### The Oral Health Workforce in Maine





School of Public Health University at Albany, State University of New York

### The Oral Health Workforce in Maine

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#### The Center for Health Workforce Studies

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The Center for Health Workforce Studies is a not-for-profit research organization whose mission is to provide timely, accurate data and conduct policy-relevant research about the health workforce. The Center's work assists health, professional, and education organizations; policy makers and planners; and other stakeholders to understand issues related to the supply, demand, distribution, and use of health workers.

#### **Preface**

In 2012, the Center for Health Workforce Studies (the Center) at the School of Public Health, University at Albany with support from the Maine Oral Health Funders (MOHF)<sup>1</sup> completed a study of the oral health workforce in Maine. The purpose of the study was to assess the distribution and type of oral health professionals in Maine relative to access to oral health care in the state. The study included interviews of oral health stakeholders in Maine and surveys of dentists, registered dental hygienists, registered dental hygienists working under public health supervision status, independent practice dental hygienists, and expanded function dental assistants in Maine. While denturists are an important part of the oral health workforce in Maine, the number of licensed denturists was too small to provide a meaningful response rate to a survey. Therefore, they are not addressed in this document.

This report summarizes the data from the four workforce surveys and includes an executive summary followed by separate technical reports about each of the professional surveys. This report was written by Margaret Langelier, Jean Moore, and Tracey Continelli of the Center. The authors can be contacted with any questions about the content of the report at (518) 402-0250.

Special appreciation is extended to Barbara Leonard of the Maine Health Access Foundation and Karin Anderson of the Maine Oral Health Funders for their help with this work. The authors are especially grateful to the dentists, registered dental hygienists, and dental assistants who responded to the surveys and provided information about their professional practices.

Established in 1996, the Center is a not-for-profit research organization whose mission is to provide timely, accurate data and conduct policy-relevant research about the health workforce. The Center's work assists health, professional, and education organizations; policy makers and planners; and other stakeholders to understand issues related to the supply, demand, distribution, and use of health workers. Today the Center is a national leader in the field of health workforce studies. It supports and improves health workforce planning and access to quality health care through its collection, tracking, analysis, interpretation, and dissemination of information about health professionals at the national, state, and local levels. Additional information about the Center can be found at <a href="http://chws.albany.edu">http://chws.albany.edu</a>.

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<sup>&</sup>lt;sup>1</sup> Maine Oral Health Funders that funded the study are the Maine Health Access Foundation, the Betterment Fund, and the Bingham Program.

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#### **Executive Summary**

#### **Background**

Over the past decade, access to oral health care has become a growing concern. Despite efforts to improve the oral health of the nation's population, oral health disparities continue. These disparities are characterized by compromised oral health status for certain vulnerable populations, including the poor, children, racial and ethnic minorities, people with special needs, and the elderly. One of the factors believed to influence access to oral health services and contribute to these disparities is the available supply of oral health professionals.

Oral health stakeholders in Maine have worked collaboratively in developing strategies aimed at increasing access to oral health services. There are, however, persistent concerns that oral health workforce issues including uneven distribution could affect access to oral health services for Maine's underserved populations.

In 2012, the Center for Health Workforce Studies, with support from the Maine Oral Health Funders, <sup>2</sup> conducted a study of the oral health workforce in Maine. The purpose of the study was to assess the distribution and type of oral health professionals in Maine relative to access to oral health care in the state. The study included surveys of licensed oral health professionals, including dentists, registered dental hygienists (RDHs), RDHs working under public health supervision (PHS), <sup>3</sup> independent practice dental hygienists (IPDHs), and expanded function dental assistants (EFDAs). <sup>4</sup>

As part of its broader research study on oral health in Maine, the Center completed a comprehensive literature review, examined historical data on the oral health professions in Maine, and conducted a large number of interviews with oral health stakeholders in the state. Information and insights obtained from these efforts provided important context for the development of survey questions. The oral health workforce surveys collected data on demographic, educational, and practice characteristics of Maine's oral health professionals as well as their perspectives on access barriers to oral health services in Maine.

In April 2012, invitations to complete the surveys were emailed to dentists, RDHs, IPDHs, and EFDAs in Maine. The invitations explained the reasons for the research, described the survey process, and provided assurances of confidentiality to survey respondents. In July 2012, a

<sup>&</sup>lt;sup>2</sup> Maine Oral Health Funders that funded the study are the Maine Health Access Foundation, the Betterment Fund, and the Bingham Program.

<sup>&</sup>lt;sup>3</sup> The RDH survey included a module completed by RDHs who worked under public health supervision at any time in their career.

<sup>&</sup>lt;sup>4</sup> Denturists, are licensed oral health professionals in Maine who specialize in fitting and constructing removable prosthetic devices and prosthodontics. While there were plans to survey all denturists in Maine as part of this study, their numbers were too small to make such a survey feasible.

follow-up letter was mailed to non-respondents. Follow-up emails were sent every 10 to 14 days throughout the summer. In September 2012, a paper copy of the respective surveys was sent to oral health professionals who had not responded to prior solicitations. Email reminders to non-respondents continued through November 2012. Responses to each of the surveys were processed, cleaned, and placed into separate SPSS<sup>5</sup> databases for analyses.

The response rates to the surveys were as follows:

- Surveys were mailed to 664 dentists. The response rate for the dentist survey was 52.8%.
- Surveys were mailed to 1,196 RDHs. The response rate for the RDH survey was 34.2%. While the response rate to the RDH survey was lower than the target response rate of 50%, the responses were geographically comparable to the distribution of RDHs in Maine.
- Surveys were mailed to 37 IPDHs and the response rate was 52.8%.
- Surveys were mailed to 34 EFDAs and the response rate was 53.1%

Key findings from the analyses of the four oral health workforce surveys are summarized below.

#### **Dentists in Maine: Survey Findings**

Ninety-five percent of dentists in Maine were actively working in dentistry. The following is based on survey responses from active dentists.

#### Most dentists in Maine practice in the more populated areas of the state.

There were 5.1 dentists per 10,000 population in Maine (ME BDE, 2012), which is similar to the national ratio of dentists to the U.S. population. Three-quarters (74.9%) of dentists in Maine practiced in either a metropolitan or micropolitan area while fewer practiced in small towns (11.7%) and rural communities (13.5%).

# Dentists in Maine are predominantly older, White males. One-quarter of actively practicing dentists expect to retire within the next five years.

Dentists were mainly non-Hispanic White. Dentists in Maine were predominately male (80.4%). They were more racially and ethnically diverse than the population in the state but were less diverse than dentists in the U.S. The mean age of dentists was 54 years (ME BDE, 2011). Almost one-quarter of survey respondents (23.7%) expected to retire within the next five years and an additional 16.3% expected to reduce their work hours over the same time period.

### The majority of dentists in Maine practice general dentistry in private dental practices.

Eighty percent of dentists in Maine practiced general dentistry, while 6.1% practiced orthodontics, 4.9% practiced oral and maxillofacial surgery, and 3.2% practiced pedodontics.

<sup>&</sup>lt;sup>5</sup> IBM SPSS Statistics is a proprietary software package used for statistical analysis and data management.

Dentists worked primarily in solo or group private practice (88.7%) and more than three-quarters owned their primary practice.

### Thirteen percent of dentists in Maine report working with RDHs who practice in expanded roles.

Thirteen percent of dentists had provided standing orders to an RDH working under PHS status. On average, these dentists had supervised two RDHs working under PHS. More than one-quarter of dentists had accepted patient referrals from an RDH working under PHS (24.1%) or from an IPDH (27.4%).

### The majority of dentists report working with other oral health professionals in their primary practices.

More than half (56.9%) of the dentists who owned dental practices indicated they employed at least one other full-time dentist in their primary practice site. Two-thirds (67%) employed at least one full-time RDH and 98.4% employed at least one full-time dental assistant (DA) in their primary practice. Fifteen percent of respondents reported using EFDAs in their practices and, on average, employed 1.5 EFDAs.

### Commercial dental insurance payments and self-pay payments comprise the majority of practice revenue for many dental practices in Maine.

More than one-third of dentists (37.4%) reported that commercial dental insurance payments represented more than 50% of practice revenue, while nearly two-thirds of dentists (64.7%) reported that self-pay patient payments represented more than 26% of practice revenues. Approximately 10% of dentists reported that MaineCare represented more than one-quarter of practice revenues.

# While more than half of dentists in Maine (57.7%) report serving MaineCare-insured patients, most limit the number in their practices.

Over 42% of dentists in Maine served no MaineCare-insured patients, and 57.2% limited the number of MaineCare-insured patients in their caseloads. Among dentists who accepted MaineCare, 47.0% treated MaineCare-insured children (age 4 to 18 years), but only 21.2% treated MaineCare-insured older adults (age 65 and older). The most common reason cited for limiting the number of MaineCare-insured patients in a practice was low MaineCare reimbursement rates.

#### Most dentists in Maine report providing some uncompensated care.

While most dentists (78.9%) indicated they provided some uncompensated care for patients each year, only one-third provided reduced-fee or sliding-fee scale services for low-income patients. Forty-seven percent of dentists who provided uncompensated care reported doing so for one to five patients per month. Dentists usually provided 10 or fewer services for uncompensated or

reduced-fee patients monthly, and the average wait time for a restorative visit was 11.9 days. Twenty percent of dentists in Maine volunteered in free dental clinics and 16.6% participated in the Maine Donated Dental Services program.

### While dentists report serving patients of all age groups, very young children and the elderly constitute the smallest portions of average patient caseloads.

Well over one-third of dentists (36.2%) treated no very young children (birth to 3 years), while an additional 57.4% of dentists indicated that only a small percentage (between 1% and 10%) of their patient caseload was very young children. More than one-third of dentists (36.7%) indicated that most (between one-half and three-quarters) of their patients were adults, age 19 to 64 years.

### Over three-quarters of dentists report that the recent economic downturn has contributed to a decline in utilization of dental services in their private practices.

The majority of dentists (77.1%) indicated that the weak economy had adversely affected demand for services in their practices. This was true for all specialties, but especially for general dentists (80.8%).

# The barriers to oral health care most frequently cited by dentists are financial in nature. Dentists also identify low-income and uninsured populations as having the most substantial unmet oral health needs.

The most significant barriers to oral health care identified by dentists in Maine were the cost of dental services, the lack of finances to pay for care, and lack of dental insurance. Low-income children and adults and uninsured children were cited as the populations most in need of oral health services in the state, with restorative and preventive oral health services as the most important unmet oral health needs

#### **Registered Dental Hygienists in Maine: Survey Findings**

#### RDHs in Maine are not as diverse as the population in Maine.

The mean age of RDHs in Maine was 44 years (ME BDE, 21011). RDHs in Maine were female (99.4%) and non-Hispanic White (99.1%). While RDHs nationally were also mainly female, the racial/ethnic backgrounds of RDHs in the U.S. were more diverse than those of RDHs in Maine.

#### The majority of RDHs in Maine work in metropolitan areas.

More than half (52.4%) of the RDHs who responded to the survey worked in metropolitan areas of the state. Twenty-nine percent worked in either rural areas (15.8%) or small towns (13.2%).

#### The majority of RDHs in Maine work for a single employer.

A significant percentage of RDHs in Maine (84.7%) worked for a single employer. Among those with more than one employer, 66.7% worked 10 or fewer hours per week at the secondary worksite.

### Half of RDHs in Maine work part time for their primary employer and many indicated difficulty finding RDH employment in their geographic areas.

Half of RDHs (50.4%) worked 30 or fewer hours per week for their primary employer. Some RDHs (14.1%) indicated working for a secondary employer. More than one-third of employed RDHs (36.3%) in Maine reported working part time.

Most RDHs (86.7%) indicated that it was currently either somewhat or very difficult to find a dental hygiene job in the geographic areas where they lived and worked. RDHs indicated that the reasons for difficulty finding employment were an oversupply of RDHs in the area (61.8%) and too few dentists in the area (48.7%).

#### The vast majority of RDHs in Maine work in private dental offices of general dentists.

Over 82% of active RDHs in Maine reported working in private dental offices with either solo practitioners or in group practices. RDHs in Maine also worked in federally qualified health centers (FQHCs) (4.8%), school-based dental programs (3.3%), and other settings (3.9%). More than 80% of RDHs worked with general dentists, while 6.9% worked with pediatric dentists.

#### RDHs in Maine report serving patients in all age groups but few served young children.

RDHs in Maine served patients in all age groups; however, young children (birth to 3 years) were a very small percentage of RDH caseloads. Twenty-one percent of RDHs saw no children in this age cohort and 65.1% indicated that they treated only a few young children (between 1% and 10% of the RDH's caseload). Half of RDHs (50.0%) indicated that they treated only a small number of children age 4 to 18 years (between 11% and 15% of their caseload).

One-third of RDHs in Maine (34.6%) indicated that adults age 65 years and older were between one-quarter and one-half of their caseload. More than one-third of RDHs (38.8%) indicated that most (between 51% and 75%) of their patients were adults age 19 to 64 years.

#### RDHs in Maine mostly provide preventive and educational services to patients.

The clinical service most commonly performed by RDHs was cleaning and prophylaxis with 55.3% of RDHs spending 17 to 40 hours weekly providing these services. All RDHs (98.4%) conducted dental hygiene assessments of patients. The vast majority of RDHs reported providing patient education on a regular basis. The majority of RDHs (57.8%) spent less than 10% of their weekly work time on administrative activities, with 11.1% indicating no weekly administrative activities.

Most active RDHs expect to remain in dental hygiene practice over the next five years. Seventy percent of RDHs indicated plans to remain in their current position for the next five years and an additional 11.0% reported plans to seek a similar position in another setting.

Approximately 8.7% of RDHs expected to retire during the coming five years, and another 3.3% plan to obtain employment in another field.

#### Many RDHs expressed interest in working in advanced practice models of care.

Forty percent of RDHs who responded to the survey indicated either great (25.2%) or considerable (14.6%) interest in becoming an advanced dental hygiene practitioner<sup>6</sup> should the model be established in Maine. RDHs were also greatly (18.7%) or considerably (12.1%) interested in the dental hygienist therapist<sup>7</sup> workforce model.

### RDHs in Maine identified many underserved populations in Maine who lacked access to oral health services.

RDHs indicated that many populations were in need of oral health services in the state, particularly low-income and uninsured children and adults. RDHs indicated that the greatest unmet need in oral health was for preventive services followed by restorative services and oral health education.

### Registered Dental Hygienists in Maine Working Under Public Health Supervision Status: Survey Findings

RDHs were asked if they had ever worked under PHS status. The following describes the responses of those RDHs who are currently using PHS status. More than one-quarter of RDHs who responded to the survey (25.5%) reported practicing under PHS status at some point in their career, while 13.8% reported currently working under this status.<sup>8</sup>

### Many RDHs have utilized PHS status during their careers and currently about 14% work under this status. Most do so as paid employment.

Among RDHs currently working under PHS, only 15.6% indicated that they did so only as a volunteer. Half of the RDHs using PHS currently spent all of their work time in paid employment under PHS status and an additional 12.5% of these RDHs spent between 76% and 99% of paid work time under PHS status. Some of the RDHs who were paid for clinical services provided under PHS also provided some volunteer services under this status.

#### RDHs working under PHS status serve patients in a variety of settings.

Most RDHs working under PHS reported working in school-based oral health programs (90.6%) and "other" settings including day care centers, Head Start programs, and WIC clinics. RDHs

<sup>&</sup>lt;sup>6</sup> The advanced dental hygiene practitioner (ADHP) is a workforce model proposed by the American Dental Hygienist Association. The ADHP is a master's degree-educated RDH with advanced education and training in preventive care with some training in basic restorative services.

<sup>&</sup>lt;sup>7</sup> The dental hygienist therapist (DH-T) is an oral health professional that is trained to provide both preventive and basic restorative oral health services. These professionals are working in several countries including New Zealand, Australia, and Great Britain.

<sup>&</sup>lt;sup>8</sup> This does not include IPDHs in Maine who may also use PHS for reimbursement of services provided to MaineCare children.

who used this status did so mainly to address lack of dental access in the areas where they lived and worked (84.4%) or because of an interest in working in a public health setting (68.8%).

#### RDHs working under PHS status mainly serve children in Maine

RDHs using PHS status mainly served children (birth to 18 years) who were uninsured (100.0%), low-income (96.4%), and MaineCare-insured (96.4%). About half of RDHs working under PHS served some uninsured or low-income adults.

# RDHS working under PHS status provide preventive services and apply more fluoride varnishes and sealants for patients than their RDH peers in traditional practice.

RDHs working under PHS almost always (90%) performed oral inspections on their patients and often (13.3%) or always (66.7%) took dental histories. They also often (13.3%) or always (60.0%) provided complete prophylaxis. These RDHs frequently (93.6%) applied sealants (45.2% applied them often and 48.4% applied them always). Fluoride varnish was also often (29%) or always (67.7%) applied.

### Over 70% of RDHs working under PHS status are employed by an organization that bills for their services.

Only 18.8% of RDHs working under PHS status billed directly for their services to patients. Almost three-quarters of RDHs working under PHS (71.9%) were employed by an organization that billed for their services. About one-third (31.3%) were paid through grant funding.

### While many RDHs working under PHS status have established dental referral networks, many indicate that finding dentists to accept referrals is challenging.

More than 70% of RDHs working under PHS indicated they had an established dental referral network. About one-third of RDHs indicated they gave the patient a referral and suggested the patient find a dentist (34.4%) or they helped the patient to find a dentist (34.4%) to provide needed care. More than half (56.3%) of currently practicing RDHs working under PHS found it either somewhat (34.4%) or very (21.9%) difficult to find a dentist to accept referrals in the communities where they worked.

#### **Independent Practice Dental Hygienists in Maine: Survey Findings**

#### Many IPDHs work in small towns or rural areas of Maine

Half (50.0%) of the IPDHs who responded to the survey worked in a rural area or a small town.

# RDHs working as IPDHs tend to have higher levels of educational attainment compared to their RDH peers.

Seventy percent of the licensed IPDHs in Maine were actively practicing as IPDHs. IPDHs were licensed as RDHs on average 20.2 years. Half (50.0%) of IPDHs indicated that an associate degree was their highest level of education currently (compared to 69.7% of RDHs) and 42.9%

indicated a bachelor's degree as their highest educational attainment (compared to 23.1% of RDHs).

### While many IPDHs are self-employed, many also work at least part time in dental practices in Maine.

Ninety percent of IPDHs indicated they were self-employed at least part of the time with 50.0% indicating self-employment most of the time (76% to 100%). One-quarter of IPDH respondents worked 31 or more hours per week for an employer and practiced independently only a few hours each week. Almost two-thirds of IPDHs (64.3%) indicated they sometimes worked under the supervision of a dentist, while 21.4% reported never working under the supervision of a dentist.<sup>9</sup>

#### IPDHs treat more adults in their practices than RDHs who work under PHS status.

IPDHs treated a wide variety of patients including uninsured and low-income adults and children. One-fifth (21.4%) of IPDHs indicated that more than half of their patients (between 51% and 75%) were adults age 19 to 64 years. More than one-third of IPDHs (35.7%) saw no very young children (birth to 3 years). However, 42.9% of IPDHs indicated that children age 4 to 18 years were between one-quarter and one-half of their patient caseload.

