Appendix H

2010 SURVEY OF ACTIVE LICENSED DENTAL HYGIENISTS IN NEW HAMPSHIRE

CHARTBOOK OF RESULTS

This chartbook presents the findings of a survey of dental hygienists, fielded in February 2010. The survey was conducted as a project of Bi-State Primary Care Association in partnership with the State of New Hampshire’s Department of Health and Human Services. The survey was implemented and analyzed by the Community Health Institute / JSI under contract to Bi-State.

The survey was mailed to a random sample of 600 out of 1,269 actively licensed dental hygienists in NH with a valid mailing address, based on a list obtained from the New Hampshire Board of Dental Examiners as of December 15th, 2009. The sample was drawn using a pure random selection process based on a list generated by a commonly used research randomizer tool available at www.randomizer.org. Of the 600 surveys mailed, 14 were returned as undeliverable and dropped from the universe as corrected addresses could not be obtained. This resulted in a revised total universe of 586 surveys. A reminder postcard was sent to all non-responsive hygienists approximately 3 weeks after the original surveys were sent and responses were received through the end of March 2010.

The survey resulted in 347 responses, or an overall response rate of 59.2%. There were no categorical distinguishing parameters between hygienists on the licensing list, such as degree or specialty, upon which to examine the response compared to those that did not respond. By examining the license issue dates, it was noted that the average years licensed was somewhat higher for respondents, at 17.6 years, compared to 14.2 years for non-respondents. A similar pattern was noted in the Dentist survey.

The responses were scanned in electronically and incorporated into a statistical database for analysis using SPSS. Data were cleaned to assure skip patterns and survey logic was followed, and key variables were recoded as needed for analytic groupings.

Where possible and valid, results from this survey are compared to the results obtained from a similar survey conducted in 2004. Because many of the questions in the current survey were new or modified from the 2004 survey, comparisons were not always possible. Where comparisons are made, there is one significant issue that must be kept in mind. As a result of a planned Crosswalk’ analysis of the entire hygienist licensing list obtained for this survey compared to the list used in 2004, a significant issue with the list used in the earlier survey was noted. By linking hygienists based on their license number, it was determined that the earlier list, which had only 807 records, was missing a significant number of hygienists that were likely practicing in the state in 2004. This was confirmed based on licensing dates of hygienists on the 2009 list, but not on the 2004 list, many of whom had been licensed prior to the earlier survey. It was not possible to determine the nature of the missing group, which could impact 2004 results if the exclusion was not random in nature. Also, the gap in the 2004 list eliminated the ability to conduct the planned crosswalk analysis of the two lists. Obtaining accurate lists from the NH Board of Dental Examiners is essential in the future in order to rely on survey data for workforce analysis and projections.
Hygienist Tenure, Age, and Years to Remain in Practice:

- Approximately one quarter (26%) of Hygienists have been in practice more than 30 years. This compares to nearly 40% for dentists.
- A second peak in the tenure curve for those practicing <10 years reflects a recent influx of hygienists (see comparison to age in next section).
- 4.3% of hygienists with an active NH license reported that they are not practicing in NH currently. There were a variety of reasons noted, but working out-of-state was cited most.
• Less than 25% of Hygienists are over age 55, compared to 48% for dentists. The 2004 survey showed only 13% of hygienists over age 55.

• It should be noted that 99.7% of hygienists are female, which some speculated may influence a portion of the workforce to change to inactive license status during childbearing years.

• Results show some evidence that Hygienists starting practice more recently may have entered the field later in life, referred to as ‘non-traditional’ enrollees in clinical education. This is evidenced by the comparison of the age curve above to the curve showing years in practice on the previous page. While complicated by issues of ‘aging out’, looking at these two factors together, one sees that:
  
  o 38% of Hygienists in practice < 10 years are 35+ years old
  o 36% of Hygienists in practice 10-19 years are 45+ years old
  o Only 14% of Hygienists in practice 20-29 years are 55+ years old
• Just under 30% of Hygienists expect to leave practice within 10 years. This compares to nearly 40% for dentists.

• Nearly 40% expect to practice for 15+ years, compared to 35% for dentists.

• The proportions are similar to those in the 2004 survey, with those expecting to practice 15+ years increasing from 35% to nearly 39%.

• Amongst those hygienists that expect to leave practice within 5 years, about half cited retirement as the reason (47%), with 22% citing burnout/stress, and with the remainder comprising a mix of health issues and issues of pay/benefits/opportunity.

• Age/Retirement curve suggests potential decline in Hygienist workforce after 15-20 years, potentially related to the issue of more hygienists entering practice later in life.

• Nearly half of all hygienists (45.5%) work less than full time. This proportion is essentially unchanged compared to the 2004 survey.
Hygienists average approximately 30 hours per week. Approximately half work from 32 to 40 hours per week.

