yes
      ii. No
   h. Dental license fee reimbursement:
      i. Yes
      ii. No
   i. Drug license fee reimbursement:
      i. Yes
      ii. No
   j. Continuing education allowance:
   k. Paid NNOHA membership:
      i. Yes
      ii. No
   l. Paid membership to other organizations (ADA, ADHA, etc.):
      i. Yes
      ii. No
m. Level of experience of this dentist (since dental school graduation)
   i. 1 year or less
   ii. 1-5 years
   iii. 5-10 years
   iv. More than 10 years

12. Current highest paid full time dental leadership (dental director, Chief Dental Officer, VP of Dental Services, etc.):
   a. Annual salary (not including fringes):
   b. Medical/dental insurance benefits:
      i. Yes
      ii. No
   c. Other insurance (i.e. disability, life):
      i. Yes
      ii. No
   d. # paid holidays:
   e. # vacation/personal leave days:
   f. Retirement plan:
      i. Yes
      ii. No
   g. Malpractice insurance reimbursement:
      i. Yes
      ii. No
   h. Dental license fee reimbursement:
      i. Yes
      ii. No
   i. Drug license fee reimbursement:
      i. Yes
      ii. No
   j. Continuing education allowance:
   k. Paid NNOHA membership:
      i. Yes
      ii. No
   l. Paid membership to other organizations (ADA, ADHA, etc.):
      i. Yes
      ii. No
   m. Level of experience of this individual (since dental school graduation)
      i. 1 year or less
      ii. 1-5 years
      iii. 5-10 years
      iv. More than 10 years

13. Current highest paid full time dental hygienist (employee, not contracted labor):
   a. Annual salary (not including fringes):
   b. Medical/dental insurance benefits:
      i. Yes
      ii. No
   c. Other insurance (i.e. disability, life):
      i. Yes
      ii. No
   d. # paid holidays:
   e. # vacation/personal leave days:
   f. Retirement plan:
      i. Yes
      ii. No
   g. Malpractice insurance reimbursement:
      i. Yes
Dental hygiene license fee reimbursement:
  i. Yes
  ii. No

Continuing education allowance:
  i. Level of experience of this dental hygienist (since dental school graduation)
     i. 1 year or less
     ii. 1-5 years
     iii. 5-10 years
     iv. More than 10 years

14. Does your state practice act include dental therapists?
   a. Yes
   b. No *Skip to Question 18*

15. How many dental therapists are currently employed in the dental component?

16. How many dental therapists are full-time (30 or more hours per week)?

17. How many dental therapist positions (# FTE) are currently budgeted?

18. Do you have vacant dentist positions?
   a. Yes
   b. No *Skip to Question 27*

19. What is the duration of the dentist vacancy as of today?
   a. Less than 6 months
   b. 6-12 months
   c. 13-24 months
   d. More than 24 months

20. What methods/sources have been used to recruit for/fill this vacant position?
    (Select all that apply)
    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
    m. Social media
    n. Online recruitment websites (Indeed, Monster, Craigslist, etc.)

21. What recruiting method has been the most successful for your center?

22. How many applicants have responded to any of the above recruiting methods during the entire time the position has become vacant?

23. How many applicants have been made a firm offer of employment to fill the vacancy?
24. If firm employment 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

25. What is the current budgeted annual salary amount for the dentist vacancy, not including fringe is:
   a. Entry level position <1 year:
   b. 1-5 years experience:
   c. 5-10 years experience:
   d. More than 10 years experience:

26. 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 q 18-26 for each additional vacancy on the back page or a separate page.

27. Do you have vacant dental hygienist positions?
   a. Yes
   b. No *Skip to Question 36*

28. What is the duration of the dental hygienist vacancy as of today?
   a. Less than 6 months
   b. 6-12 months
   c. 13-24 months
   d. More than 24 months

29. What methods/sources have been used to recruit for/fill this vacant position? (Select all that apply)
   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
   m. Social media
   n. Online recruitment websites (Indeed, Monster, Craigslist, etc.)

30. What method has been the most successful for your center?

31. How many applicants have responded to any of the above methods during the entire time the position has become vacant?

32. How many applicants have been made firm employment offers to fill the vacancy?

33. If firm employment 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  

34. The current \textit{budgeted} annual salary amount for the dental hygienist vacancy, not including fringe is:  
   a. Entry level position <1 year:  
   b. 1-5 years experience:  
   c. 5-10 years experience:  
   d. More than 10 years experience:  

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

\textbf{If there is more than one dentist vacancy, please answer q 27-35 for each additional vacancy on the back page or a separate page.}  

\textbf{The following questions apply to your current dental personnel.}  

36. Are there any contract labor (non-employees) \textit{dentist} retained on staff?  
   a. Yes  
   b. No \textbf{*Skip to Question 39*}  

37. What is the lower contract amount per hour for your contract labor dentist?  

38. What is the highest contract amount per hour for your contract labor dentist?  

39. Are there any contract labor (non-employees) \textit{dental hygienists} retained on staff?  
   a. Yes  
   b. No \textbf{Skip to end}  

40. What is the lower contract amount per hour for your contract labor dental hygienists?  

41. What is the highest contract amount per hour for your contract labor dental hygienists?  

\textbf{Thank you for participating in this survey.}
Mean: The sum of a list of numbers, divided by the number of numbers; also known as the average.

Median: The "middle value" of a list. The smallest number such that at least half the numbers in the list are no greater than it. If the list has an odd number of entries, the median is the middle entry in the list after sorting the list into increasing order. If the list has an even number of entries, the median is the smaller of the two middle numbers after sorting.

Mode: The most frequently occurring value.

N: Sample size, or in the case of this report, the total number of individuals that answered the particular question.

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The mission of the National Network for Oral Health Access (NNOHA) is to improve the oral health of underserved populations and contribute to overall health through leadership, advocacy, and support to oral health providers in safety-net systems.

The National Network for Oral Health Access (NNOHA) is a nationwide network of Health Center dental providers. These providers understand that oral disease can affect a person’s speech, appearance, health, and quality of life and that inadequate access to oral health services is a significant problem for low-income individuals. The members of NNOHA are committed to improving the overall health of the country’s underserved individuals through increased access to oral health services.

For more information on NNOHA, visit www.nnoha.org, send an email to info@nnoha.org, or call 303-957-0635.