Half of IPDHs (50.0%) treated no MaineCare-insured children. Until recently, IPDHs were not permitted to bill MaineCare for services to patients. Some IPDHs also worked under PHS status and were permitted to bill MaineCare when working under that PHS status.

#### IPDHs mainly provide preventive and educational services to patients.

All IPDHs (100.0%) provided dental hygiene assessments, complete prophylaxis, and oral cancer screenings for their patients. Most also provided patient education (92.3%), fluoride treatments (92.3%), and sealant applications (84.6%) for their patients.

#### IPDHs are mainly compensated by payments from patients.

While IPDHs were compensated for their services from a variety of sources, most IPDHs (85.7%) indicated that some of their compensation came from patients who paid for their services. Forty percent of IPDHs received some reimbursement directly from MaineCare. The IPDHs who received reimbursement from MaineCare likely worked under PHS when providing services to MaineCare-eligible patients. Many IPDHs (71.4%) received at least some portion of their practice revenue from private dental insurance companies.

<sup>&</sup>lt;sup>9</sup> IPDHs who used PHS status to obtain reimbursement for services provided to MaineCare-insured children are required to have standing orders from a dentist to provide those services.

### While many IPDHs have an established dental referral network, as do RDHs working under PHS, IPDHs also report difficulty finding dentists to accept referrals.

Many IPDHs (64.3%) indicated they had established a dental referral network in the area where they worked. However, the majority of IPDHs (64.3%) indicated that it was moderately, considerably, or extremely difficult to find dentists to accept patient referrals for care.

#### IPDHs like other oral health professionals volunteer their clinical services.

More than three-quarters (78.6%) of IPDHs participated in volunteer activities in which they provided oral health services. More than one-third (36.4%) volunteered on average between one and five hours annually and more than one-quarter (27.3%) volunteered on average between 16 and 20 hours annually. IPDHs volunteered at community health/dental fairs (50.0%) and at school-based oral health programs (50.0%) as well as during other volunteer opportunities.

#### IPDHs indicate that their patients are generally satisfied with the services they provide.

IPDHs appraised patient perceptions about receiving oral health care from an IPDH and indicated that patients were appreciative to have oral health care available (92.9% of IPDHs) and were not at all concerned about receiving care from an IPDH (85.7%).

# The vast majority of IPDHs are motivated to establish independent practices, in part, because of lack of dental access in their geographic areas.

IPDHs provided their reasons for choosing IPDH practice, including a desire for expanded practice opportunities (92.9%), concern about lack of dental access in their areas (85.7%), and an interest in owning a business (85.7%).

Many IPDHs were interested in other expanded practice opportunities should they become available in Maine, including advanced practice dental hygiene (78.6%), dental hygiene therapy (60.0%), and dental therapy (54.4%). 10

# IPDHs indicate that a lack of dental insurance and poor oral health literacy are the most significant barriers to access to oral health services.

The most significant barriers to obtaining oral health services identified by IPDHs were lack of dental insurance and poor oral health literacy. IPDHs identified preventive services and restorative services as the greatest unmet needs in oral health.

IPDHs also identified the populations in Maine who were most in need of oral health services. They cited low-income children, age birth to 18 years, and MaineCare-insured children as the

<sup>&</sup>lt;sup>10</sup> The dental therapist is an oral health professional in Alaska and Minnesota who is trained to provide some restorative dental services.

populations in greatest need of oral health care. The elderly and low-income older adults were also identified as in need of oral health services.

#### **Expanded Function Dental Assistants in Maine: Survey Findings**

### EFDAs in Maine are experienced oral health professionals with higher education than many of their DA peers.

On average, EFDAs in Maine who were DAs had worked 11.75 years as a DA. One-quarter of the EFDAs (25%) were RDHs in Maine. More than 40% of EFDAs indicated that a certificate/diploma was their highest level of education and 31.3% indicated they held a bachelor's degree.

#### EFDAs mainly work in the more populated areas of Maine.

EFDAs mainly worked in metropolitan areas of the state (75%). Since EFDAs must be directly supervised by dentists, they work in the same areas as dentists in Maine.

### Most EFDAs trained in expanded functions because they have an interest in learning to do more professionally.

Most EFDAs (93.3%) cited a personal interest in learning to do more or career advancement (86.7%) as reasons for becoming an EFDA. Sixty percent of EFDAs indicated they received encouragement from their employers to become an EFDA. Forty percent of EFDAs indicated that they shared the cost of the EFDA training with their employer.

#### EFDAs mainly work in private dental practices and many work only part time.

EFDAs mainly worked part time (defined as 30 hours or less) for their primary employers, but 46.7% worked more than 31 hours weekly for a primary employer. Most EFDAs in Maine (75.0%) primarily worked in private solo (50.0%) or group (25.0%). dental practices. Most EFDAs worked with general dentists in their primary work locations (93.8%).

#### EFDAs commonly work with other EFDAs in their workplaces.

All EFDAs worked with at least one other EFDA in their workplaces. Eighty-six percent of EFDAs worked with two or more other EFDAs.

#### EFDAs provide a variety of clinical services for patients.

EFDAs provided a wide variety of services in their workplaces. All EFDAs (100%) exposed radiographs while 62.5% placed temporary restorations.

### EFDAs identify low-income people in Maine as the population in greatest need of oral health services.

EFDAs ranked low-income children, birth to 18 years, as the population in greatest need of oral health services and low-income adults, age 19 to 64 years, as the second group most in need of oral health care in the state.

#### Discussion

There is growing concern across the U.S. about uneven access to oral health services especially for the poor, children, the elderly, immigrants and refugees, and special needs populations. Stakeholders in Maine share these concerns. The rural geography of the state complicates efforts to improve access to oral health services for those residents living in northern and central Maine. A well trained oral health workforce is a critical resource when developing strategies to increase the availability of oral health care services in the state.

#### Distribution of Oral Health Professionals

Maine's oral health professionals are not well distributed. Dentists, RDHs, and EFDAs in Maine are most likely to practice in the more populated areas of the state. Oral health professionals working in public health settings or in independent dental hygiene practices are increasing the availability of oral health services in rural areas and in settings outside private dental practices (see Table 2 on page 22) where most dental services are usually provided. Analyses of the oral health workforce surveys found that RDHs working under PHS status and IPDHs were more likely than other professionals to be working in small towns and rural areas of Maine, which was the intent of the legislation that enabled these models. While the numbers of professionals active in these workforce models remains small, they are providing oral health services to needy populations.

Workforce innovation in Maine has been used to address disparities in access to oral health care. To date, Maine has enabled a number of oral health professions including EFDAs, RDHs working under PHS status, and IPDHs. Maine also licenses denturists to provide services directly to patients. These efforts are positively impacting the availability of oral health services in the state.

Table 1. Geographic Location of Oral Health Workforce in Maine by RUCA Code\*, 2012

Type of Oral Health Professionals	Metropolitan	Micropolitan	Small Town	Rural
Dentists	51.5%	23.4%	11.7%	13.5%
RDHs	52.4%	18.6%	13.2%	15.8%
RDHs under PHS status	44.2%	15.6%	19.5%	20.8%
IPDHs	35.7%	14.3%	7.1%	42.9%
EFDAs	75.0%	6.3%	0.0%	18.0%

Source: CHWS, 2012. Surveys. \* Note: RUCA codes are a comparatively new Census tract-based classification scheme that utilizes the standard Census Bureau Urbanized Area and Urban Cluster definitions in combination with work commuting information to characterize all of the nation's Census tracts. The metropolitan classification includes areas where there is an urban cluster of 50,000 or more people. The micropolitan classification includes areas where there is a cluster of 10,000 or more people. Small towns include areas with at least 2,500 residents and rural areas comprise settlements with fewer than 2,500 residents. (See USDA Economic Research Service http://webarchives.cdlib.org/sw15d8pg7m/http://www.ers.usda.gov/briefing/Rurality/MicropolitanAreas/).

#### Experience and Education

On average, oral health professionals in Maine have been licensed for many years (e.g., dentists were licensed on average 25 years and RDHs over 20 years). The average age of a dentist in Maine was 54. Many dentists expect to retire or reduce hours over the next five years. The supply of dentists in Maine is expected to increase with the opening of the new dental school at the University of New England (UNE). The new dental school will admit students from Maine so the percent of dentists from the state is likely to increase over time.

Nationally, RDHs are mainly associate degree-educated and DAs are educated mainly in certificate programs with a limited number holding associate degrees. RDHs in Maine were similar to RDHs in the U.S., with 70% of RDHs in the state reporting an associate degree as their highest degree. About one-quarter of RDHs in Maine (23.1%) hold a bachelor's degree and 4.8% hold an advanced graduate degree.

RDHs and DAs working in expanded practice are more highly educated than their professional peers. While the numbers of RDHs working under PHS status or as IPDHs or EFDAs in Maine were relatively small, there were noticeable differences in their educational attainment in comparison to their peers. One-third of the RDHs who had ever worked under PHS status (33.7%) had either a bachelor's degree (24.4%) or a master's degree (8.1%). About 43% of IPDHs indicated that a bachelor's degree was their highest education and 7.1% of IPDHs held a master's degree.

While DAs nationally are educated mainly in certificate programs and occasionally in associate degree programs, EFDAs in Maine also had higher levels of educational attainment. Forty

percent of EFDAs reported a certificate/diploma as their highest level of education, 31.3% indicated they held a bachelor's degree, and 6.3% had a master's degree. Proportionately more oral health professionals with higher levels of educational attainment were practicing in expanded practice roles in the state.

#### Excess Capacity in the Dental Hygiene Workforce

Stakeholders who were interviewed for this study expressed concern about excess capacity within the RDH workforce in Maine. An analysis of the RDH survey responses found a large number of RDHs either working part time and/or having difficulty finding full-time RDH employment. In contrast to the 25% of dentists who expect to retire in the next five years, only a small percentage of RDHs expect to leave practice in the near term (8.7%). Seventy percent of RDHs expect to remain in their current position for the next five years and 11% expect to seek a similar position in another setting. These data suggest limited availability of dental hygiene jobs for new graduates in the next five years.

#### Work Settings and Collaboration

Use of innovative oral health workforce models has increased the array of settings where oral health services are available. While the majority of oral health professionals in Maine work in solo and group private dental practices, higher percentages of RDHs working under PHS status and IPDHs worked in public health settings, including school-based oral health programs, nursing homes, and other community settings. This suggests that legislative and regulatory changes for these professionals have increased the availability of oral health services.

In addition, it is critical that collaborations between new oral health professionals and dental providers in all settings be encouraged given the limited resources for safety net oral health services. Table 2 describes the practice settings of oral health professionals in Maine as well as the practice settings of dentists who supervise or collaborate with personnel working in expanded oral health roles. While dentists in private practice worked with EFDAs, supervised RDHs under PHS status, and accepted referrals from RDHs under PHS status and/or from IPDHs, proportionately more dentists in FQHCs and community dental clinics accepted patient referrals from these professionals. RDHs working under PHS status and IPDHs were more likely than others to be providing oral health services in alternative settings such as school-based oral health programs or nursing homes.

Table 2. Percent of Oral Health Professionals by Work Setting and by Type of Collaboration, Maine, 2012

Settings	All Dentists by Primary Work Setting	All Dentists by Secondary Work Setting*	Only Dentists Who Worked with EFDAs	Only Dentists Who Supervised RDHs Under PHS Status	Only Dentists Who Accepted Referrals from RDHs under PHS Status	Only Dentists Who Accepted Referrals from IPDHs
Private Dental Practice-Solo	55.4%	2.9%	44.1%	59.6%	52.4%	62.6%
Private Dental Practice-Group	33.3%	4.0%	32.2%	21.2%	29.5%	27.8%
Federally Qualified Health Center	4.1%	2.0%	10.2%	13.5%	6.7%	3.5%
Community/Migrant/Rural Dental Clinic	3.5%	1.4%	8.5%	3.8%	8.6%	3.5%
Indian Health Services	0.3%	0.3%	0.0%	1.9%	0.0%	0.0%
School-Based Dental Program	0.3%	2.3%	0.0%	0.0%	0.0%	0.0%
Academic/Educational Institution	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%
Nursing Home/Long-Term Care	0.3%	1.4%	0.0%	0.0%	0.0%	0.0%
Veterans Hospital	0.6%	0.3%	1.7%	0.0%	0.0%	0.0%
Other	2.0%	3.7%	3.4%	0.0%	2.9%	1.8%
Totals	100.0%	18.6%	100.1%	100.0%	100.1%	99.2%
Settings	All RDHs by Primary Work Setting	All RDHs by Secondary Work Setting*	All RDHs under PHS Status by All Work Settings	All IPDHs by All Work Settings	All EFDAs by Primary Work Setting	All EFDAs by Secondary Work Setting
Private Dental Practice-Solo	53.7%	6.0%	0.0%	71.4%	50.0%	12.5%
Private Dental Practice-Group	28.7%	3.9%	0.0%	28.6%	25.0%	0.0%
Federally Qualified Health Center	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Community/Migrant/Rural Dental Clinic	1.8%	1.2%	0.0%	0.0%	12.5%	6.3%
Indian Health Services	0.9%	9.0%	0.0%	0.0%	0.0%	0.0%
School-Based Dental Program	3.3%	3.3%	90.6%	7.1%	0.0%	0.0%
Academic/Educational Institution	3.0%	1.8%	0.0%	0.0%	12.5%	6.3%
Nursing Home/Long-Term Care	0.0%	0.0%	3.1%	21.4%	0.0%	0.0%
Veterans Hospital	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	3.9%	0.6%	40.7%	42.9%	0.0%	0.0%

Source: CHWS, 2012, Surveys. Note: \*Totals do not equal 100% because not all dentists or RDHs worked in a secondary setting. Note: \*\*Totals exceed 100% because IPDHs and RDHs under PHS worked in multiple settings.

Impact of the Economic Downturn on Demand for Oral Health Services

Dentists who responded to the survey expressed concern that the weak economy in Maine was adversely affecting demand for oral health services. Three-quarters of dentists (77.1%) indicated that the recession had negatively impacted their dental practices. Dentists reported additional capacity in their practices as established patients were reducing both the frequency of dental visits and the quantity of elective dental services. Decreased demand appeared to affect both general and specialty dentists. Eighty percent of dentists reported capacity to accept new patients in their practices. RDHs also reported a decreased demand for oral health services in the practices where they worked.

It is important to recognize the difference between demand and need for oral health services. In fact, need for oral health services may be increasing even as demand for services declines. Patients who delay preventive and basic restorative care may require more extensive restorative services in the future.

#### Participation with the MaineCare Program

Most dentists (96.8%) reported that commercial dental insurance was a major source of revenue for their dental practices. Only 57.6% of dentists indicated any practice revenue from MaineCare. Among dentists who treated MaineCare patients, just 11.7% indicated that proceeds from MaineCare reimbursement constitutes more than half of their practice revenues. In addition, 57.2% of dentists who treated MaineCare patients indicated that they limited the number of MaineCare patients in their practices. Of the 80% of dentists who reported some capacity to serve new patients, 39.0% indicated they would limit new patients to those who were commercially insured or self-pay.

In addition, dentists who treated MaineCare-insured patients mainly treated children between age 4 and 18 years (47% of dentists). About 30% of dentists treated some adults, age 19 to 64 years, who were covered by MaineCare. Dentists cited low reimbursement rates, limited coverage for adult dental services, broken appointments, and lack of compliance with treatment recommendations as reasons for their reluctance to work with MaineCare-insured patients.

Oral health professionals in Maine are improving access to oral health services by providing uncompensated care, reduced-fee services, and volunteering their clinical services to patients in need. However, the quantity of these services is limited and not sufficient to fully address unmet need for oral health services. Many dentists indicated that they provide some uncompensated care to patients and some dentists also volunteer their clinical services. On average, dentists who provide uncompensated care for patients indicated that they do so for a small number of patients monthly. Other oral health professionals in Maine including RDHs, IPDHs, and EFDAs also volunteer their professional services for many organized oral health special events including Dentists Who Care for ME, Give Kids a Smile, and Special Olympics.

Table 3. Percent of Dentists Providing Care to MaineCare-Insured Children or Providing Reduced-Fee or Uncompensated Care in Their Primary Practice, by Specialty, Maine, 2012

Dental Specialty	Sees MaineCare- Insured Children	Provides Reduced-Fee Services	Provides Some Uncompensated Care
General Dentistry	76.9%	81.7%	81.7%
Pedodontics	5.0%	2.8%	2.8%
Orthodontics	5.8%	7.3%	7.3%
Periodontics	0.8%	1.8%	1.8%
Prosthodontics	2.5%	0.9%	0.9%
Endodontics	0.0%	1.8%	1.8%
Oral and Maxillofacial Surgery	9.1%	3.7%	3.7%
Totals	100.1%	100.0%	100.0%

Source: CHWS, 2012. Survey of Dentists in Maine, Questions 6 and 18. Total exceeds 100% due to rounding error.

#### Attitudes and Opinions

Oral health professionals agreed that there is unmet need for oral health services in Maine especially for low-income children and low-income adults in the state. Survey respondents were asked to rank the populations in Maine who were most in need of dental services in their geographic areas. Respondents were provided a list of population groups to rank on a 5-point Likert Scale. The responses to this question were weighted with a mean weighted score closest to 5 indicating the neediest populations.

Table 4. Mean Ranking\* of Populations Most in Need or Oral Health Services in Maine, by Profession, 2012

Dationto	Profession Specific Ranks**				
Patients	Dentists	RDHs	IPDHs	EFDAs	
Low-income children (0 to 18 years )	4.08	3.85	4.30	4.42	
Low-income adults (19 to 64 years)	3.72	3.38	2.43	3.75	
Low-income older adults (65 years and older)	2.88	2.76	3.13	2.83	
Uninsured children	3.05	3.45	2.43	2.62	
Uninsured adults	2.65	2.78	2.25	2.21	
MaineCare-insured children	2.49	3.14	3.63	1.00	
Confined elderly	2.77	2.71	3.45	2.75	
People with special needs	2.48	2.40	2.00	2.50	
Homeless people	2.87	2.96	3.00	3.00	
Other***	4.19	4.60	1.00	2.00	

Source: CHWS, 2012, Surveys of Dentists, RDHs, IPDHs, and EFDAs. .Note: \*A mean score of 5 indicates the neediest population. Note: \*\* Shaded areas show mean ranked scores above 3.00. Note: \*\*\* Other was described variously but was generally defined as all of the populations listed as response options.

On a weighted Likert scale with 5 being most significant and 1 being least significant, dentists and IPDHs identified lack of dental insurance and poor oral health literacy as the most significant barriers to access to oral health care in Maine.

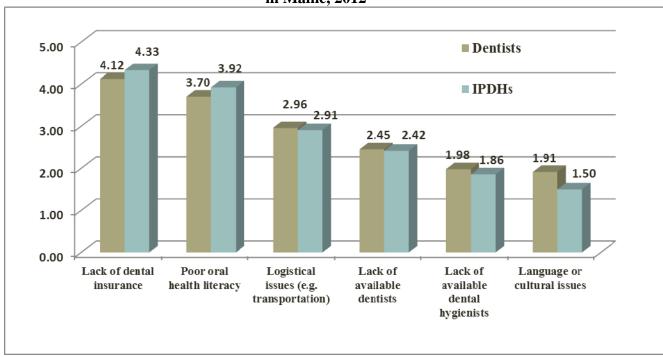


Figure 1. Dentists' and IPDHs' Mean Ranking\* of Barriers to Oral Health Care in Maine, 2012

Source: CHWS, 2012, Surveys of Dentists and IPDHs. \* A mean score of 5 is the most significant barrier.