Only 4% spend more than 40 hours per week practicing.

The survey did not ask how many separate jobs each hygienist works, but 13% of hygienists that responded reported working in more than one zip code. Hygienists working at more than one location within the same zip code would not be reflected in this number.
• Hygienists nearing retirement (leaving practice within 5 years or over age 65) are much more likely to work a part time schedule.
• Conversely, those expecting to work 15+ years or under age 35 are most likely to work a full time schedule.
• Nearly all Hygienists (99.7%) provide clinical patient care, accounting for 93% of total hygienist hours worked.

• Almost 27% of Hygienists spend some time on community education and outreach, but this accounts for less than 2% of total hours worked. Similarly, over 14% report being involved in program development and implementation, however this accounted for less than 1% of total hours worked.

• Other” hours was comprised largely of hygienists that carved out time for administrative and management activities.

• In response to a separate question, 34% of hygienists stated that they volunteer to provide community outreach/education, citing a wide variety of programs, such as Dentists with a Heart, Cheshire Smiles, Give Kids a Smile, Tooth Tutors, and settings such as health fairs, schools, scouts/clubs, smoking cessation classes, etc.

• Dentist owned private practices account for 92% of Hygienist employment.

• Hospital run practices, community health centers, and school based programs employ most of the rest.

• 60.6% of hygienists reported that they were aware of employment opportunities outside of private practice (not pictured).
Hygienist Compensation and Benefits:

- Most hygienists are paid on a unit-time basis. Over 83% of Hygienists are employed on an hourly basis, up slightly from 80% in 2004. Another 2.4% paid on a daily basis, which is approximately the same as 2004.

- Salaried employment is the next most common compensation arrangement, accounting for 8% of hygienist employment. This is down from 11% in 2004.

- Looking at those that work full-time (32+ hours per week), just over half of full time hygienists earn between $40,000-$59,000 per year. Most of the remaining group (42.5%) earns over $60,000.

- Under 5% of full time hygienists earn below $40,000.
• Paid time off for vacations and holidays are the most commonly offered benefits, available to 80% and 76% of hygienists respectively. Earned flex time was offered by another 10.5% of hygienists’ employers.

• Health Insurance and paid sick leave are offered to approximately half of hygienists. Dental insurance is offered to 1 in 5 hygienists. Note, however, that free/discounted dental care for staff and/or their families is listed as an ‘Other’ benefit by some hygienists, and may be offered as an alternative to dental insurance.

• Disability insurance is available to only 16% of hygienists, despite many comments noting job-related injury and the physical demands of hygienist practice. This question focuses on benefits offered through the hygienists’ employer, and would not reflect coverage purchased independently, such as that offered through the American Dental Hygienists’ Association.

• Other benefits included a variety of items, such as child care, free/discounted dental care, uniforms/uniform cleaning service, and bonus/profit-sharing.
Desire to work with patients/families was the most cited reason for entering the field of dental hygiene (42%), and the strongest factor influencing hygienists to stay in the field.

Just under 10% felt that good pay was the primary reason for entering the field of dental hygiene, but earnings potential was the second strongest factor in favor of hygienists staying in the field.

Job flexibility was the second most commonly cited reason for entering the field of dental hygiene, cited by nearly 19% of respondents.

Benefits was the least cited reason for entering the field, garnering almost no response, but neutral in terms of their influence on staying in the field.

Opportunities for advancement and the physical demands of the job both had a net negative impact hygienists’ overall desire to stay in the field.
Hygienist Employment Opportunities and Supply:

- Most Hygienists (80%) feel they work the amount of time they want.
- 15% of Hygienists overall feel they are under-employed (would prefer to work more hours).
- More than one in five (21%) of those working part time felt that they did not work enough hours.
- Just over 6% of those working full time felt they were working too many hours, but over 9% felt they were not working enough. This may reflect the ability to earn more due to the hourly nature of many hygienists’ pay, or the desire to work more hours at a single job for those that split time.
Less than 4% of hygienists perceived a shortage of hygienists in their community, and most (all but 7%) felt they knew about the local hygienist workforce. The 2004 survey reported that 50% of hygienists felt that there was a shortage in their profession, representing a marked decrease over a 5 year period.

Dentists were more than twice as likely to perceive a shortage of hygienists, though less than 10% of dentists felt there was a shortage in the profession.

Approximately one in 5 hygienists felt there was a shortage of dentists in their community. This rate is more than double the percentage of dentists that perceived a shortage in their profession. This perception may relate to employment opportunities to some degree, as hygienists must work with dentists and are largely employed in dentist-owned practices.

Hygienists were less certain of the supply of dentists than of the supply of hygienists.

**Hygienist Geographic Origin, Education, and Licensure:**
• The greatest proportion of hygienists were born New Hampshire (41%). The next most common state of origin is Massachusetts at approximately 27%.

