BACKGROUND

Over the past decade, access to oral health care has become a growing concern. While the science of oral health has evolved and the technology in dentistry has improved over recent decades, many Americans have limited access to oral health services. These groups include the poor, children, racial/ethnic minorities, and the elderly. One of the access barriers to oral health care is the available supply and distribution of oral health professionals. Dental hygienists are key to the provision of preventive and prophylactic oral health services. Detailed information about New York’s active dental hygiene workforce can inform programs and policies designed to increase access to needed oral health services.

In 2010, there were approximately 10,000 licensed dental hygienists in New York. Beginning in September 2007, the Center for Health Workforce Studies, with support from New York State Departments of Health and Education, began conducting a survey of dental hygienists at the time of license renewal. Between September 2007 and September 2010, 5,388 surveys were completed, representing 53% of the licensed dental hygienists in the state. Over 94% of the survey respondents reported actively working in dental hygiene, while 4% reported being retired. This research brief is based on survey responses and presents information about active dental hygienists in New York, such as demographic, educational, and practice characteristics.

KEY OBSERVATIONS

With an estimated 48 active dental hygienists per 100,000 population, New York is consistent with the national average of 50 dental hygienists per 100,000 population.

There was wide regional variation in the distribution of dental hygienists in New York, ranging from 82 active dental hygienists per 100,000 population in the Finger Lakes region to 19 per 100,000 in New York City. While the ratio of active dentists per capita in the state was well above the national ratio, the ratio of dental hygienists per capita in the state was close to the national ratio.

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There is a substantial maldistribution of dental hygienists within the five boroughs of New York City.

Within New York City, there was great variation by borough in the number of dental hygienists per 100,000 population. In New York County (Manhattan), there were about 48 dental hygienists per 100,000 population, which was consistent with the state average. Kings County (Brooklyn) and Bronx County, however, each had fewer than 10 dental hygienists per 100,000 population.

Figure 3: Active Dental Hygienists in New York City per 100,000 population by County

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There is wide regional variation in the ratio of dental hygienists to dentists, with the highest ratio in the Southern Tier and the lowest in New York City.

More dental hygienists than dentists practiced in the Southern Tier (1.26) and Finger Lakes (1.24) regions; comparable numbers of dental hygienists and dentists in the Central New York, Mohawk Valley, and Capital District regions; and fewer dental hygienists than dentists in all other areas of the state. The areas with the fewest dental hygienists per dentist were the Hudson Valley, Long Island, and New York City regions. In New York City, there was only 0.25 dental hygienist per dentist, compared to the Southern Tier region, where there were 1.26 dental hygienists per dentist.

New York’s dental hygienists are older than dental hygienists nationwide.

The median age of dental hygienists in New York (47) was older than the median age of dental hygienists in the U.S. (42). The gender distribution of dental hygienists in New York (99% female and 1% male) was consistent with the gender profile nationally.

New York’s dental hygienists are much less diverse than the state’s population.

Whites were overrepresented among dental hygienists in New York relative to the state’s population (86% compared to 60%). Black/African Americans were underrepresented among dental hygienists in New York relative to the state’s population (3% compared to 15%), as were Asians (2% compared to 7%), and Hispanics/Latinos (5% compared to 16%). New York’s dental hygienists were comparable in their racial/ethnic composition to all dental hygienists in the U.S. (86% White, 3% Asian, 3% Black/African American, and 6% Hispanic/Latino).
The vast majority of dental hygienists in New York work in private dental offices in general practice and large numbers work only part time.

Eighty percent of dental hygienists in New York reported that their principal practice position was in a general dental practice, while 15% reported working in a specialty practice. Over half of New York’s dental hygienists (51%) reported practicing fewer than 30 hours per week at their primary and secondary practice locations. Among responding dental hygienists, 58% indicated that their principal practice setting was a private, solo dental practice and 33% reported they worked in a private partnership or group dental practice. The remainder of dental hygienists reported working at hospitals, schools or colleges, community health clinics, public health agencies, nursing homes, prisons, or other settings.

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Dental hygienists in New York primarily spend their time in clinical practice. Very few dental hygienists spend time in administrative or educational activities.

Forty-one percent of dental hygienists spent 30 to 39 hours per week in clinical practice, and another 11% spent 40 hours per week or more in clinical practice. Only 7% spent any time on administration activities, and just 11% spent any time doing education activities.

Eighty-nine percent of New York’s dental hygienists report having graduated from a dental hygiene school in New York and 84% report having graduated from a high school in the state.

Figure 6: Hours Spent on Clinical Practice, Education, and Administration by Active Dental Hygienists

Figure 7: Dental Hygiene Program Attended among New York Graduates
Most dental hygienists hold an associate degree as their highest degree. Eighteen percent, however, report a bachelor’s degree as their highest degree.

Nearly 81% of dental hygienists reported an associate degree as their highest degree, and these associate degrees were overwhelmingly in the field of dental hygiene. Fourteen percent of dental hygienists in New York held bachelor’s degrees and 4% held graduate degrees.

**METHODS**

Data for this research brief were drawn from an ongoing survey conducted by the Center of dental hygienists licensed in New York. Between September 2007 and September 2010, nearly 5,500 surveys were completed and entered into a database, representing 54% of licensed dental hygienists in New York.

A respondent was determined to be active in the field if the individual reported working in dental hygiene in clinical practice, administration, or education. Dental hygienists who did not report any of the three activities or who reported being retired were excluded from the analysis. The region in which a dental hygienist practiced was based on the principal practice zip code reported on the survey. To estimate total dental hygienists per region, data were weighted (weight = N/n).

**LIMITATIONS**

With a response rate of 53% of all licensed dental hygienists in New York, some caution should be exercised in interpreting the results. The analysis presented in this brief intentionally did not push the data beyond their limits. However, as the number of survey responses increases, these limitations will be greatly reduced and a more detailed profile of dental hygienists practicing in New York will be developed, including analysis at the county level.

**CONCLUSION**

New York’s active dental hygienists, on average, are older than dental hygienists in the U.S. They are also much less diverse than the state’s population, with many fewer Black/African American, Asian, and Hispanic/Latino dental hygienists relative to the general population. The majority of active dental hygienists in the state graduated from a New York high school and completed their dental hygiene education in New York.

At a statewide level, New York has a ratio of dental hygienists to population that is close to the national average, but there is substantial regional variation in their distribution. For example, while there is a relatively small ratio of dental hygienists-to-population in New York City (19 per 100,000), most upstate areas exceed the national ratio (Hudson Valley and North Country are two exceptions). It is important to better understand the implications of this maldistribution on access to preventive and prophylactic oral health services, particularly for underserved populations. It may be valuable to consider innovative strategies designed to increase the number of dental hygienists in areas of New York where they are in short supply and expand their capacity to provide dental hygiene services to underserved populations in the state.

Findings from the dental hygienist re-registration survey make an important contribution to our understanding of dental hygiene in New York. The survey is an important tool for monitoring the state’s oral health workforce and provides the information necessary to inform programs and policies designed to increase access to oral health services.