#### Narrative Comments

Survey respondents had the opportunity to provide comments about access to oral health care in Maine that were not covered in the survey content. While it is not possible to describe all topics of concern, there were some common themes across professions.

Survey respondents identified lack of oral health literacy as a primary barrier to improved oral health. Maine's oral health professionals were clear that an overarching barrier to improved oral health outcomes was a lack of education about the importance of oral health and its relationship to systemic well-being. For populations for whom seeking routine preventive oral health services is not normative behavior, the value of oral health may not be appropriately understood among some populations.

Future improvements in population oral health status must be linked to better education about its importance. Preventive care and routine oral hygiene in the present can reduce the future costs of therapeutic or reparative services and improve outcomes over the lifespan. Education is key for every age group and it is especially important for the young to build a future adult generation

with a desire for good oral health. While lack of dental insurance was widely noted as an important barrier to obtaining oral health services, respondents commented that even people with dental insurance may not seek appropriate care because they lack a basic understanding of the importance of oral health.

Dentists and other oral health professionals emphasized that economic issues in oral health are major barriers to improving access. Dentists identified the cost of dental services, lack of finances to pay for care, low MaineCare reimbursement rates, and lack of dental insurance as the most significant barriers to oral health care in Maine. There were pervasive concerns that until these barriers to care were addressed, there would be little progress in improving oral health outcomes for the population.

While there was general agreement about the need for improved oral health literacy and the economic problems that impact demand for oral health services, there were many divergent opinions about the oral health workforce models that were needed to improve access to oral health services for Maine's people. Many dentists felt that it was ill advised to consider further workforce innovations, especially a midlevel oral health provider, since the new dental school would be producing dentists, some of whom are expected to practice in Maine. Some dentists expressed concern that patients could not afford any oral health care regardless of the type of provider offering the services. Some thought the current supply of oral health professionals was adequate and felt that increases in the number of professionals was unnecessary. Others expressed concern that creating new oral health providers would further fragment the delivery of oral health services in Maine.

On the other hand, other oral health professionals including those already working in expanded professional roles expressed interest in further training and education to enable them to work in other roles and in more settings including schools and nursing homes. These professionals suggested that expanded practice professionals could supply more accessible and more affordable care than is currently available. From their perspective, the ability of providers other than dentists to provide more services to diverse populations in a variety of alternative settings could positively impact the oral health of the populations served. Many acknowledged that professionals working in expanded roles would need sufficient training to provide x-rays, preventive care, and basic restorative services.

Nationally, Maine is recognized as being at the forefront of efforts to address unmet need for oral health care for its residents. Maine's history of open discussion and thoughtful planning for oral health programs and oral health workforce initiatives has resulted in improved access to oral health care and reduced barriers to care for some populations. While there is still significant unmet need in the state, past efforts to expand accessibility of oral health services appear to have been fruitful.

#### **Technical Report**

#### **Background**

The Center for Health Workforce Studies with support from the Maine Oral Health Funders conducted a research study of the oral health workforce in Maine. The study included surveys of four oral health professions:

- Dentists
- Registered Dental Hygienists (RDHs), including RDHs working under public health supervision (PHS) status
- Independent Practice Dental Hygienists (IPDHs), and
- Expanded Function Dental Assistants (EFDAs)

Denturists, who are licensed professionals in Maine, were also considered for survey but their numbers were too small to make a survey feasible.

The surveys gathered information about demographic and educational characteristics of the oral health professionals as well as their opinions about access to oral health services in Maine. The survey questionnaires were developed after the Center completed a comprehensive literature review, examined historical data on the oral health professions in Maine, and conducted a large number of interviews with oral health professionals in the state. Information obtained from these efforts provided important context for the survey content.

#### Methodology

The four surveys were initially fielded electronically to all dentists, RDHs (including those working under PHS status), IPDHs, and EFDAs listed on the licensure and registration lists of the Maine Board of Dental Examiners (ME BDE) in April 2012. The surveys were each designed in an online format on the Inquisite Platform. Respondents were able to complete the survey via a standard Internet browser. Communications with potential respondents were mainly electronic but there was also paper communication.

In early July 2012, each oral health professional received a letter in the mail that contained a personalized link to their survey. The letter explained the reasons for the research, described the survey process, and provided assurances of confidentiality to survey respondents. During the following weeks, oral health professionals received email reminders approximately every 10 to 14 days. Email reminders were sent only to non-respondents and only to those who had an email listed with the licensure information supplied by the ME BDE. There were a small number of professionals for whom no email address was available.

In early September 2012, a paper copy of the respective surveys was sent to all dentists, RDHs (including RDHs working under PHS status), IPDHs, and EFDAs in Maine who had not

responded to prior solicitations. Subsequent to the mailing of the paper survey, email reminders were continuously sent to non-respondents until November 2012. At that time, survey data from the paper and electronic responses were aggregated and cleaned and placed into separate SPSS databases for analyses.

Each of the professional surveys asked a comprehensive set of questions. Each question was followed by defined response options including, in some cases, an "other" category with the opportunity to describe the meaning of "other," if that response was selected. The descriptions of "other" appear in Appendix A of this report. In several cases, narrative comments were also solicited and they, too, appear in Appendix A of this report.

#### **Results**

The surveys were sent to all oral health professionals licensed by and listed with the ME BDE in April 2012.

#### **Dentists**

There were 664 dentists licensed in Maine with an address in Maine who were solicited to participate in the survey. There were 13 bad addresses in the file; four dentists had relocated out of state making them ineligible to complete the survey; one dentist refused to participate (664-13-4-1=646 possible respondents). Ultimately, 352 dentists responded to the survey for a response rate of 54.5%. Only the responses of dentists who were actively practicing in Maine were analyzed.

#### Registered Dental Hygienists

There were 1,196 RDHs licensed in Maine with an address in Maine who were solicited to participate in the survey. There were 42 bad addresses; nine RDHs had moved out of state and were thus ineligible to complete the survey; one RDH was deceased; and one RDH refused to participate (1196-42-9-1-1=1,143). Ultimately, 391 RDHs responded to the survey for a response rate of 34.2%. Only the responses of RDHs who were actively practicing in Maine were analyzed.

#### **Independent Practice Dental Hygienists**

There were 37 IPDHs licensed in Maine with an address in Maine who were solicited to complete the survey. There was one bad address (37-1=36). There were 19 responses from IPDHs for a response rate of 52.8%. Only the responses of IPDHs who were actively practicing as IPDHs were analyzed for this report.

#### **Expanded Function Dental Assistants**

There were 34 EFDAs registered with the ME BDE who were solicited to complete the survey. There were two bad addresses (34-2=32). There were 17 responses from EFDAs in Maine for a response rate of 53.1%. Only the responses of EFDAs who were actively practicing as EFDAs were analyzed for this report.

#### Limitations

While the response rate to the RDH survey was a bit lower than the target response rate of 50%, the responses were geographically distributed and provided a broad basis for drawing conclusions. A comparison of the residence and practice zip codes supplied by RDHs who responded to the survey showed that 82% lived and worked in the same county. It was therefore assumed that the county of residence of non-respondents was likely also the county in which they worked. The survey responses were considered geographically representative of the larger professional group. A comparison of the geographic location of survey respondents with the RDH licensure list showed that there were 4% more rural survey respondents (20.4%) compared to the licensure list (16.4%) and 4.5% fewer metropolitan respondents (52.4%) compared to the licensure list (56.9%).

Another limitation was the small number of licensed IPDHs and the small number of EFDAs in Maine. While the response rates to these surveys exceeded 50%, the small numbers limit the ability to generalize results.

The initial mailing of the survey coincided with a significant wind storm that affected the power at the School of Public Health, University at Albany. As a result, the server that hosted the survey instruments was unavailable during a 24-hour period. This created some initial difficulty for prompt respondents. Each inquiry about difficulty accessing a survey was handled individually to help Maine oral health professionals access the survey instrument. In addition, the first reminder email to oral health professionals in Maine contained an apology and explanation of the power outage and its impact on survey access. These limitations notwithstanding, the survey process was relatively routine.

#### The Report

This technical report contains key findings from each of the four surveys and supporting statistical data in tabular format. This technical report also contains appendices that provide descriptive responses and narrative comments of survey respondents, tables comparing survey responses across professions, and the survey instruments.

#### The Report of Dentists in Maine

#### **Characteristics of Dentists in Maine**

Dentists in Maine were mainly male and non-Hispanic white. The gender of dentists in the state was similar to that of dentists across the U.S. Dentists in Maine were not as racially or ethnically diverse as dentists in the U.S., but they were representative of the population of Maine.

Table 5. Demographic Characteristics of Dentists in Maine, 2012

Tuble of Demographic Characteristics of Demographic, 2012				
Gender	Dentists in Maine	Dentists in the U.S.	Population of Maine	
Male	80.4%	80.0%	48.9%	
Female	18.3%	20.0%	51.1%	
Race/ Ethnicity				
Asian, non-Hispanic	2.9%	6.9%	0.7%	
Black/African American, non-Hispanic	1.0%	3.4%	1.3%	
American Indian/Alaska Native, non-Hispanic	0.3%	0.1%	0.7%	
White, non-Hispanic	93.3%	86.2%	95.4%	
Two or More Races, non-Hispanic	0.3%	N/A	1.5%	
Hispanic/Latino	2.2%	3.4%	1.4%	

Source: CHWS, 2012. Survey of Dentists in Maine, Questions 20 and 21. Valachovic, ADA, 2008, U.S. Census Bureau, Quick Facts, 2012.

More than 20% of dentists who responded to the survey completed their undergraduate studies in the state suggesting that some of these dentists were native to Maine. About 12% of dentists completed undergraduate studies in Massachusetts, and about 32% of dentists completed their dental education at a dental school in Massachusetts. (See Appendix A., Dentist Survey, Question 23 for a complete list of educational degrees, fields of study, and location of education program for dentists in Maine).

On average, dentists in Maine were licensed to practice dentistry for 24.74 years; years of experience among dentists in Maine ranged from newly licensed to 57 years. Among the almost 400 dentists who responded to the survey, 95.1% were actively practicing dentistry in Maine at the time of survey completion.

Actively practicing dentists mainly worked in either solo or group private practice (88.7%). Four percent of dentists in Maine worked in federally qualified health centers (FQHCs). About one-fifth of dentists (18.6%) reported a secondary worksite. Most dentists (84%) worked in only one location while about 17% worked in two locations and 1% worked in three or more locations.

Table 6. Primary and Secondary Worksites of Actively Practicing Dentists, Maine, 2012

Setting	Primary Worksite	Secondary Worksite
Private Dental Practice - Solo	55.4%	2.9%
Private Dental Practice - Group	33.3%	4.0%
Federally Qualified Health Center	4.1%	2.0%
Community/Migrant/Rural Dental Clinic	3.5%	1.4%
Indian Health Services	0.3%	0.3%
School Based Dental Program	0.3%	2.3%
Academic/Educational Institution	0.3%	0.3%
Nursing Home/Long Term Care	0.3%	1.4%
Veterans Hospital	0.6%	0.3%
Other	2.0%	3.7%
Total	100.0%	18.6%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 3. Note: Totals may vary from others charts and tables due to differences in responses to questions used in the cross tabulation.

More than three-quarters of dentist respondents (77.7%) owned the practice where they primarily worked. One-third of dentists (33.3%) who reported working in a secondary work location also owned the secondary practice location.

To accomplish a geographic analysis of dentists' practice locations in Maine, the zip code of the dentists' primary work settings were used along with rural urban continuum area (RUCA) codes of the U.S. Census Bureau to identify the practice location as either metropolitan, micropolitan, small town, or rural in nature.<sup>11</sup> Dentists in Maine generally practiced in metropolitan areas (51.5%) or in micropolitan areas (23.4%).

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RUCA codes are a comparatively new Census tract-based classification scheme that utilizes the standard Census Bureau Urbanized Area and Urban Cluster definitions in combination with work commuting information to characterize all of the nation's Census tracts. The metropolitan classification includes areas where there is an urban cluster of 50,000 or more people. The micropolitan classification includes areas where there is a cluster of 10,000 or more people. Small towns include areas with at least 2,500 residents and rural areas comprise settlements with fewer than 2,500 residents. (See USDA Economic Research Service <a href="http://webarchives.cdlib.org/sw15d8pg7m/http://www.ers.usda.gov/briefing/Rurality/MicropolitanAreas/">http://www.ers.usda.gov/briefing/Rurality/MicropolitanAreas/</a>).

Table 7. Geographic Locations of Dental Practices in Maine, 2012

Location of Dental Practice by Rural Urban Continuum Code	Percent
Rural	13.5%
Small Town	11.7%
Micropolitan	23.4%
Metropolitan	51.5%
Total	100.1%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 4. Note: Total exceeds 100% due to rounding error.

More than one-third of dentists (35.4%) provided clinical patient care between 31 and 35 hours per week in their primary work location. One-third of dentists (33.3%) provided clinical services more than 36 hours per week.

Table 8. Number of Weekly Hours Providing Clinical Care to Patients by Primary or Secondary Work Location, Maine, 2012

Secondary Work Education, Maine, 2012			
Clinical Patient Work Hours	Primary Worksite	Secondary Worksite	
No hours	0.6%	3.0%	
1 to 5 hours	0.6%	4.1%	
6 to 10 hours	2.9%	5.1%	
11 to 15 hours	2.0%	0.5%	
16 to 20 hours	3.8%	2.3%	
21 to 25 hours	5.8%	0.5%	
26 to 30 hours	15.7%	0.0%	
31 to 35 hours	35.4%	0.0%	
36 to 40 hours	24.9%	0.0%	
More than 40 hours	8.4%	0.3%	
Totals	100.1%	15.8%	

Source: CHWS, 2012. Survey of Dentists in Maine, Question 5. Totals do not equal 100% because not all dentists provided care in secondary locations.

Most respondent dentists (80.3%) worked primarily in general dentistry. Orthodontics was the most common specialty cited by dentists (6.1%), followed by oral and maxillofacial surgery (4.9%).

Table 9. Dental Specialty, Maine, 2012

Dental Specialty	Primary Specialty	Secondary Specialty
General Dentistry	80.3%	4.3%
Pedodontics	3.2%	0.5%
Orthodontics	6.1%	2.0%
Periodontics	2.0%	0.8%
Prosthodontics	1.2%	1.0%
Endodontics	2.3%	0.8%
Oral and Maxillofacial Surgery	4.9%	0.8%
Total	100.0%	10.2%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 6. Totals do not equal 100% because not all dentists had a secondary specialty.

#### **Future Plans**

Dentists were asked to describe their future plans. While 59.6% of dentists expected to remain in practice for at least five years, 3.4% of dentists expected to retire within one year and an additional 20.3% of dentists expected to retire or leave dental practice in the next five years.

Table 10. Future Plans of Dentists in Maine, 2012

Future Plans of Dentists in Maine	Percent of Dentists
Retire or leave dental practice within 1 year	3.4%
Retire or leave dental practice within 1 to 5 years	20.3%
Reduce hours within 1 year	3.7%
Reduce hours within 1 to 5 years	12.6%
Increase hours within 1 year	3.4%
Increase hours within 1 to 5 years	1.4%
Move practice location to another area in Maine	2.3%
Expect to remain in practice for at least 5 years	59.6%
Other	9.2%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 24. Note: Total exceeds 100% because survey respondents were permitted to select multiple response options.

#### **Dentists and Other Oral Health Workforce**

Dentists who owned their own dental practices were asked to describe their employees and their part-time or full-time status. For purposes of the survey, part time was defined as 30 hours or fewer per week. More than half (57%) of dentists who owned a dental practice (77.7% of respondents) employed at least one other full-time dentist in their primary work location. Two-thirds of practice owners (67%) employed at least one full-time RDH and 98.4% employed at least one full-time DA in their primary practice. Almost 70% of dental practice owners employed two or more full-time DAs in their primary work location. On average, dental practice owners employed 1.8 full-time RDHs and 2.9 full-time DAs at their primary locations.

Table 11. Number and Type of Employees in Practices Owned by Dentists in Maine, 2012

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Number of Employees	Primary	Practice	Secondar	y Practice	Primary I		Secondar	•	Primary		Secondary	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
None Employed	43.1%	91.1%	63.6%	63.6%	33.0%	57.0 %	65.0%	70.0%	1.7%	19.1%	14.3%	42.9%
1 Employed	37.2%	7.8%	18.2%	27.3%	19.3%	19.6 %	10.0%	10.0%	28.6%	56.2%	7.1%	28.6%
2 Employed	10.8%	1.1%	13.6%	4.5%	21.2%	10.9 %	20.0%	10.0%	34.9%	20.2%	42.9%	14.3%
3 Employed	5.2%	0.0%	4.5%	4.5%	12.5%	8.7%	0.0%	10.0%	14.3%	2.2%	7.1%	14.3%
4 Employed	1.9%	0.0%	0.0%	0.0%	6.1%	1.9%	0.0%	0.0%	9.2%	0.0%	21.4%	0.0%
5 Employed	0.4%	0.0%	0.0%	0.0%	4.5%	1.5%	0.0%	0.0%	2.5%	1.1%	0.0%	0.0%
6 Employed	0.7%	0.0%	0.0%	0.0%	1.9%	0.0%	5.0%	0.0%	1.7%	1.1%	0.0%	0.0%
7 Employed	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%
8 Employed	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%
9 Employed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%
10 Employed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%
11 Employed	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
12 Employed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%
13 Employed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%
14 Employed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%
24 Employed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%
25 Employed	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
26 Employed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
32 Employed	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
36 Employed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%
Total	100.1%	100.0%	99.9%	99.9%	100.1%	100.0%	100.0%	100.0%	100.1%	99.9%	99.9%	100.1%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 7a. Note: Totals exceed 100% due to rounding error.

Fifteen percent of dentists who responded to the survey indicated that they employed EFDAs in their dental practice(s). On average those dentists who employed EFDAs had 1.5 EFDAs working with them.

Dentists were asked if they had ever supervised any RDHs working under PHS status; 13% had done so. On average, these dentists had supervised two RDHs working under PHS status. Dentists who had supervised RDHs working under PHS status were asked to indicate the events or settings in which these RDHs had worked; most had supervised a RDH working in a school-based oral health program (7.1% of dentists).

Table 12. Percentage of Dentists Who Supervised a DH under PHS Status by Setting in Which the DH Provided Services, Maine, 2012

Locations in Which RDH Working Under PHS Status Provided Services	Percent of Dentists Who Had Supervised an RDH in Setting
Give Kids a Smile Day	1.5%
Dentists Who Care For ME	0.8%
Community Health/Dental Fairs	3.8%
Special Olympics	0.5%
School Based Oral Health Programs	7.1%
Nursing Home/ Long Term Care Facility	1.0%
Mobile Dental Van	1.3%
Faith-based Organization	0.0%
Other	3.6%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 9b.