• An even greater proportion of hygienists completed their clinical education in New Hampshire, accounting for 45% of the total hygienist workforce. This is more than twice the percentage of hygienists that completed clinical training in Massachusetts; the next most commonly reported state. Maine accounted for just over 15% of hygienists’ education.

• The hygienist workforce is far more ‘locally-grown’ compared to dentists, amongst whom both birth and undergraduate education in NH represented 14-15% of the workforce. Clinical education is not comparable as NH has no dental school.
• Over 75% of hygienists hold an associate’s degree. Hygienist associates degrees can take longer to complete than equivalent degrees in other fields due to higher credit requirements.

• Approximately 20% have a Bachelor’s level education – a slight increase over 2004 (17%). It should be noted that a Baccalaureate degree in dental hygiene degree is not offered in NH.

• Nearly 4% of hygienists report holding a Masters’ degree. It should be noted that the question did not specify that the highest degree completed be a degree in dental hygiene.

![Graph showing Hygienist Out-Of-State License Status](image)

- More than one in five actively licensed NH hygienists also hold an active license in Massachusetts, and 4-5% hold active licenses in Maine and Vermont.

![Graph showing What first attracted you to practice in NH?](image)

• Two thirds of hygienists in NH were attracted to practice here by a personal connection to the state/region.

• Only 10% combined selected the two options construed as professionally-related, including the practice environment and professional opportunities in the state. A greater proportion, 17%, cited employment opportunities for their spouse/partner.
Hygienist Geographic Distribution and Rural Analysis:

To examine geographic distribution, the analysis broke responses down by a tiered rural definition developed for NH Department of Health and Human Services’ State of Health in Rural New Hampshire report, released in 2004.

The definition is based on a calculated population density within a 10-mile radius of the center of each city/town in the state, including areas and populations outside the state for municipalities on the border. The definition relies on 2000 census data for population and was cross walked to match zip codes in the state.

Hygienists were assigned to a rural tier based on the zip code where they reported practice the greatest number of hours per the survey.
• Non-Rural areas of the state have almost 71% of the licensed hygienists, but just under 63% of the population based on the 2000 census.

• All rural tiers have a smaller portion of hygienists compared to the population. The two most rural tiers have the greatest proportional deficit between hygienists and population.

• The three rural tiers account for 84% of the land area in the state, but just under 30% of the hygienists. Much greater area and fewer hygienists in rural communities indicate a more sparse distribution of services and likely longer travel times to reach a provider.
Hygienists in rural areas of the state are somewhat more likely to be over age 55 and to be planning to leave field within 5-10 years.

Overall, however, hygienists appear reasonably well distributed by age and years remaining in practice across rural/non-rural tiers.
• The greatest perceived shortages of both dentists and hygienists are reported by hygienists in the ‘high density’ rural tier (blue). A similar pattern of perceived shortage in hygienists was seen amongst dentists located in this tier.

• Relatively small percentages of hygienists perceive a shortage of hygienists in any area of the state.

• The perceived shortage of dentists is somewhat greater in rural areas overall compared to the non-rural tier (23-31% percent perceiving a shortage, compared to 15% in non-rural areas). The difference is less pronounced than the difference in perceived shortage of dentists amongst dentists where non-rural dentists were far less likely to perceive a shortage.
Summary of Open-Ended Responses:

At the end of the survey, respondents were asked to comment on any other aspects of their life as a hygienist that they wished to communicate. Responses mirrored many of the themes gleaned from other aspects of the survey with additional depth. These points are grouped by attractions and challenges for the profession:

- Attractions for Profession:
  - Many simply stated that they love being a dental hygienist and found it to be a rewarding career, particularly related to working with patients and the sense of value in the services they were providing.
  - Job flexibility, and specifically the ability to spend time with family, was frequently cited as a key positive career factor for many hygienists.
  - Some noted that pay level was a positive factor, particularly at the Associates’ degree level.

- Challenges for Profession:
  - Market saturation and the lack of jobs and opportunity for advancement was the most commonly cited issue. Many expressed that this was a recent or emerging development in the field and the expansion of the New Hampshire Technical Institute program was specifically cited as a perceived factor by many holding this view.
  - The physical demands of the job was also a common theme, with neck and back injuries specifically cited in several comments. Some stated that this was influencing their ability to continue practicing as long as they would wish.
  - Lack of benefits, diminishing pay, and the inability to find full time employment were also stated as challenges. These sentiments were often related back to the issue of market saturation.
  - The desire to practice independently from dentists and to have a separate licensing board was expressed in several ways. Some felt that self regulation and autonomy was important to advance the profession while others felt that it was unfair to be regulated by the group that hygienists must rely on for employment. A concern was raised about the dynamic of a declining population of dentists limiting opportunities for hygienists due to the oversight requirement.