Dentists were asked if they currently accepted any patients referred to them by either RDHs working under PHS status or from IPDHs. Almost one-quarter (24.1%) of dentists indicated that they accepted referrals from RDHs working under PHS status and 27.4% of dentists accepted referrals from IPDHs. The number of patient referrals accepted annually from RDHs varied but most dentists accepted between 1 and 10 patient referrals annually.

Table 13. Percent of Dentists in Maine Who Accepted Referrals from RDHs Working under PHS Status or from IPDHs, by Number of Patient Referrals Annually, 2012

Number of Patient Referrals Seen by Dentist	Referrals from RDH under PHS status	Referrals from IPDHs
1 to 10 Patients	10.9%	18.8%
11 to 20 Patients	5.1%	3.0%
21 to 30 Patients	2.0%	2.3%
31 to 40 Patients	0.8%	0.5%
41 to 50 Patients	1.0%	0.8%
More than 50 Patients	4.3%	2.0%
Total	24.1%	27.4%

Source: CHWS, 2012. Survey of Dentists in Maine, Questions 10a and 11a. Totals do not equal 100% because not all dentists accepted referrals from DHs.

Dentists who worked with EFDAs in their primary worksites mainly practiced in private dental practices, but EFDAs were also employed in FQHCs, community/migrant/rural dental clinics, Veterans hospitals, and "other" settings. Dentists who supervised and accepted referrals from RDHs under PHS status in their primary worksites were mainly in private practice, but again some were in FQHCs, community clinics, and Indian health service facilities. Dentists who accepted referrals from IPDHs were mostly in private practice, although a few were in FQHCs, community clinics, or "other" settings (see Table 10 on the following page).

Many of the dentists (84.7%) who worked with EFDAs in their primary worksites were general dentists, but a few specialty dentists also worked with EFDAs in their primary practices. While three-quarters of the dentists (76.9%) who supervised RDHs working under PHS status were general dentists, only 62.9% of dentists who accepted referrals from RDHs working under PHS status were general dentists. More than one-fifth (21.9%) of dentists who accepted referrals from RDHs working under PHS status were either oral and maxillofacial surgeons (11.4%) or pediatric dentists (10.5%). About two-thirds of dentists who accepted referrals from IPDHs were general dentists (68.4%)

Table 14. Percent of Dentists Who Worked with EFDAs or Supervised RDHs under PHS Status or Accepted Referrals from RDHs Working under PHS Status or IPDHs, by

Primary Work Setting and Dental Specialty, Maine, 2012

Settings	Percent of Dentists Who Worked with EFDAs	Percent of Dentists Who Supervised RDHs under PHS Status	Percent of Dentists That Accepted Referrals from RDHs under PHS Status	Percent of Dentists That Accepted Referrals from IPDHs
Private Dental Practice - solo	44.1%	59.6%	52.4%	62.6%
Private Dental Practice - group	32.2%	21.2%	29.5%	27.8%
Federally Qualified Health Center	10.2%	13.5%	6.7%	3.5%
Community/Migrant/Rural Dental Clinic	8.5%	3.8%	8.6%	3.5%
Indian Health Services	0.0%	1.9%	0.0%	0.0%
School-based Dental Program	0.0%	0.0%	0.0%	0.0%
Academic/Educational Institution	0.0%	0.0%	0.0%	0.0%
Nursing Home/Long Term Care	0.0%	0.0%	0.0%	0.0%
Veterans Hospital	1.7%	0.0%	0.0%	0.0%
Other	3.4%	0.0%	2.9%	1.8%
Totals	100.1%	100.0%	100.1%	99.2%
Dental Specialty				
General Dentistry	84.7%	76.9%	62.9%	68.4%
Pedodontics	3.4%	9.6%	10.5%	6.1%
Orthodontics	5.1%	5.8%	8.6%	9.6%
Periodontics	0.0%	1.9%	4.8%	4.4%
Prosthodontics	3.4%	1.9%	1.0%	0.0%
Endodontics	3.4%	0.0%	1.0%	3.5%
Oral and Maxillofacial Surgery	0.0%	3.8%	11.4%	7.9%
Totals	100.0%	99.9%	100.2%	99.9%

Source: CHWS, 2012. Survey of Dentists in Maine, Questions 3, 6, 8, 9, 10, and 11. Totals do not equal 100% due to rounding error.

# The Impact of the Economic Downturn on Dental Practices in Maine

Dentists were asked if the most recent economic recession had affected demand for dental services in their dental practices. More than three-quarters of survey respondents (77.1%) affirmed that the recession had negatively impacted their practices. Some dentists (18.1%) indicated no impacts from the most recent recession and 4.1% of respondents were unsure if, in fact, there had been any impacts from the downturn.

Dentists who indicated that the economic recession had affected their practices were asked to indicate the impacts. The most often selected response was that patients deferred dental services (92.8%) or that there had been a decrease in patient volume (74.6%). A portion of dentists indicated that there were "other" effects on their practice. (See Appendix A, Dentist Survey, Question 13A. for a description of "other" impacts of the recession on dental practices.) "Other" impacts included longer work hours or providing services to more MaineCare-insured patients than in the past.

Table 15. Effects of the Economic Downturn on Dental Practices in Maine, 2012

Effect of Economic Downturn	Percent of Dentists
Volume of patients decreased	74.6%
Patients deferred dental services	92.8%
Practice shortened hours of operation	17.8%
Staff hours were shortened	25.0%
Other	16.3%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 13a. Note: Total exceeds 100% because survey respondents were permitted to select multiple response options.

While most dentists who indicated that their practices had been impacted by the weak economy were general dentists (80.8%), dentists from other dental specialties, such as those working in private practices, FQHCs, and community clinics, also remarked on the impact of the recession.

Table 16. Percent of Dentists Who Indicated that the Recent Economic Recession Had Impacted Practice by Practice Setting and Dental Specialty, Maine, 2012

Practice Setting	Percent of Dentists
Private Dental Practice - solo	57.4%
Private Dental Practice - group	34.7%
Federally Qualified Health Center	3.8%
Community/Migrant/Rural Dental Clinic	2.3%
Indian Health Services	
School Based Dental Program	0.4%
Academic/Educational Institution	
Nursing Home/Long Term Care	0.4%
Veterans Hospital	0.4%
Other	0.8%
Totals	100.2%
Dental Specialty	
General Dentistry	80.8%
Pedodontics	2.6%
Orthodontics	6.0%
Periodontics	2.6%
Prosthodontics	1.5%
Endodontics	1.5%
Oral and Maxillofacial Surgery	4.9%
Totals	100.0%

Source: CHWS, 2012. Survey of Dentists in Maine, Questions 3, 6, and 13

Dentists were asked if their dental practice had any additional capacity to provide dental services to new patients. In response, 80.2% of dentists indicated that their practice currently had capacity to accept new patients.

# **Patients Served by Dentists in Maine**

Dentists were asked to indicate how many dental visits (excluding dental hygiene visits) they provided in 2011. On average, dentists in Maine provided 2,709 dental visits. The median number of annual visits was 1,897 visits. Dentists were also asked to indicate how many patients their primary practice served on an annual basis. On average, a dental practice in Maine served 3,583 patients annually. The median number of patients served in a dental practice annually was 2,500.

Dentists were asked to describe the age of the patients treated in their dental practices. One-third of dentists (36.2%) saw no infants/children from birth to age 3 years. An additional 57.4% of dentists indicated that infants/children birth to age 3 years constituted between 1% and 10% of

their patient caseload. One-quarter of dentists indicated that 10% or less of their caseload was children age 4 to 18 years. Over one-third of dentists (36.7%) indicated that between half and three-quarters of their patient caseload was adults age 19 to 64 years.

Table 17. Percent of Dentists by Percent of Patients in an Age Cohort Treated by their Dental Practices in Maine, 2012

Age of Patients	Percent of Patients Treated in Dental Practice						
Age of Fatients	0%	1-10%	11-25%	26-50%	51-75%	76-100%	
Infants/ Children (0 to 3 years)	36.2%	57.4%	5.7%	0.7%	0.0%	0.0%	
Children/ Adolescents (4 to 18 years)	1.3%	24.5%	48.1%	13.4%	8.6%	4.1%	
Adults (19 to 64 years)	1.6%	3.6%	9.1%	45.8%	36.7%	3.2%	
Older adults (65 years and older)	4.5%	16.2%	45.3%	27.2%	6.5%	0.3%	

Source: CHWS, 2012. Survey of Dentists in Maine, Question 16.

Dentists were asked to indicate the percentage of dental services that were reimbursed by commercial or public insurance plans or by patients paying for services. More than 40% of dentists indicated no reimbursement from MaineCare, suggesting that they treated no MaineCare-insured patients in their practices. Another 30% of dentists indicated that between 1% and 10% of practice proceeds were from MaineCare, suggesting again a limited caseload of MaineCare-insured patients. Some dentists indicated "other" sources of payment for services. (See Appendix A., Dentist Survey, Question 17 for a complete description of "other.") "Other" included medical insurance payments and Care Credit, which is a health care credit card that allows patients to pay over time for care.

Table 18. Percent of Dentists and Percent of Payments for Patient Services by Payment Source, Maine, 2012

Source of Payment For Dental Services	0%	1-10%	11-25%	26-50%	51-75%	76-100%	Total
Commercial Dental Insurance	3.2%	5.8%	13.9%	39.7%	33.5%	3.9%	100.0%
MaineCare	42.3%	29.7%	7.3%	9.0%	7.7%	4.0%	100.0%
Patient payments	1.9%	11.7%	21.8%	45.5%	13.0%	6.2%	100.1%
Other	40.7%	35.6%	8.5%	10.2%	0.0%	5.1%	100.1%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 17.

Dentists who did serve MaineCare patients were asked to describe the age of those patients. Almost half of the dentists in Maine (47.0%) who served MaineCare-insured patients treated children/adolescents, age 4 to 18 years. Children on MaineCare have a comprehensive dental benefit under the Early Periodic Screening, Diagnosis, and Treatment (EPSDT) benefit mandated by the federal government. Fewer dentists treated adults on MaineCare who have a limited dental benefit.

Table 19. Percent of Dentist Who Treated MaineCare Patients by Age Cohort of Patients, Maine, 2012

Age of MaineCare Patients	Percent of Dentists
Infants (0 to 3 years)	25.5%
Children/Adolescents (4 to 18 years)	47.0%
Adults (19 to 64 years)	30.7%
Older adults (65 years and older)	21.2%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 17a. Note: Total exceeds 100% because survey respondents were permitted to select multiple response options.

Dentists who treated MaineCare patients were asked if they limited the number of MaineCare-insured patients in their practices. More than half of the dentists who responded to the question indicated they did so (57.2%). The remainder of dentists who served MaineCare patients either did not limit the number of MaineCare-insured patients (41.6%) or were unsure if their practice limited the number of MaineCare-insured patients (1.2%).

Dentists were asked to describe the reasons why they limited the number of MaineCare-insured patients. The most common reason cited for limiting MaineCare-insured patients was that reimbursement for services was too low. Dentists also cited "other" reasons, including limited treatment coverage for adults, broken appointments, and poor compliance with treatment recommendations. (See Appendix A., Dentist Survey, Question 17c. for a complete description of "other.")

Table 20. Percent of Dentists by Reason for Limiting the Number of MaineCare-Insured Patients in Their Caseloads, Maine, 2012

Reason for Limiting Maine Care Insured Patients	Percent of Dentists Who Limit MaineCare- Patients
Reimbursement is too low	56.5%
Paperwork is burdensome	4.8%
Other	38.7%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 17c. Total exceeds 100% because survey respondents were allowed to select multiple response options.

Dentists were also asked to describe patient service characteristics of both their primary and secondary (where applicable) practice locations including the new patient policy and reduced-fee or uncompensated care provided in those practices. Many dentists were providing care to all new patients (78.5%) at the time of survey completion. More than three-quarters of dentists (78.9%) provided some uncompensated care for patients in their primary practice locations.

Table 21. Percent of Dentists Who Provide Services to Different Types of Patients or Who
Offer Reduced-Fee or Uncompensated Care for Patients, Maine, 2012

Patient Service Characteristics	Primary Worksite	Secondary Worksite
Provides care to all new patients	78.5%	11.5%
Provides care only to commercially insured or self-pay new patients	39.0%	4.6%
Provides care to MaineCare-insured children	36.6%	5.4%
Provides a sliding-fee scale/reduced-fee services for low-income patients	32.9%	5.4%
Provides some uncompensated care for patients	78.9%	9.2%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 18. Note: Percent of dentists in secondary worksite is low because the number of dentists with a secondary practice site is low. Totals exceed 100% because survey respondents were permitted to select multiple response options.

Dentists who provided care to MaineCare-insured children or offered reduced-fee or uncompensated care for patients in their primary worksites were mainly general dentists although some dentists from all specialties provided reduced-fee or uncompensated services in their primary work settings.

Table 22. Percent of Dentists Who Provided Care to MaineCare Insured Children or Provided Reduced-Fee or Uncompensated Care in Their Primary Work Setting by Dental Specialty, Maine, 2012

Specially, Wallie, 2012						
Dental Specialty	Sees MaineCare- Insured Children	Provides Reduced-Fee Services	Provides Some Uncompensated Care			
General Dentistry	76.9%	81.7%	81.7%			
Pedodontics	5.0%	2.8%	2.8%			
Orthodontics	5.8%	7.3%	7.3%			
Periodontics	0.8%	1.8%	1.8%			
Prosthodontics	2.5%	0.9%	0.9%			
Endodontics	0.0%	1.8%	1.8%			
Oral and Maxillofacial Surgery	9.1%	3.7%	3.7%			
Totals	100.1%	100.0%	100.0%			

Source: CHWS, 2012. Survey of Dentists in Maine, Questions 6 and 18. Total exceeds 100% due to rounding error.

Dentists were asked to indicate how many patients were provided with either uncompensated care or reduced-fee services on a monthly basis in their practice. Forty-seven percent of dentists indicated that between one and five patients were provided with services that were uncompensated on average each month and 14% of dentists indicated they treated between one and five patients on a reduced-fee basis on average each month.

Table 23. Percent of Dentists by Number of Patients Provided with Uncompensated Care or Reduced-Fee Services Monthly, Maine, 2012

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Number of Patients	Uncompensated Care	Reduced-fee Sliding Scale Services		
1 to 5 patients	47.3%	14.0%		
6 to 10 patients	6.0%	1.4%		
11 to 15 patients	12.3%	6.6%		
16 to 20 patients	0.3%	1.4%		
21 to 25 patients	2.3%	0.9%		
26 to 30 patients	0.3%	0.6%		
31 to 35 patients	0.9%	1.1%		
36 to 40 patients	0.3%	0.3%		
41 to 45 patients	0.0%	0.6%		
46 to 50 patients	0.9%	0.3%		
More than 50 patients	2.0%	4.9%		
Total	72.6%	32.1%		

Source: CHWS, 2012. Survey of Dentists in Maine, Questions 18a and 18c. Totals do not equal 100% because not all dentists provided uncompensated care or reduced-fee services in their practices.

Dentists were asked to describe the number and type of uncompensated or reduced-fee/sliding-fee scale services they provided to patients in an average month. Among dentists who provided these services, most provided between one and four diagnostic, preventive, restorative, or therapeutic services to patients on a sliding-fee scale or as uncompensated care.

Table 24. Percent of Dentists by Number of Patient Services Provided Monthly as Uncompensated Care or on a Reduced-Fee/Sliding-Fee Scale Basis, Maine, 2012

Number of Uncompensated Services	Diagnostic	Preventive	Restorative	Therapeutic
1 to 4 services	45.6%	32.4%	34.7%	36.1%
5 to 10 services	10.3%	9.2%	10.9%	8.0%
11 to 15 services	4.0%	2.6%	4.0%	2.6%
16 to 20 services	1.4%	1.4%	1.1%	1.1%
21 to 25 services	0.6%	0.6%	1.1%	0.6%
26 to 30 services	0.0%	0.0%	0.6%	0.0%
31 to 35 services	0.0%	0.0%	0.3%	0.6%
36 to 40 services	0.3%	0.3%	0.0%	0.3%
More than 40 services	2.9%	1.7%	1.7%	2.0%
Total	65.1%	48.2%	54.4%	51.3%
Number of Reduced-Fee/ Sliding-Fee Scale Services	Diagnostic	Preventive	Restorative	Therapeutic
•	Diagnostic	Preventive 12.9%	Restorative	Therapeutic 11.2%
Sliding-Fee Scale Services				
Sliding-Fee Scale Services  1 to 4 services	15.2%	12.9%	10.6%	11.2%
Sliding-Fee Scale Services  1 to 4 services  5 to 10 services	15.2% 5.2%	12.9% 3.7%	10.6%	11.2%
Sliding-Fee Scale Services  1 to 4 services 5 to 10 services 11 to 15 services	15.2% 5.2% 2.3%	12.9% 3.7% 2.0%	10.6% 4.3% 2.6%	11.2% 5.2% 1.7%
Sliding-Fee Scale Services  1 to 4 services 5 to 10 services 11 to 15 services 16 to 20 services	15.2% 5.2% 2.3% 0.6%	12.9% 3.7% 2.0% 0.9%	10.6% 4.3% 2.6% 0.9%	11.2% 5.2% 1.7% 0.6%
Sliding-Fee Scale Services  1 to 4 services 5 to 10 services 11 to 15 services 16 to 20 services 21 to 25 services	15.2% 5.2% 2.3% 0.6% 0.3%	12.9% 3.7% 2.0% 0.9% 0.0%	10.6% 4.3% 2.6% 0.9% 0.9%	11.2% 5.2% 1.7% 0.6% 0.6%
Sliding-Fee Scale Services  1 to 4 services 5 to 10 services 11 to 15 services 16 to 20 services 21 to 25 services 26 to 30 services	15.2% 5.2% 2.3% 0.6% 0.3% 0.6%	12.9% 3.7% 2.0% 0.9% 0.0% 0.3%	10.6% 4.3% 2.6% 0.9% 0.9% 1.1%	11.2% 5.2% 1.7% 0.6% 0.6%
Sliding-Fee Scale Services  1 to 4 services 5 to 10 services 11 to 15 services 16 to 20 services 21 to 25 services 26 to 30 services 31 to 35 services	15.2% 5.2% 2.3% 0.6% 0.3% 0.6% 0.9%	12.9% 3.7% 2.0% 0.9% 0.0% 0.3% 0.9%	10.6% 4.3% 2.6% 0.9% 0.9% 1.1% 0.6%	11.2% 5.2% 1.7% 0.6% 0.6% 0.6%

Source: CHWS, 2012. Survey of Dentists in Maine, Questions 18b and 18d. Totals do not equal 100% because not all dentists provided uncompensated care or reduced-fee services in their practices.

Dentists who provided services to patients as uncompensated care or on a reduced-fee/sliding-fee scale were asked about appointment wait time for various types of services. The shortest average wait time for uncompensated or reduced-fee dental services was for an emergency visit.

Table 25. Wait Times for Dental Services Provided as Uncompensated or Reduced-Fee Care, Maine, 2012

Type of Visit	Minimum Wait	Maximum Wait	Mean Wait	Median Wait	Mode
New Patient Visit	0 days	180 days	12.7 days	5 days	5 days
Preventive Visit	0 days	180 days	14.5 days	7 days	5 days
Restorative Visit	0 days	180 days	11.9 days	7 days	5 days
Therapeutic Visit	0 days	60 days	7.8 days	5 days	0 days
Emergency Visit	0 days	365 days	3.4 days	1 day	0 days

Source: CHWS, 2012. Survey of Dentists in Maine, Question 18e.

# **Volunteer Activities of Dentists in Maine**

Dentists in Maine were asked if they participated in any volunteer activities in which they provided dental services outside the dental office. Forty-four percent indicated some volunteer dental services. More than 20% of dentists who provided volunteer services did so in free dental clinics and 16.6% of dentists participated with the Maine Donated Dental Services Program. More than 12% of dentists indicated they provided volunteer services for school-based oral health programs in the state.

Table 26. Location of Volunteer Dental Services by Dentists in Maine, 2012

Location of Volunteer Dental Services	Percent of Dentists
Free dental clinics	20.6%
Maine Donated Dental Services program	16.6%
Give Kids a Smile event	7.7%
Dentists Who Care for ME	8.6%
Community health/dental fairs	10.3%
School-based oral health programs	12.3%
Nursing home/long-term care facility	4.6%
Mobile dental van	1.1%
Faith-based organization	2.9%
Other	12.6%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 19a. Totals do not equal 100% because survey respondents were permitted to select multiple response options.

Dentists were asked to describe the types and quantity of dental services they provided annually when they volunteered their services. Dentists indicated a wide range of the type and quantity of their volunteer services.

Table 27. Percent of Dentists Providing Volunteer Dental Services by Number and Type of Annual Dental Services, in Maine, 2012

Number of Volunteer Dental Services	Diagnostic	Preventive	Restorative	Therapeutic
1 to 4 services	6.9%	6.0%	4.9%	5.2%
5 to 10 services	6.3%	5.7%	5.7%	6.6%
11 to 15 services	3.7%	1.7%	2.9%	3.7%
16 to 20 services	3.2%	2.0%	3.4%	1.7%
21 to 25 services	3.2%	2.9%	2.6%	2.3%
26 to 30 services	1.4%	0.6%	0.9%	1.1%
31 to 35 services	0.3%	0.9%	0.6%	0.3%
36 to 40 services	1.1%	0.9%	1.4%	0.6%
More than 40 services	9.7%	7.2%	6.6%	6.6%
Totals	35.8%	27.9%	29.0%	28.1%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 19b. Totals do not equal 100% because not all dentists provided volunteer services.

#### **Attitudes and Opinions**

About two-thirds of dentists (64%) indicated there were barriers to access to oral health services. However, 29.3% felt there were no access barriers and 6.7% were unsure if patients encountered problems with access. Dentists who felt there were impediments to care were asked to rank a list of possible barriers that impede people's ability to obtain dental or dental hygiene services in their geographic areas.

Dentists ranked the list of possible barriers to oral health services on a Likert scale of 1 to 5, with 1 being the most significant barrier and 5 being the least significant barrier. Dentists were provided with some defined response options but were also permitted to select "other" and to describe "other." (A list of "other" responses appear in Appendix A., Dentist Survey, Question 25.)

The responses on the Likert scale were weighted by multiplying the number of responses at each point on the scale (1 or 2 or 3, etc.) times a designated weight. Those weights were as follows:

- The number of most significant responses at point 1 was multiplied by 5;
- The number of very significant responses at point 2 was multiplied by 4;
- The number of significant responses at point 3 was multiplied by 3;
- The number of somewhat significant responses at point 4 was multiplied by 2; and
- The number of least significant responses at point 5 was multiplied by 1.

The weighted values for each item were then added together and divided by the number of responses to that item to arrive at a mean value. A mean score of 5 would indicate the most significant barriers.

Dentists ranked "other" barriers (mean score 4.14), including the cost of dental services, lack of finances to pay for care, and dental fear as the most significant barriers to access to oral health services. Lack of dental insurance (mean score 4.12) and poor oral health literacy (mean score 3.70) were considered the next most significant barriers. While logistical barriers, such as lack of transportation and lack of time off from work, or lack of available workforce were identified by some dentists as barriers to access they were not considered as significant as other factors obstructing access to oral health services in Maine.

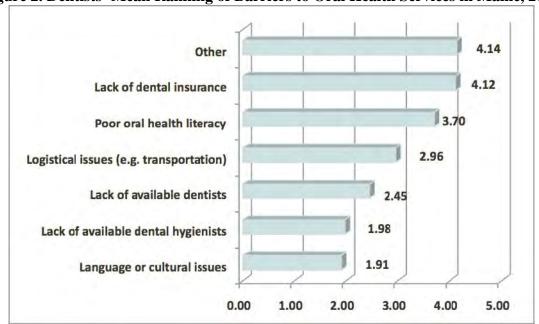


Figure 2. Dentists' Mean Ranking of Barriers to Oral Health Services in Maine, 2012

Source: CHWS, 2012. Survey of Dentists in Maine. Question 25.

Dentists were also asked to rank the greatest unmet need for oral health services in their geographic area on a Likert scale of 1 to 5, with 1 being the most important unmet need. Responses to this question were weighted in the same manner that responses to the previous question were handled. The most important unmet need would have a weight of 5.

Dentists selected restorative services (mean score 3.92) as the most important unmet need followed closely by preventive services (mean score 3.81) and "other" services, such as emergency treatment and funding for services. ("Other" responses to this question can be found in Appendix A, Dentist Survey, Question 26). Oral health education was also a significant unmet need (mean score 3.54).

Restorative services

Preventive services

Other

Oral health education

Specialty dental services

0.00 1.00 2.00 3.00 4.00

Figure 3. Dentists' Mean Ranking of the Most Important Unmet Need for Oral Health Services, Maine, 2012

Source: CHWS, 2012. Survey of Dentists in Maine, Question 26.

Dentists were then asked to identify the populations most in need of dental services in their geographic areas on a Likert Scale of 1 to 5, with 1 being the neediest. The responses to this question were weighted in a similar manner as the weighting for the previous questions. A mean weighted score closest to 5 indicated the neediest populations identified by dentists. Dentists rated "other" populations (mean score 4.19) as neediest. "Other" populations were mainly described as all of the populations listed as possible responses to the question. (See Appendix A. Dentist Survey, Question, 27). Dentists identified low-income children (mean score 4.08), low-income adults (mean score 3.72), and uninsured children (mean score 3.05) as among the populations in Maine most in need of oral health services.

4.19 Other 4.08 Low income children (0 to 18 years ) 3.72 Low income adults (19 to 64 years) 3.05 Uninsured children 2.88 Low income older adults (65 years and older) 2.87 Homeless people 2.77 Confined elderly 2.65 Uninsured adults 2.49 MaineCare insured children 2.48 People with special needs 5.00 0.00 1.00 2.00 3.00 4.00

Figure 4. Dentists' Mean Ranking of Populations Most in Need of Oral Health Services in Maine, 2012

Source: CHWS, 2012. Survey of Dentists in Maine, Question 28.

Dentists were also asked to express their opinion about whether other oral health workforce models would be helpful in achieving improved access to oral health services in Maine. More than one-third of dentists (37.6%) felt that a community dental health coordinator (which is similar to a community health worker in medicine) would be helpful in improving access. Between one-fifth and one-quarter of Maine's dentists were unsure if any of the models would be helpful in improving access to oral health services in the state.

Table 28. Dentists' Opinion of the Usefulness of Possible Oral Health Workforce Expansions to Achieve Improved Access to Oral Health Services in Maine

Workforce Model	Yes	No	Unsure
Community dental health coordinator	37.6%	35.4%	27.0%
Dental therapist	6.3%	71.9%	21.8%
Dental hygienist therapist	6.3%	70.5%	23.2%
Advanced practice dental hygienist	6.6%	68.2%	25.2%

Source: CHWS, 2012. Survey of Dentists in Maine, Question 28.

Dentists were also asked to provide narrative comments about access to oral health services in Maine and many expressed concern about MaineCare reimbursement, the impact of the economy on dental practices, new workforce models, and patient oral health literacy.

# The Report of Registered Dental Hygienists in Maine

#### **Characteristics of RDHs in Maine**

The majority of RDHs in Maine were female (99.4%) and non-Hispanic White (99.1%). The average years licensed as a RDH was 20.4 years with a range in years licensed from one year to 49 years. Seventy percent of RDHs in Maine indicated that their highest level of education was an associate degree.

Table 29. Highest Level of Education, RDHs in Maine, 2012

Highest Level of Education	Percent of RDHs
Certificate/Diploma	0.6%
Associate Degree	69.7%
Bachelor's Degree	23.1%
Master's Degree	3.3%
Post-Master's Certificate	0.6%
Doctoral/Advanced Degree/DDS	0.9%
Other	1.8%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 20.

More than half (52.4%) of the RDHs who responded to the survey worked in the metropolitan areas of the state. Twenty-nine percent of RDHs worked in rural areas (15.8%) or small towns in Maine (13.2%).

Table 30. Work Locations of RDHs in Maine by RUCA, 2012

Geography of Work Location	Percent of RDHs
Rural	15.8%
Small Town	13.2%
Micropolitan	18.6%
Metropolitan	52.4%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 19.

## **Employment**

Most RDHs (84.7%) worked for a single employer with 50.4% working 30 or fewer hours per week for their primary employer. Two-thirds (66.7%) of RDHs with more than one employer worked 10 hours or fewer per week at the secondary worksite.

Table 31. Number of Weekly Work Hours by Employer, for RDHs in Maine, 2012

Number of Hours	Employer 1	Employer 2	Employer 3
1 to 5 hours	3.3%	2.4%	0.0%
6 to 10 hours	7.2%	6.6%	0.9%
11 to 15 hours	1.8%	2.1%	0.0%
16 to 20 hours	13.7%	1.2%	0.0%
21 to 25 hours	13.7%	0.6%	0.0%
26 to 30 hours	10.7%	0.3%	0.3%
31 to 35 hours	28.7%	0.3%	0.0%
36 to 40 hours	19.1%	0.6%	0.0%
More than 40 hours	1.8%	0.0%	0.0%
Total	100.0%	14.1%	1.2%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 3. Totals do not equal 100% because not all RDHs worked for multiple employers.

RDHs primarily worked in private dental offices with either solo practitioners or in a group practice (82.4%). RDHs in Maine also worked in FQHCs (4.8%) and school-based dental programs (3.3%). Some RDHs worked in "other" locations, including public health settings, free clinics, and pediatric offices. A full description of "other" settings is contained in Appendix A, Survey of RDHs, Question 3.

Table 32. Practice Settings for RDHs in Maine, 2012

Practice Setting	Primary Worksite	Secondary Worksite
Private dental officesolo	53.7%	6.0%
Private dental officegroup	28.7%	3.9%
Federally qualified health center	4.8%	0.0%
Community/migrant/rural dental clinic	1.8%	1.2%
Indian health services	0.9%	9.0%
School-based dental program	3.3%	3.3%
Academic/educational institution	3.0%	1.8%
Other	3.9%	0.6%
Total	100.1%	25.8%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 3. Note: Total does not equal 100% due to rounding error. Total in secondary worksite does not equal 100% because not all RDHs worked in a secondary setting.

RDHs primarily worked with general (80.9%) and pediatric dentists (6.9%). Some RDHs worked primarily with other specialty dentists, including periodontists (3.9%) and public health dentists (3.0%). A few RDHs (3.9%) worked with "others," including students in academic institutions and clinics. Appendix A., Survey of RDHs, Question 3 contains a complete list of "other" types of employers for RDHs in Maine.

Table 33. Type of General or Specialty Dentists with Whom RDHs in Maine Work, 2012

Dental Specialty	Primary Worksite	Secondary Worksite
General Dentist	80.9%	9.0%
Pedodontist	6.9%	0.6%
Orthodontist	1.8%	0.6%
Periodontist	3.9%	0.6%
Prosthodontist	1.8%	0.3%
Endodontist	0.3%	0.0%
Public Health Dentist	3.0%	0.9%
Oral/Maxillofacial Surgeon	0.6%	0.0%
Other	3.0%	2.1%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 4. Note: Total may not equal 100% because DHs in group practices may work with more than one type of general or specialty dentist. Total in secondary worksite does not equal 100% because not all RDHs worked in a secondary setting.

More than 80% of RDHs in Maine worked with at least one general dentist in their worksites. Six percent worked with at least one pediatric dentist and 3% worked with at least one public health dentist. Some RDHs worked with multiple dentists in a workplace.

Table 34. Percent of RDHs by Number and Specialty of Dentists in their Worksites, Maine, 2012

Turns of Doubiets In Manheites	Total Number of Dentists					
Type of Dentists In Worksites	1	2	3	4	5	>5
General Dentist	57.8%	12.8%	6.6%	3.3%	1.5%	0.6%
Pedodontist	2.4%	2.4%	0.3%	0.3%	0.0%	0.6%
Orthodontist	1.5%	0.3%	0.0%	0.0%	0.0%	0.0%
Periodontist	2.1%	1.5%	0.0%	0.0%	0.0%	0.0%
Prosthodontist	0.9%	0.0%	0.3%	0.0%	0.0%	0.3%
Endodontist	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Public Health Dentist	1.8%	0.3%	0.6%	0.0%	0.3%	0.0%
Oral/Maxillofacial Surgeon	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 4. Note: Total do not equal 100% because DHs may work with more than one type of general or specialty dentist.

#### **Patients and Services**

RDHs were asked to describe the patient service characteristics of their employing organizations. Three-quarters of RDHs (74.3%) indicated that their primary worksite provides care to new patients, but 37.4% of RDHs indicated that only new patients who were self-pay or commercially insured were treated in their primary worksite. Just 38% of RDHs indicated that MaineCareinsured children were treated in their primary workplace.

Table 35. Percent of Maine's RDHs by Patient Service Characteristics of Primary and Secondary Worksites, 2012

Patient Service Characteristics	Primary Worksite	Secondary Worksite
Provides care to all new patients	74.3%	9.0%
Provides care only to commercially insured or self-pay new patients	37.4%	5.4%
Provides care to MaineCare-insured children	38.0%	5.7%
Provides a sliding-fee scale/reduced-fee services for low-income patients	12.6%	3.9%
Provides some uncompensated care for patients	35.3%	3.9%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 6. Totals do not equal 100% because respondents were permitted to select multiple response options.

RDHs were asked to describe the age of their patients. RDHs treated patients in every age cohort, however 21.5% of RDHs treated no very young children (birth to 3 years).

Table 36. Percent of RDHs in Maine by Percent of Patients Served by Age Cohort, 2012

Age of Patients	0%	1% to 10%	11% to 25%	26% to 50%	51% to 75%	76% to 100%	Total
Infants (birth to 3 years)	21.5%	65.1%	9.4%	2.0%	1.3%	0.7%	100.0%
Children/Adolescents (age 4 to 18 years)	0.9%	13.8%	50.0%	23.3%	6.4%	5.5%	99.9%
Adults (age 19 to 64 years)	3.1%	1.9%	6.5%	44.4%	38.8%	5.3%	100.0%
Older Adults (age 65 years and older)	4.8%	7.3%	41.6%	34.6%	8.6%	3.2%	100.1%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 7. Totals do not equal 100% due to rounding error.

#### **Work Activities and Patient Services**

RDHs were asked to describe their weekly work activities. More than half of survey respondents (57.8%) indicated that between 1% and 10% of their weekly work time was spent doing administrative activities. Ninety percent of RDHs in Maine spent less than 20% of their weekly work hours in administrative activities.

Table 37. Percent of Weekly Work Time Devoted to Administrative Activities, RDHs, Maine, 2012

Percent of Weekly Work Time That is Spent Doing Administrative Tasks	Percent of RDHs
0%	11.1%
1% to 10%	57.8%
11% to 20%	21.4%
21% to 30%	5.7%
31% to 40%	9.0%
41% to 50%	1.5%
More than 50%	1.5%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 9.

RDHs were asked to describe the number of weekly work hours spent providing a variety of clinical services to patients. On average, RDHs spent between one and two hours a week providing sealants or fluoride treatments; between three and four hours a week providing dental hygiene assessments, patient education, and scaling and root planing services; and between 17 and 24 hours on average providing prophylaxis. About two-thirds of RDHs provided these services under general dental supervision. Services mainly provided under direct supervision included cementing crowns and facings and anesthesia services.

Table 38. Percent of RDHs by Number of Weekly Hours Spent Providing Particular Clinical Services and Level of Supervision for Each Service, Maine, 2012

		Number of Weekly Hours							Level of Super	Dental vision	
Clinical Services to Patients	0 hours	1 to 2 hours	3 to 4 hours	5 to 8 hours	9 to 16 hours	17 to 24 hours	25 to 32 hours	33 to 40 hours	More than 40 hours	Direct	General
Dental hygiene assessment	1.6%	33.1%	23.1%	15.3%	7.1%	6.8%	7.5%	5.5%	0.0%	33.5%	66.5%
Oral cancer screenings	4.7%	58.0%	12.9%	6.9%	5.0%	2.5%	5.7%	4.1%	0.0%	35.9%	64.1%
Cleaning and prophylaxis	7.8%	2.7%	4.5%	9.9%	20.0%	26.3%	19.7%	9.3%	0.0%	33.1%	66.9%
Patient education	5.1%	29.0%	24.2%	12.8%	9.3%	7.5%	6.0%	6.0%	0.3%	29.8%	70.2%
Fluoride treatments	10.7%	58.2%	11.9%	5.1%	3.9%	3.9%	4.2%	2.1%	0.0%	30.8%	69.2%
Sealant applications	29.0%	46.6%	11.0%	4.2%	4.8%	1.8%	2.1%	0.6%	0.0%	32.3%	67.7%
Subgingival irrigation	41.5%	34.0%	8.4%	6.3%	3.0%	3.3%	2.4%	1.2%	0.0%	29.7%	70.3%
Scaling and root planing	17.0%	27.5%	20.3%	14.0%	8.4%	7.2%	4.5%	1.2%	0.0%	38.0%	62.0%
Smooth/polish amalgam restorations	87.5%	10.7%	0.0%	0.6%	0.3%	0.0%	0.6%	0.3%	0.0%	44.1%	55.9%
Place temporary restorations	91.3%	6.9%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.8%	39.2%
Cement pontics/ facings	99.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	64.7%	35.3%
Re-cement crowns	93.7%	6.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.9%	39.1%
Take impressions	72.8%	23.6%	1.8%	1.2%	0.3%	0.0%	0.3%	0.0%	0.0%	38.4%	61.6%
Nitrous oxide analgesia	88.7%	9.0%	0.9%	0.9%	0.0%	0.3%	0.3%	0.0%	0.0%	82.8%	17.2%
Local anesthesia	70.4%	22.4%	3.3%	2.7%	0.3%	0.6%	0.0%	0.3%	0.0%	76.0%	24.0%
Suture removal	90.7%	8.1%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	53.8%	46.2%
Place/remove dressings	94.9%	4.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	53.5%	46.5%
Radiography	11.3%	25.4%	28.1%	15.8%	6.6%	4.2%	4.8%	3.9%	0.0%	36.4%	63.6%
Other	89.9%	4.5%	2.1%	1.5%	0.3%	0.6%	0.6%	0.6%	0.0%	42.9%	57.1%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 8.

#### **Volunteer Activities**

More than one-third of Maine's RDHs who responded to the survey indicated that they participated in volunteer activities in which they provided dental hygiene services (38.4%). The mean time spent annually on volunteer activities among those who volunteered was between six and 10 hours.

Table 39. Annual Time Spent Volunteering Dental Hygiene Services, RDHs, Maine, 2012

Number of Annual Volunteer Hours	Percent of RDHs
1 to 5 hours	33.3%
6 to 10 hours	30.2%
11 to 15 hours	7.9%
16 to 20 hours	10.3%
21 to 25 hours	2.4%
26 to 30 hours	3.2%
31 to 40 hours	4.8%
More than 40 Hours	7.9%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 10a. Note: Percentage tabulations were calculated using only the number of RDHs who volunteered in the denominator.

RDHs indicated the volunteer activities in which they participated. The most common were school-based oral health programs and community health/dental fairs.

Table 40. Percent of Survey Respondent RDHs Who Participated in Volunteer Events, Maine, 2012

Volunteer Event Location	Percent of RDHs
Give Kids a Smile event	7.5%
Dentists Who Care for ME	5.1%
Community health/dental fairs	13.1%
Special Olympics	2.7%
School-based oral health programs	17.0%
Nursing home/long-term care facility	0.3%
Mobile dental van	1.5%
Faith based organization	0.9%
Other	12.5%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 10b. Note: The percentages were calculated using the number of RDHs who responded to the survey in the denominator.

#### **Availability of Employment and Future Plans**

RDHs were asked about the degree of difficulty in securing employment in the geographic area where they worked. Most RDHs (86.7%) indicated that it was either somewhat or very difficult to find a dental hygiene job.

Table 41. Assessment of Degree of Difficulty with Finding Employment as an RDH in the Geographic Area, Maine, 2012

Degree of Difficulty	Percent of RDHs
Very easy	0.6%
Somewhat easy	2.1%
Neither easy nor difficult	10.6%
Somewhat difficult	38.7%
Very difficult	48.0%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 11.

RDHs who indicated that it was either somewhat or very difficult to find a dental hygiene job were asked to indicate the reasons for that difficulty. Most indicated that there were too many RDHs in the area (61.8%). Almost half of the RDHs indicated there were too few dentists in the area (48.7%). Some RDHs indicated "other" reasons for difficulty with finding employment, including decreased demand for dental services due to the weak economy and a decrease in the number of patients with dental insurance. A list of "other" answers to this question is available in Appendix A., Survey of RDHs, Question 11a.

Table 42. Percent of RDHs by Reasons for Difficulty Securing Dental Hygiene Employment, Maine, 2012

Reasons for Difficulty Securing Dental Hygiene Employment	
There are too few dentists working in the area	48.7%
There are too many RDHs in the area	61.8%
Dentists hire dental assistants to provide some services usually provided by RDHs	4.8%
Education programs in Maine graduate too many RDHs	35.5%
Other	18.5%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 11a. Totals do not equal 100% because respondents were permitted to select multiple response options.

#### Other Oral Health Workforce Models

Some survey respondents were practicing as RDHs under public health supervision (PHS) status (13.8%) or as expanded function dental assistants (EFDAs) (2.2%). In all, 25.5% of RDHs who responded to the survey had ever practiced under PHS status.

All survey respondents were asked to rank their level of interest in expanded practice opportunities on a Likert scale of 1 to 5, with 1 being most interested. More than half of Maine's RDHs (55.1%) were at least moderately interested in advanced practice dental hygiene. Just less than half (47.2%) of RDH survey respondents were not interested in becoming an EFDA.

Table 43. Percent of RDHs by Level of Interest in Expanded or Alternative Practice Oral Health Workforce Models, Maine, 2012

Office interest with the control of						
Expanded Practice Model	Most Interested = Point 1	Considerably Interested = Point 2	Moderately Interested = Point 3	Slightly Interested = Point 4	Least Interested = Point 5	Not Interested
Expanded function dental assistant	13.9%	6.0%	9.2%	3.5%	20.3%	47.2%
Public health supervision status	22.4%	10.3%	15.0%	10.3%	16.8%	25.2%
Independent practice	19.8%	10.2%	12.4%	12.1%	16.1%	29.4%
Dental therapist	15.1%	10.6%	16.4%	8.0%	16.1%	33.8%
Dental hygienist therapist	18.7%	12.1%	17.5%	8.9%	13.7%	29.2%
Advance practice dental hygienist	25.2%	14.6%	15.3%	10.3%	12.1%	22.4%

Source: CHWS, 2012, Survey of RDHs in Maine, Question13. Totals do not equal 100% because respondents were permitted to select multiple response options.

The ranked responses on the Likert scale were weighted by multiplying the number of responses at each point on the scale (1 or 2 or 3, etc.) times a designated weight. Those weights were as follows:

- The number of most interested responses at point 1 was multiplied by 5;
- The number of considerably interested responses at point 2 was multiplied by 4;
- The number of moderately interested responses at point 3 was multiplied by 3;
- The number of slightly interested responses at point 4 was multiplied by 2; and
- The number of least interested responses at point 5 was multiplied by 1.

The weighted values for each item were then added together and divided by the number of responses to that item to arrive at a mean value. A mean score of 5 would indicate the highest level of interest in a workforce model.

RDHs who responded to the survey ranked advanced practice dental hygiene (mean score of 3.39, between moderately and considerably interested) and dental hygiene therapy (mean score of 3.19, at moderately interested) as the workforce models of greatest interest to survey respondents. Public health supervision, independent practice, and dental therapy were also considered moderately interesting.

3.39 Advance practice dental hygienist 3.19 **Dental hygienist therapist** 3.15 **Public health supervision status** 3.08 **Independent practice** 3.01 **Dental therapist** 2.81 **Expanded function dental assistant** 0.00 3.00 4.00 5.00 1.00 2.00

Figure 5. Mean Ranked Score of Interest for RDHs in Maine in Oral Health Workforce Models, 2012 (5=Most Interested)

Source: CHWS, 2012, Survey of RDHs, Question13.

RDHs were asked to describe their future plans for the next five years. Seventy percent of RDHs in Maine expected to remain in their current position. Some RDHs (8.7%) expected to retire and 3.3% expected to leave dental hygiene practice. Some RDHs indicated "other" future plans, including applying to dental school or needing to seek another job because their employing dentist would be retiring. (See Appendix A., Survey of RDHs, Question 14 for a full description of "other.")

Table 44. Percent of RDHs by Future Plans for the Next Five Years, Maine, 2012

Future Plans of RDHs	Percent of RDHs
I expect to remain in my current position	70.1%
I expect to seek a similar position in another setting	11.0%
I expect to leave dental hygiene and seek employment in another field	3.3%
I expect to retire	8.7%
I don't know	8.1%
Other	10.1%

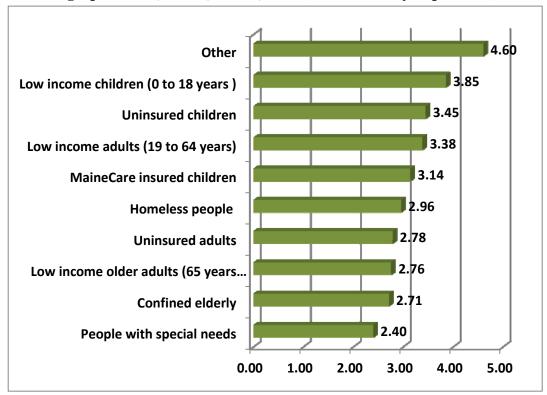
Source: CHWS, 2012. Survey of RDHs, Question 14. Note: Totals do not equal 100% because respondents were permitted to select multiple response options.

# **Attitudes and Opinions**

RDHs were asked if there were barriers that impeded people's ability to obtain dental or dental hygiene services in their geographic areas. Most RDH survey respondents indicated that there were barriers that affected access (75.4%). However, 15.8% of RDHs did not feel there were barriers to access and 8.8% were unsure.

RDHs were then asked to rank the populations most in need of dental services in their geographic areas on a Likert Scale of 1 to 5, with 1 being the neediest. The responses to this question were weighted in a similar manner as the weighting described previously in this report (see page 47). A mean weighted score closest to 5 indicates the neediest populations identified by RDHs. RDHs ranked "other" populations (mean score 4.60), low-income children (mean score 3.85), and uninsured children (mean score 3.45) as neediest. "Other" populations included all of the populations listed as response options. (See Appendix A. RDH Survey, Question 22.) RDHs also identified low-income adults in Maine (mean score 3.38) as being among the populations most in need of oral health services.

Figure 6. Mean Rank Score of Populations Most in Need of Oral Health Services in the Geographic Area, RDHs, Maine, 2012 (5= Most Needy Population)



Source: CHWS, 2012. Survey of RDHs in Maine, Question 22.

RDHs also ranked the greatest unmet need for oral health services in their geographic areas on a Likert scale of 1 to 5, with 1 being the greatest need. These responses were also weighted with a mean score of 5 being the greatest unmet need. RDHs identified preventive services (mean score 4.01) and restorative services (mean score 3.78) as the greatest unmet needs in their geographic areas.

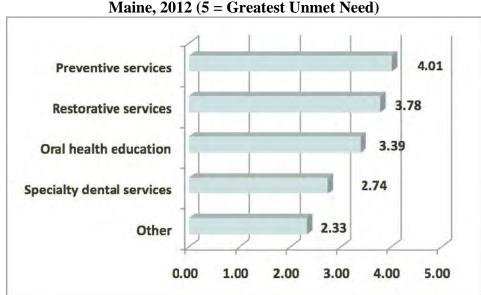


Figure 7. RDHs' Mean Rank Score of Greatest Unmet Need for Oral Health Services, Maine, 2012 (5 = Greatest Unmet Need)

Source: CHWS, 2012. Survey of RDHs in Maine, Question 23.

RDHs were asked to describe strategies or policy initiatives that might help to address unmet dental need in the areas where they worked. RDHs discussed the new dental school, improving oral health literacy of the population, and expansion in scope of practice as possible strategies to improve access to oral health services in Maine.

# The Report of Registered Dental Hygienists Working Under Public Health Supervision Status in Maine

## **Characteristics of RDHs Working Under PHS Status**

About 25% of RDHs who responded to the survey had used PHS status at some point in their dental hygiene career. At the time of survey completion, 13.8% of RDH survey respondents were actively working under PHS status. The following figures and tables represent data collected from RDHs who were using PHS status. These data do not include independent practice dental hygienists (IPDHs) in Maine who might use PHS status to treat MaineCare-insured children. IPDHs were surveyed using a separate survey instrument. The data collected from IPDHs is reported in a subsequent chapter of this report.

The majority of RDHs who had ever worked under PHS status indicated that an associate degree was their highest level of education (66.3%) with the remainder indicating a bachelor's degree or higher as their educational attainment.

Table 45. Level of Highest Educational Attainment of RDHs Who Have Ever Worked Under PHS Status, Maine, 2012

Highest Level of Education	Percent of RDHs Who Ever Worked Under PHS Status
Associate degree	66.3%
Bachelor's degree	24.4%
Master's degree	5.8%
Post-Master's certificate	1.2%
Other	2.3%

Source: CHWS, 2012. Survey of RDHs in Maine, Questions 20 and 24.

RDHs who had ever worked under PHS status mainly did so in metropolitan areas (44.2%) but many also practiced in rural areas (20.8%) and small towns (15.6%).

Table 46. Work Locations of RDHs Working Under PHS Status in Maine by RUCA, 2012

Geography of Work Location	Percent of RDHs Working Under PHS Status
Rural	20.8%
Small Town	19.5%
Micropolitan	15.6%
Metropolitan	44.2%

Source: CHWS, 2012. Survey of RDHs in Maine, Questions 5 and 24.

Most RDHs working under PHS status did so as paid employment. Just 15.6% indicated they were not paid for work time spent as an RDH under PHS status. More than 70% of RDHs working under PHS status indicated they did no volunteer work using this status.

Table 47. Percent of RDHs by Percent of Annual Work Time as Paid Employment or Using Volunteer Status When Working Under PHS Status, Maine, 2012

Percent of Annual Work Time	Paid Employment	Volunteer Time
0%	15.6%	71.9%
1% to 10%	12.4%	15.6%
11% to 25%	3.1%	0.0%
26% to 50%	0.0%	6.2%
51% to 75%	6.2%	0.0%
76% to 99%	12.5%	3.1%
100%	50.0%	3.1%
Total	99.8%	99.9%

 $Source: CHWS, 2012. \ Survey \ of \ RDHs \ in \ Maine, \ Question \ 27. \ Note: \ Totals \ do \ not \ equal \ 100\% \ due \ to \ rounding \ error.$ 

RDHs working under PHS status worked mainly in school-based oral health programs (90.6%) and in "other" settings (25.0%), including day care centers, Head Start programs, and WIC clinics. (See Appendix A., Survey of RDHs, Question 28 for a full list of "other" settings.)

Table 48. Settings in Which RDHs Working Under PHS Status Provided Services, Maine, 2012

Settings In Which DHs Provided Services Under PHS Status	Currently Using
School-based oral health programs	90.6%
Nursing homes/long-term care facilities	3.1%
Community health fairs	9.4%
Institutional settings	6.3%
Other	25.0%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 28. Totals exceed 100% because respondents were permitted to select multiple response options.

RDHs working under PHS status were asked their reasons for selecting work in public health. Most (84.4%) indicated a concern about lack of dental access in the areas where they worked and 68.8% indicated an interest in working in a public health setting.

Table 49. Percent of RDHs Working Under PHS status by Reason for Selecting Status, Maine, 2012

Reasons for Working Under PHS Status	
Interest in working in a public health setting	68.8%
Concern about lack of a dental access in my area	
Desire for expanded practice opportunities	
Desire to participate in oral health volunteer activities	
Other	9.4%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 29. Totals exceed 100% because respondents were permitted to select multiple response options.

#### **Patients and Clinical Services**

RDHs working under PHS status described the characteristics of the patients that they served. Most (96.4%) served low-income children and MaineCare-insured children. Three-quarters of RDHs under PHS status (73.3%) served no confined elderly patients and 62.5% served no low-income older adults.

Table 50. Percent of RDHs Working Under PHS Status by Characteristics of Patients Served, Maine, 2012

Characteristics of Patients	0%	1% to 10%	11% to 20%	21% to 30%	31% to 40%	41% to 50%	More than 50%	Total
Low-income children (0 to 18 years )	3.6%	7.1%	0.0%	3.6%	10.7%	7.1%	67.9%	100.0%
Low-income adults (19 to 64 years)	53.3%	6.7%	13.3%	6.7%	6.7%	0.0%	13.3%	100.0%
Low-income older adults (65 years and older)	62.5%	18.8%	0.0%	6.3%	0.0%	0.0%	12.5%	100.1%
Uninsured children	0.0%	20.0%	20.0%	8.0%	16.0%	12.0%	24.0%	100.0%
Uninsured adults	50.0%	16.7%	5.6%	5.6%	0.0%	22.2%	0.0%	100.1%
MaineCare-insured children	3.6%	0.0%	7.1%	3.6%	3.6%	14.3%	67.9%	100.1%
Confined elderly	73.3%	20.0%	0.0%	0.0%	6.7%	0.0%	0.0%	100.0%
People with special needs	25.0%	35.0%	25.0%	5.0%	0.0%	5.0%	5.0%	100.0%
Homeless people	46.7%	40.0%	13.3%	0.0%	0.0%	0.0%	0.0%	100.0%
Other	50.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 33.

RDHs working under PHS status were asked to describe the frequency of the services they provided to their patients. Most of these RDHs always performed oral inspections (90%) and two-thirds always took dental histories (66.7%) and provided fluoride varnishes (67.7%). There were some tasks that were never or rarely performed by RDHs under PHS status, including cementing pontics, taking impressions, and smoothing/polishing amalgams.

Table 51. Percent of RDHs Working Under PHS Status by Frequency of Clinical Services Provided to Patients, Maine, 2012

Clinical Services	Never	Rarely	Sometimes	Often	Always	Total
Take dental histories	10.0%	3.3%	6.7%	13.3%	66.7%	100.0%
Perform oral inspections	0.0%	0.0%	0.0%	10.0%	90.0%	100.0%
Take/expose radiographs	73.3%	6.7%	6.7%	10.0%	3.3%	100.0%
Complete prophylaxis	13.3%	6.7%	6.7%	13.3%	60.0%	100.0%
Root planing	56.7%	23.3%	13.3%	3.3%	3.3%	99.9%
Sealant application	0.0%	3.2%	3.2%	45.2%	48.4%	100.0%
Fluoride varnish	0.0%	3.1%	0.0%	29.0%	67.7%	99.8%
Temporary fillings	46.7%	20.0%	13.3%	16.7%	3.3%	100.0%
Smooth/polish amalgam restorations	83.3%	13.3%	0.0%	0.0%	3.3%	99.9%
Supragingival polishing	27.6%	0.0%	13.8%	17.2%	41.4%	100.0%
Apply topical anesthetics	73.3%	10.0%	10.0%	3.3%	3.3%	99.9%
Take impressions	83.3%	13.3%	3.3%	0.0%	0.0%	99.9%
Cement pontics/facings	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Other	66.7%	0.0%	0.0%	16.7%	16.7%	100.1%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 31. Totals do not equal 100% because respondents were permitted to select multiple response options.

# **Scope of Practice**

RDHs working under PHS status were asked if a more expansive scope of practice would be helpful when providing services to patients. Forty-four percent of RDHs agreed that an expansion in scope of practice would be helpful, 46.9% of RDHs working under PHS status were unsure if it would be helpful, and 9.4% did not feel an expansion in scope would be helpful. RDHs described services that are not currently permitted that they would like to provide, including taking radiographs, placing temporary fillings, and identifying caries.

## **Payment for Services**

RDHs working under PHS status were asked about how the non-volunteer clinical services they provided were paid. Many RDHs working under PHS status (71.9%) were employed by an organization that billed for their services. About one-third (31.3%) of those working under PHS

status indicated that their services were paid through grant funding. Some (18.8%) directly billed for their services.

Table 52. Percent of RDHs Working under PHS Status by Method of Payment for Services, Maine, 2012

How Services Provided Under PHS Status are Paid	Percent of RDHs
I am employed by an organization that bills for my services	71.9%
My services are paid through a program grant	31.3%
My dentist employer bills for my services	0.0%
I bill directly for my services	18.8%
I provide these services only on a volunteer basis	3.1%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 30. Totals exceed 100% because respondents were permitted to select multiple response options.

### **Referrals to Dentists**

RDHs working under PHS status were also asked to describe their patient referral practices. Most indicated they had an established dental referral network to which they referred patients (71.9%). One-third of RDHs (34.4%) indicated they either gave a patient a referral and suggested the patient find a dentist or they worked with the patient to find a dentist to provide services.

Table 53. Percent of RDHs Working Under PHS Status by Referral Practices for Patients in Need of Dental Services, Maine, 2012

Referral Practices	Percent of RDHs
I refer to the supervising dentists	12.5%
I have an established dental referral network to which I generally refer	71.9%
I give the patient a referral and suggest they find a dentist	34.4%
I work with the patient to find a dentist to provide care	34.4%
Other	18.8%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 34. Totals exceed 100% because respondents were permitted to select multiple response options.

RDHs working under PHS status were asked to assess the degree of difficulty they encountered in finding a dentist in their geographic area that would accept dental referrals. More than half (56.3%) found it either somewhat (34.4%) or very (21.9%) difficult to find a dentist to accept referrals in the areas where they worked.

Table 54. Level of Difficulty with Finding a Dentist to Accept Patient Referrals, Maine, 2012

Degree of Difficulty	Percent of RDHs
Somewhat easy	21.9%
Neither easy nor difficult	21.9%
Somewhat difficult	34.4%
Very difficult	21.9%

Source: CHWS, 2012. Survey of RDHs in Maine, Question 35.

Appendix C of this report contains a list of places in Maine where RDHs working under PHS status have provided services to patients from 2002 to 2011 as well as some tables describing the number of patients and type of services provided during that time period.

# The Report of Independent Practice Dental Hygienists in Maine

All licensed IPDHs in Maine were sent the workforce survey. Among IPDH survey respondents, just 70% indicated they were working currently as an IPDH. The following tabulations included only responses from actively practicing IPDHs.

### **Characteristics of IPDHs in Maine**

IPDHs who responded to the workforce survey were all female and mainly non-Hispanic White (92.3%). On average, IPDHs in Maine were licensed 20.2 years as a RDH with a range in years licensed from seven years to 33 years. Half of the IPDH respondents indicated that an associate degree was their highest level of education.

Table 55. Highest Level of Education of IPDHs in Maine, 2012

Highest Level of Education	Percent of IPDHs
Associate degree	50.0%
Bachelor's degree	42.9%
Master's degree	7.1%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 27.

Half of the IPDHs (50.0%) who responded to the survey worked in either a rural areas or a small town in Maine. (See explanation of RUCA codes in the note on page 20 of this report.)

Table 56. Geographic Locations of IPDHs in Maine, 2012

Geography of Work Location	Percent of IPDHs
Rural	42.9%
Small Town	7.1%
Micropolitan	14.3%
Metropolitan	35.7%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 7.

### **Work Patterns of IPDHs**

More than 90% of IPDHs in Maine indicated that they were self-employed at least part of the time. Half of the IPDHs (50%) reported that they were self-employed 76% to 100% of the time. An additional 14.3% of IPDHs reported they spent between one-half and three-quarters of their work time self-employed.

Table 57. Percent of Total Work Time that IPDHs Were Self-Employed, Maine, 2012

Percent of Work Time	Percent of IPDHs
0%	7.1%
1% to 10%	14.3%
11% to 25%	14.3%
26% to 50%	0.0%
51% to 75%	14.3%
76% to 100%	50.0%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 2.

IPDHs were asked whether they ever worked under the supervision of a dentist. Some IPDHs (21.4%) reported never working under the supervision of a dentist, 64.3% of IPDHs sometimes worked under the supervision of a dentist, and 14.3% always worked under the supervision of a dentist (14.3%). Some IPDHs, even those who were self-employed, also provided services working under PHS status, which requires standing orders from a dentist. Other IPDHs worked in private dental practices some of the time and in self-employment the rest of their work time. The percent of IPDH work time spent working under the supervision of a dentist varied. More than half of IPDHs (55.6%) indicated they were supervised by a dentist 26% to 50% of their work time. No IPDHs were supervised by a dentist 51% to 75% of their work time, but 11.1% were supervised by a dentist between 76% and 100% of their work time.

Table 58. Percent of Total IPDH Work Time That Was Supervised by a Dentist,

Maine, 2012

Percent of Supervised Work Time	Percent of IPDHs
1% to 10%	11.1%
11% to 25%	22.2%
26% to 50%	55.6%
51% to 75%	0.0%
76% to 100%	11.1%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 3.

IPDHs were asked to indicate the number of employers for whom they worked. About half of the IPDHs were only self-employed and none of the remaining respondents indicated more than one employer.

IPDHs apportioned their work hours by the time spent self-employed and by the number of hours worked for an employer. Some IPDHs worked only a few hours a week in an IPDH practice while others worked full time as an IPDH.

Table 59. IPDH Work Hours by Percent of Employed or Self-Employed IPDHs in Maine, 2012

Number or Weekly Work Hours	Self- Employed Hours	Hours Worked for Employer
1 to 5 hours	15.4%	12.5%
6 to 10 hours	30.8%	12.5%
11 to 15 hours	0.0%	12.5%
16 to 20 hours	7.7%	25.0%
21 to 25 hours	0.0%	0.0%
26 to 30 hours	23.1%	12.5%
31 to 35 hours	0.0%	25.0%
36 to 40 hours	23.1%	0.0%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 4.

Half of the IPDHs (50%) who responded to the survey were self-employed full time. All others worked with either a general dentist or in one case a public health dentist, when they worked with a dentist. Most of those IPDHs (71%) worked with dentists in solo private practices, while 14.3% worked some time in a group practice.

A few IPDHs (14.3%) spent some time, but less than 10% of their time, providing services in patients' homes. One-fifth of IPDHs (21.3%) spent some time working in nursing homes and one IPDH worked in a nursing home full time. Some IPDHs indicated they worked in "other" settings, including schools and a denture center. (See Appendix A., IPDH Survey, Question 5 for a list of "other" settings.)

### **Work Activities**

IPDHs spent most of their time providing clinical services to patients; 85.7% of IPDHs indicated they spent between 51% and 100% of their weekly work time providing clinical services. A small percentage of IPDHs (7.1%) spent no time weekly providing clinical services to patients and 28.6% spent no time providing education.

Table 60. Percent of Time by Type of IPDH Activity or Service, Maine, 2012

Type of Service or Function	0%	1% to 10%	11% to 25%	26% to 50%	51% to 75%	76% to 100%
Clinical Services	7.1%	0.0%	7.1%	0.0%	57.1%	28.6%
Administrative Functions	14.3%	35.7%	42.9%	7.1%	0.0%	0.0%
Education	28.6%	21.4%	14.3%	14.3%	7.1%	14.3%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 6.

### **Patients**

As with dentists, very few IPDHs treated young children. More than one-third of IPDHs (35.7%) saw no children age birth to 3 years and 42.9% indicated that children in that youngest age group constituted less than 10% of their patient caseload. Half of IPDHs (50%) indicated that adults between the age of 19 and 64 constituted between 11% and 25% of their caseload, and 21.4% indicated that adults were between 51% and 75% of their caseload. More than 40% of IPDHs indicated that children age 4 to 18 years constituted between one-quarter and one-half of their patients.

Table 61. Percent of IPDHs by Percent of Patients in their Caseloads by Age Cohort, Maine, 2012

17141110) 2012							
Ann of Potionts	Percent of Patients Treated in Dental Practice						
Age of Patients	0%	1%-10%	11%-25%	26%-50%	51%-75%	76%-100%	
Infants (0 to 3 years)	35.7%	42.9%	14.3%	7.1%	0.0%	0.0%	
Children/Adolescents (4 to 18 years)	14.3%	14.3%	21.4%	42.9%	7.1%	0.0%	
Adults (19 to 64 years)	14.3%	0.0%	50.0%	14.3%	21.4%	0.0%	
Older adults (65 years and older)	0.0%	35.7%	21.4%	21.4%	14.3%	7.1%	

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 8.

IPDHs were asked to describe the socioeconomic characteristics and ages of their patients. Half of the IPDH respondents (50%) indicated they treated no MaineCare-insured children. Until recently, IPDHs were not permitted to bill MaineCare for services to MaineCare-insured patients. Some IPDHs also worked under PHS status and were able to bill for services to MaineCare-insured children under that umbrella. Most IPDHs treated a variety of populations especially uninsured children and adults. Only 14.3% of IPDHs had no uninsured adults in their patient caseloads.

Table 62. Percent of IPDHs by Percent and Type of Patients in their Clinical Caseloads, Maine, 2012

Type of Patient	0%	1%-10%	11%-20%	21%-30%	31%-40%	41%-50%	More than
							50%
Low-income children (0 to 18 years)	35.7%	21.4%	14.3%	0.0%	0.0%	14.3%	14.3%
Low-income adults (19 to 64 years)	42.9%	21.4%	14.3%	14.3%	0.0%	0.0%	7.1%
Low-income older adults (65 years and older)	35.7%	42.9%	7.1%	7.1%	0.0%	0.0%	7.1%
Uninsured children	21.4%	50.0%	28.6%	0.0%	0.0%	0.0%	0.0%
Uninsured adults	14.3%	21.4%	35.7%	7.1%	14.3%	0.0%	7.1%
MaineCare-insured children	50.0%	7.1%	7.1%	0.0%	0.0%	7.1%	28.6%
People with special health needs	28.6%	50.0%	7.1%	7.1%	0.0%	0.0%	7.1%
Homeless people	92.9%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Confined elderly	64.3%	14.3%	0.0%	0.0%	0.0%	0.0%	21.4%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 9.

## **Clinical Services**

IPDHs were asked to describe the clinical services they provided to patients. All IPDHs who responded to the survey (100.0%) provided dental hygiene assessments, complete prophylaxis, and oral cancer screenings for patients. Most also provided patient education, fluoride treatments, and sealant applications. Some services that are permitted, such as cementing pontics, were not performed by respondent IPDHs.

Table 63. Percent of IPDHs by Hours Spent and Type of Clinical Patient Services and Type of Supervision, Maine, 2012

	Number of Weekly Hours						Level of Supervision					
Type of Clinical Service	0 hours	1 to 2 hours	3 to 4 hours	5 to 8 hours	9 to 16 hours	17 to 24 hours	25 to 32 hours	33 to 40 hours	More than 40 hours	Direct Supervision	General Supervision	Unsupervised
Dental hygiene assessment	0.0%	30.8%	23.2%	7.7%	23.1%	0.0%	7.7%	7.7%	0.0%	0.0%	8.3%	91.7%
Dental history	7.7%	30.8%	15.4%	15.4%	23.1%	0.0%	0.0%	7.7%	0.0%	0.0%	9.1%	90.9%
Periodontal/restorative charting	15.4%	15.4%	46.2%	7.7%	7.7%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	100.0%
Oral cancer screenings	0.0%	61.5%	23.1%	0.0%	15.4%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	90.9%
Patient education	7.7%	15.4%	38.5%	7.7%	15.4%	7.7%	0.0%	7.7%	0.0%	0.0%	0.0%	100.0%
Take impressions	92.3%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	66.7%
Complete prophylaxis	0.0%	7.7%	15.4%	30.8%	15.4%	7.7%	15.4%	7.7%	0.0%	0.0%	0.0%	100.0%
Partial prophylaxis	15.4%	30.8%	15.4%	30.8%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	100.0%
Fluoride treatments	7.7%	53.8%	15.4%	0.0%	15.4%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sealant applications	15.4%	38.5%	7.7%	15.4%	23.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Apply desensitizing agent	23.1%	46.2%	7.7%	7.7%	7.7%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	100.0%
Apply topical anesthetics	38.5%	38.5%	7.7%	0.0%	7.7%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	100.0%
Place topical antimicrobials	69.2%	15.4%	0.0%	7.7%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	100.0%
Subgingival irrigation	46.2%	7.7%	23.1%	0.0%	7.7%	7.7%	7.7%	0.0%	0.0%	0.0%	0.0%	100.0%
Scaling and root planing	38.5%	7.7%	23.1%	0.0%	15.4%	7.7%	0.0%	7.7%	0.0%	0.0%	0.0%	100.0%
Place temporary restorations	76.9%	15.4%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Smooth/polish amalgam restorations	84.6%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	100.0%
Cement pontics/facings	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Place/remove rubber dams	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wire/ligature adjustments	92.3%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Local anesthesia	76.9%	15.4%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%	50.0%
Nitrous oxide analgesia	92.3%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%
Suture removal	92.3%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%
Place/remove dressings	92.3%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%
Radiography	46.2%	23.1%	15.4%	7.7%	0.0%	0.0%	0.0%	7.7%	0.0%	0.0%	20.0%	80.0%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 15.

### **Referrals to Dentists**

IPDHs were asked to describe the overall difficulty in finding dentists to accept patient referrals in the geographic areas where they worked. While some IPDHs indicated no difficulty (14.3%) finding dentists to accept patient referrals, 64.3% of IPDHs indicated that it was moderately (28.6%), considerably (21.4%), or extremely (14.3%) difficult to find dentists to accept patient referrals.

Table 64. Level of Difficulty Finding Dentists to Accept Patient Referrals in the Geographic Area, Maine, 2012

Geographie in ea, manie, 2012				
Level of Difficulty	Percent of IPDHs			
Not at all difficult	14.3%			
Slightly difficult	21.4%			
Moderately difficult	28.6%			
Considerably difficult	21.4%			
Extremely difficult	14.3%			

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 10.

About two-thirds of IPDHs (64.3%) indicated they had established a referral network in the area where they work and more than half of the IPDHs who responded to the survey (57.1%) indicated that they work with patients to find a dentist when dental care is needed. "Other" referral practices are described in Appendix A., IPDH Survey, Question 11.

Table 65. Referral Practices of IPDHs in Maine, 2012

Referral Practices	Percent of IPDHs
I refer to a supervising dentists	21.4%
I have an established dental referral network	64.3%
I give the patient a referral and suggest they find a dentist	14.3%
I work with the patient to find a dentist to provide care.	57.1%
Other	21.4%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 11. Note: Totals exceed 100% because respondents were permitted to select multiple response options.

## **Compensation for Services**

IPDHs were asked to describe compensation for their services. Most IPDHs (85.7%) indicated that a portion of the revenue they received was from patient payments for services. More than 40% of IPDHs also received some reimbursement from MaineCare. Reimbursement from MaineCare was only available to IPDHs who also worked under PHS status.

Table 66. Percent of IPDHS by Type of Compensation Received for Clinical Services, Maine, 2012

Type of Compensation	Percent of IPDHs
Patient self-pay	85.7%
Salary/hourly/per unit pay from employer	35.7%
Grant funds for oral health program	0.0%
Direct MaineCare reimbursement	42.9%
Direct commercial insurance reimbursement	35.7%
Other	7.1%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 12. Note: Totals exceed 100% because respondents were permitted to select multiple response options.

IPDHs were asked to indicate the percentage of their services that were paid by private insurance, by MaineCare, by patients, or other sources. The most common source of payment was patient self-pay, followed by private insurance. Only 43% of IPDHs received any MaineCare revenue.

Table 67. Percent of IPDHs by Percent of Practice Revenue by Type of Payer, Maine, 2012

Type of Payer	0%	1%-25%	26%-50%	51%-75%	76%-100%
Private insurance	28.6%	35.7%	14.3%	14.3%	7.1%
MaineCare	57.1%	7.1%	7.1%	21.4%	7.1%
Patient self-pay	7.1%	21.4%	28.6%	21.4%	21.4%
Other	0.0%	0.0%	0.0%	0.0%	0.0%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 14.

## Patients' Attitudes about Receiving Care from IPDHs

IPDHs were asked about patients' attitudes towards receiving services from an IPDH. Most indicated that patients were happy to have available oral health care (92.9%) or that patients were not generally concerned (85.7%). IPDHs also indicated "other" patient attitudes. (See Appendix A. IPDH Survey, Question 17 for a list of "other" responses.)

Table 68. Percent of IPDHs by Perception of Patient Attitudes about Receiving Services from an IPDH, Maine, 2012

Patient Attitudes	Percent of IPDHs
Patients are cautious	7.1%
Patients ask questions about my clinical skills	21.4%
Patients are happy to have available oral health care	92.9%
Patients are generally not concerned at all	85.7%
Other	28.6%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 17. Note: Totals exceed 100% because respondents were permitted to select multiple response options.

### **Impact of Scope of Practice Limitations on Practice**

IPDHs were asked about the impact of scope of practice limitations on their practices as IPDHs. Among the issues IPDHs raised was the inability to take x-rays or to provide whitening services and the semantic issues surrounding the word "diagnosis" and the impact on patient services, such as cancer screenings and reading x-rays.

### **Volunteer Activities**

More than three-quarters of IPDHs (78.6%) participated in volunteer activities in which they provided oral health services. More than one-third of IPDHs (36.4%) volunteered on average between one and five hours annually and more than one-quarter (27.3%) volunteered on average between 16 to 20 hours annually.

Table 69. Average Annual Number of Volunteer Hours Providing Oral Health Services, IPDHs, Maine, 2012

Number of Annual Volunteer Hours	Percent of IPDHs
0 hours	9.1%
1 to 5 hours	36.4%
6 to 10 hours	9.1%
11 to 15 hours	9.1%
16 to 20 hours	27.3%
21 to 25 hours	0.0%
26 hours to 30 hours	0.0%
31 to 40 hours	9.1%
More than 40 hours	0.0%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 19a

IPDHs were asked to describe the locations where they provided oral health services as a volunteer. Half of the survey respondents (50%) indicated they volunteered at community health/dental fairs and half (50%) volunteered at school-based oral health programs. (A description of "other" IPDH volunteer locations is available in Appendix A, IPDH Survey, Question 19b).

Table 70. Locations Where IPDHs Volunteer to Provide Oral Health Services, Maine, 2012

Location of Volunteer Dental Services	Percent of IPDHs
Give Kids a Smile event	7.1%
Dentists Who Care for ME	14.3%
Community health/dental fairs	50.0%
Special Olympics	0.0%
School-based oral health programs	50.0%
Nursing home/long-term care facility	7.1%
Mobile dental van	0.0%
Faith based organization	7.1%
Other	21.4%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 19b. Note: Totals exceed 100% because respondents were permitted to select multiple response options.

## Reasons for Choosing IPDH Practice and Interest in Expanded Practice Opportunities

IPDHs were asked why they chose to become an IPDH. Most indicated that their reasons for choosing IPDH practice were a desire for expanded practice opportunities (92.9%), an interest in owning a business (85.7%), and concerns about lack of dental access in the areas where they worked (85.7%).

Table 71. Reasons for Choosing IPDH Practice, Maine, 2012

Reason for Becoming an IPDH	Percent of IPDHs
Interest in working in a public health setting	42.9%
Concern about lack of dental access in my area	85.7%
Desire for expanded practice opportunities	92.9%
Interest in owning a business	85.7%
Other	21.4%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 16. Note: Totals exceed 100% because respondents were permitted to select multiple response options.

IPDHs were asked if they expected to participate in the radiography pilot program recently authorized by the Maine Legislature. More than half of survey respondents (57.1%) were unsure about participation, 28.6% expected to participate, and 14.3% did not expect to participate in the pilot program.

IPDHs were also asked about their interest in other practice opportunities if they became available in Maine. More than half of IPDHs expressed interest in dental therapy, dental hygiene therapy, and advanced practice. The remaining IPDHs were unsure about their interest in other practice opportunities.

Table 72. Interest in Other Practice Opportunities If Available in Maine, 2012

Type of Practice	Yes	No	Unsure
Dental therapist	54.4%	0.0%	45.5%
Dental hygienist therapist	60.0%	0.0%	40.0%
Advanced practice dental hygienist	78.6%	0.0%	21.4%

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 20. Note: Totals exceed 100% because respondents were permitted to select multiple response options.

IPDHs supplied comments about their future professional plans. Some were expecting to go to dental school or obtain an advanced degree. Others were expecting to remain in independent dental hygiene practice. A list of IPDHs' comments about their future plans is available in Appendix A., IPDH Survey, Question 28.

## **Attitudes and Opinions**

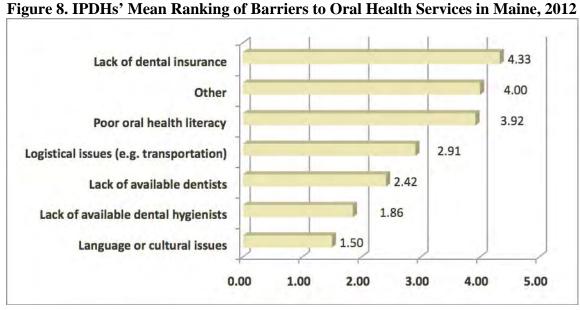
IPDHs were asked to rank a list of possible barriers to obtaining oral health services in Maine on a Likert scale of 1 to 5, with 1 being the most significant barrier and 5 the least significant barrier. IPDHs were provided with defined response options but were also permitted to select "other" and to describe "other." (A list of "other" responses appears in Appendix A., IPDH Survey, Question 30.)

The responses on the Likert scale were weighted by multiplying the number of responses at each point on the scale (1 or 2 or 3, etc.) times a designated weight. Those weights were as follows:

- The number of most significant responses at point 1 was multiplied by 5;
- The number of very significant responses at point 2 was multiplied by 4;
- The number of significant responses at point 3 was multiplied by 3;
- The number of somewhat significant responses at point 4 was multiplied by 2; and
- The number of least significant responses at point 5 was multiplied by 1.

The weighted values for each item were then added together and divided by the number of responses to that item to arrive at a mean value. A mean score of 5 would indicate the most significant barriers.

IPDHs felt that the most significant barrier to oral health services was a lack of dental insurance (mean score of 4.33). "Other" barriers (mean score of 4.00) and poor oral health literacy (mean score 3.92) were the next most significant barriers. While logistical barriers, such as lack of transportation or lack of time off from work, lack of available oral health workforce, and language and cultural issues were considered barriers to access, they were not ranked as highly significant factors obstructing access to oral health services in Maine.



Source: CHWS, 2012. Survey of IPDHs in Maine, Question 33.

IPDHs were also asked to rank the greatest unmet need for oral health services in their geographic area on a Likert scale of 1 to 5, with 1 being the most important unmet need. Responses to this question were weighted in the same way that responses to the previous question were handled. The most important unmet need would have a weight of 5 so the weighted average score closest to 5 is the need perceived to be the most important.

IPDHs described preventive services (mean score 4.43) as the most important need followed by restorative services (mean score 3.64). "Other" services are described in Appendix A., IPDH Survey, Question 32.

4.43 Preventive services 3.64 Restorative services 3.50 Oral health education 2.75 Other 2.64 Specialty dental services 0.00 5.00 1.00 2.00 3.00 4.00

Figure 9. IPDHs' Mean Ranking of the Most Important Unmet Needs for Oral Health Services, Maine, 2012

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 32.

IPDHs were then asked to rank the populations most in need of dental services in their geographic areas on a Likert Scale of 1 to 5, with 1 being the neediest. The responses to this question were again weighted in a similar manner as the weighting for the previous questions. A mean weighted score closest to 5 indicates the neediest populations selected by IPDHs. Lowincome children (mean score 4.30) were perceived to be the neediest population in the state followed by MaineCare-insured children (mean score 3.63) and confined elderly people (mean score 3.45).

4.30 Low income children (0 to 18 years ) 3.63 MaineCare insured children 3.45 Confined elderly 3.13 Low income older adults (65 years and older) 3.00 Homeless people 2.43 Uninsured children 2.43 Low income adults (19 to 64 years) 2.25 Uninsured adults 2.00 People with special needs 1.00 Other 0.00 1.00 2.00 3.00 4.00 5.00

Figure 10. IPDHs' Mean Ranking of Populations Most in Need of Oral Health Service in **Maine**, 2012

Source: CHWS, 2012. Survey of IPDHs in Maine, Question 30.

IPDHs provided narrative comments describing possible strategies or policy initiatives that might help address unmet dental need in their geographic areas.

# The Report of Expanded Function Dental Assistants in Maine

### **Characteristics of EFDAs in Maine**

EFDAs in Maine were mainly female (93.8%) and non-Hispanic White (93.8%). On average, EFDAs had worked 11.75 years as a dental assistant with total years working as a dental assistant ranging from two to 30 years. One-quarter of the EFDAs (25.0%) who responded to the survey were also RDHs.

More than 40% of EFDAs indicated that a certificate/diploma was their highest level of education and 31.3% indicated they had a bachelor's degree.

Table 73. Highest Current Level of Education, EFDAs, Maine, 2012

Highest Level of Education	Percent of EFDAs
Certificate/Diploma	43.8%
Associate Degree	12.5%
Bachelor's Degree	31.3%
Master's Degree	6.3%
Other	6.3%

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 16.

EFDAs mainly worked in metropolitan areas of the state. (See the note on page 13 of this report for an explanation of RUCA codes.)

Table 74. Location of EFDAs by RUCA Code, Maine, 2012

Location of EFDAs by Rural Urban Continuum Code	Percent
Rural	18.0%
Small Town	0.0%
Micropolitan	6.3%
Metropolitan	75.0%

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 6.

## **Becoming an EFDA**

EFDAs were asked to indicate the reasons why they became an EFDA. Most indicated a personal interest in learning to do more (93.3%) and/or career advancement (86.7%) as their reasons for becoming an EFDA.

Table 75. Percent of EFDAs by Reasons for Becoming an EFDA, Maine, 2012

Reasons for Becoming an EFDA	Percent of EFDAs
For career advancement	86.7%
My employer encouraged me to do it	60.0%
I had a personal interest in learning to do more	93.3%
Other	13.3%

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 7.

EFDAs were also asked to indicate how they had paid for their EFDA training course. Forty percent of EFDAs indicated that they had shared the cost of the course with their employer.

Table 76. Percent of EFDAs by Source of Payment for EFDA Training Course, Maine, 2012

Payment for EFDA Training Course	Percent of EFDAs
I paid the cost of the course	20.0%
My employer paid the total cost of the course	20.0%
My employer and I shared the cost of the course	40.0%
Other	20.0%

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 8.

# **Employment of EFDAs**

All EFDAs who responded to the survey worked with at least one other EFDA in their workplaces. Fourteen percent of EFDAs worked with only one other EFDA but all others worked with two or more EFDAs.

Table 77. Percent of EFDAs by the Number of Other EFDAs in their Workplaces, Maine, 2012

Number of EFDAs in Workplace	Percent of EFDAs
Works with 1 Other EFDA	14.3%
Works with 2 Other EFDAs	28.6%
Works with 3 Other EFDAs	28.6%
Works with 4 or More Other EFDAs	28.6%

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 16.

EFDAs mainly worked part time (30 hours or less per week) for their primary employers but 46.7% worked more than 31 hours weekly for a primary employer.

Table 78. Percent of EFDAs by the Number of Weekly Hours Worked for Primary and Secondary Employers, Maine, 2012

Number of Weekly Hours Worked	Employer 1	Employer 2
1 to 5 hours	13.3%	18.8%
6 to 10 hours	13.3%	0.0%
11 to 15 hours	0.0%	0.0%
16 to 20 hours	13.3%	0.0%
21 to 25 hours	0.0%	0.0%
26 to 30 hours	13.3%	0.0%
31 to 35 hours	26.7%	0.0%
36 to 40 hours	20.0%	0.0%
More than 40 hours	0.0%	0.0%

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 3.

Most EFDAs in Maine (75.0%) worked in private solo (50.0%) or group (25.0%) dental practices

Table 79. Percent of EFDAs by Type of Primary and Secondary Work Location, Maine, 2012

Work Location	Employer 1	Employer 2
Private dental office – solo	50.0%	12.5%
Private dental office – group	25.0%	0.0%
Community/migrant/ rural dental clinic	12.5%	6.3%
Academic educational institution	12.5%	6.3%

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 4

Most EFDAs worked with general dentists in their primary work locations (93.8%). A few EFDAs worked with specialty dentists in either a primary or secondary work location.

Table 80. Percent of EFDAs by Type of Dentist with Whom the EFDA Worked,
Maine, 2012

Type of Dentist	Employer 1	Employer 2	Total Number of Dentists
General Dentist	93.8%	6.3%	17
Periodontist	0.0%	12.5%	2
Prosthodontist	6.3%	0.0%	1
Endodontist	6.3%	0.0%	1
Public Health Dentist	6.3%	0.0%	2
Other	6.3%	0.0%	1

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 5. Totals exceed 100% because respondents were permitted to select multiple response options

EFDAs provided a wide variety of services in their workplaces. All EFDAs (100.0%) exposed radiographs, but few EFDAs placed periodontal dressings (18.7%) or cemented crowns and bridges (18.7%) during their weekly work time. Also, many EFDAs placed temporary restorations (62.5%) during at least a portion of their weekly work time.

Table 81. Clinical Services Provided to Patients by EFDAs in Maine by Percent of Weekly Work Time, 2012

Clinical Services	0%	1% to 10%	11% to 20%	21% to 30%	31% to 40%	41% to 50%	More than 50%
Apply sealants	6.3%	81.3%	12.5%	0.0%	0.0%	0.0%	0.0%
Apply topical fluorides	15.0%	50.0%	6.3%	12.5%	6.3%	0.0%	0.0%
Supragingival polishing	31.3%	37.5%	0.0%	18.8%	6.3%	0.0%	6.3%
Expose radiographs	0.0%	12.5%	18.8%	12.5%	18.8%	12.5%	25.0%
Perform vitality testing	50.0%	31.3%	6.3%	6.3%	6.3%	0.0%	0.0%
Take impressions	6.3%	31.3%	18.8%	12.5%	6.3%	12.5%	12.5%
Place temporary restorations	37.5%	31.3%	6.3%	6.3%	6.3%	0.0%	12.5%
Place amalgam restorations	68.8%	18.8%	0.0%	0.0%	6.3%	0.0%	6.3%
Contour amalgams	68.8%	18.8%	0.0%	0.0%	6.3%	0.0%	6.3%
Cement crowns/bridges	81.3%	6.3%	6.3%	0.0%	0.0%	0.0%	6.3%
Place periodontal dressings	81.3%	12.5%	6.3%	0.0%	0.0%	0.0%	0.0%
Place/remove retraction chord	56.3%	25.0%	6.3%	0.0%	6.3%	0.0%	6.3%
Other	56.3%	12.5%	6.3%	0.0%	6.3%	12.5%	6.3%

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 9.

## **Attitudes and Opinions**

EFDAs were asked to rank the populations most in need of dental services in their geographic areas on a Likert Scale of 1 to 5, with 1 being the neediest. The responses to this question were weighted in a similar manner as the weighting described previously in this report on page 47. A mean weighted score closest to 5 indicates the neediest populations. Low-income children, from birth to age 18 years (mean score 4.42) were perceived to be the neediest population in the state by respondent EFDAs followed by low-income adults, age 19 to 64 years (mean score 3.75) and homeless people (mean score 3.00).

Low income children (0 to 18 years ) 3.75 Low income adults (19 to 64 years) 3.00 Homeless people 2.83 Low income older adults (65 years and older) 2.75 Confined elderly 2.62 Uninsured children 2.50 People with special needs 2.21 Uninsured adults 2.00 Other 1.00 MaineCare insured children 4.00 0.00 1.00 2.00 3.00 5.00

Figure 11. EFDAs' Mean Ranking of Populations Most in Need of Oral Health Services in Maine, 2012

Source: CHWS, 2012. Survey of EFDAs in Maine, Question 19.

# **Appendix A: Description of Other and Narrative Comments from the Oral Health Workforce Surveys**

The surveys that were fielded for this research contained predefined response options but many questions also permitted the respondent to select "other" as a response. Survey participants were then asked to describe "other." This appendix contains a list of "other" responses and is organized by survey and by question.

Several of the surveys also asked respondents to provide narrative comments. These comments are also listed in this appendix by survey.

### **Dentists' Comments**

## **Question 3**

Describe your current primary worksite (the location where you spend the most time) and secondary worksite. "Other"

<u>Primary Site</u> <u>Secondary Site</u>

Associate at Medicaid-based private practice ASC

Community urban clinic Consultant
Hospital employed Farming
Jessie Albert Dental Center Hospital

Job Corps Independent contractor for military

Not for profit dental center with provisions Internal Medicine to serve the underserved, low income Military Reserve Prison Mobile dental clinic National Guard

### **Question 9b**

In what location(s) did these registered dental hygienists work under public health supervision status? "Other"

**ACAP** 

Community dental office

FQHC (2)

Free dental clinic-

Community WIC clinic (3)

Hygienist college

Independent sites; Hospital-Clinics, Pediatrician's offices

Penobscot Nation

Private hygiene practice MaineCare

School-based sealant program

Strong Area Dental Clinic, Strong, Maine

York County Maine Head Start

### **Question 13a**

Please indicate the impacts of the economic recession on your dental patients or your practice. "Other"

Change in services for cheapest option (5)

Cut staff positions (2)

Decrease in elective surgery, implants, etc.

Difficulty keeping appointments filled (3)

High unemployment and poverty in this area resulted in many new patients seeking low-cost care Higher overhead, lower profit

Hours expanded to accommodate patients work schedules

Doctors' hours shortened

Hours were shortened - no patients

Increased hours of operation and staff hours to accommodate patients (3)

Longer hours to accommodate patients but 30% less patients seen

Loss of insurance

Low-income patients needed FQHC because they could not afford to see private dentists

More Medicaid patients (3)

More patients need care at FQHC

No one received raises

Only a slight decrease

Patients often had extractions rather than extensive work to save a tooth or teeth (2).

Postponed fee increase

Private practice closed

Saw more MaineCare patients (4)

Some patients lost jobs plus insurance

Spending more to market for new patients

Staff hours shortened due to drop-off in patient demand and government healthcare regulations

The demand for services increased.

The health center I worked for lost a grant so I was laid off.

Took more vacation weeks

Volume increased! Fewer dentists willing to see kids!

Volume of self-pay/private insurance decreased

### **Question 17**

# What percentages of dental services are reimbursed by the following? "Other"

Clef palate program

Department of Correction (2)

Department of Labor - Job Corps

Donated Dental Services (6)

Health Saver Cards

**Indian Dental services** 

Medical insurance (2)

Medical insurance for maxillofacial prosthetic patients

DDS program/other nonpaid

Patient financing

Private pay

Self-pay

Charity

Pro bono - my treat

We have a few MaineCare patients (10) under 18 that we treat free of charge.

Sliding fee scale (2)

The FQHC does not divulge \$ info to the practitioners

Trade work

United Way (2)

U.S. Government (2), military

Veterans Administration, Togus, Maine

We also have subsidy and grant monies to supplement patient payments

### **Question 18**

# What is the most important reason you do not treat MaineCare patients? "Other"

All of above and patients are highly unreliable for showing up for appointments. (6)

All of the above (5)

All of the above plus poor treatment of providers

All the above and poor patient compliance (3)

Broken appointments, poor hygiene, often no primary care dentist

Have had trouble getting payment in the past

I do not take any insurance

Limited treatment coverage

Maine should not pay for orthodontic care when there are people in pain

No periodontal procedures covered

No reimbursement

Not accepting new patients

Not my decision

Patients don't keep appointments; they don't value the work, reimbursement too low and paperwork burdensome

Poor patient compliance (4)

Poorly run system

Primarily serve only service connected disabled veterans

Provide medical services to MaineCare patients

Reimbursement is too low and patients are too unreliable (4)

Reimbursement too low and doctors not allowed to treat patients correctly 100% of the time Reimbursement too low and patients are not compliant with care needed or showing up for appointments

Reimbursement too low, paperwork burdensome and "no shows," bad human relations

Reimbursement too low, patients can fail to show, can't charge them.

Reimbursement time is too slow. Not many prosthodontics/adult services are covered by MaineCare.

Services provided by Department of Labor

Slow payment and paperwork burdensome

So few providers accept MaineCare. If I allowed some, I would be swamped by it.

Something free has no value and they treat it as such.

State fails to reimburse

Too long and too much work for staff

Very poor compliance, excessive repeat paperwork

## Question 19a.

# Please describe the location(s) where you provide volunteer dental services. "Other"

Alzheimer's care facility in my neighborhood

Cleft team at Maine Medical Center

Dental mission trips to Guatemala every 1-2 years

Dental screenings

Dentists with a Heart

Educating dentists and hygienists

Educational (Tufts Dental School)

Foreign Missions

**FOHC** 

Free day at our office 1 to 2 times a year

Healing the Children

Hygiene school instruction (2)

In hospital

International dental missions occasionally

Kids class, not through any program

**Knox Clinic** 

Maine General Hospital

Masons child ID program

Military (3)

Military vets

Military mobile van (2)

Military Readiness Events

Mouth guard programs

Non-profit community dental clinic

Oral cancer screenings, domestic violence patients all at our office

Pro bono case per year

Provide volunteer services in my office for local schools

Remote Area Medical

Root Cellar

Root Cellar patients come to my office - free service

Special Olympics (6)

Special Olympics Screening/surgery for Rotaplast (cleft lip/palate repair)

Yearly trips to Central America

# **Question 23**

Describe your education. Indicate the field of study for each degree and the location of the associated education program.

## **Baccalaureate**

Field of Study	State or Country	Field of Study State of	or Country
Agriculture	Maine	Biology	West Virginia
Animal Science	Pennsylvania	Biology	Wisconsin (3)
Anthropology	Pennsylvania	Biology/Biochemistry/	<b>、</b> /
Art History and	,	Microbiology	New Hampshire
General Science	Oregon	Biology & Business	Massachusetts
Arts	Maine	Biology & Chemistry	Maine
Bacteriology	Maine	Biology & Chemistry	Massachusetts
BDS	India	Biology & Chemistry	New Jersey
Biochemistry	California	Biology & Chemistry	New York (2)
Biochemistry	Maine (6)	Biology & Earth Science	Ohio
Biochemistry	Massachusetts	Biology & Economics	Pennsylvania (2)
Biochemistry	Ohio	Biology & Engineering	Massachusetts
Bio-communications	Pennsylvania	Biology & Music	Massachusetts
Bioinformatics and	ž	Biology & Music	New York
Molecular Biology	New York	Biology & Philosophy	New York
Biological Sciences	Alberta, Can.	Biology & Pre-med	New York (2)
Biological Sciences	Maine	Biology & Psychology	California
Biology	Arizona	Biology & Psychology	Connecticut
Biology	California (5)	Biology /Biochemistry	Maryland
Biology	Connecticut (3)	Bio-science	Ohio
Biology	Florida	Botany	Massachusetts
Biology	Illinois	BSc	Halifax, NS
Biology	Indiana	BSc	New Brunswick, NB
Biology	Iowa	Business	Pennsylvania
Biology	Maine (23)	Chemical Engineering	New York
Biology	Maryland	Chemistry	Indiana
Biology	Massachusetts (13)	Chemistry	Maine (3)
Biology	Michigan (3)	Chemistry	Maryland
Biology	Nebraska	Chemistry	Massachusetts (2)
Biology	New Hampshire (3)	Chemistry	Minnesota
Biology	New Jersey (2)	Chemistry	New Hampshire
Biology	New York (9)	Chemistry	New Mexico
Biology	Ohio (4)	Chemistry	New York (3)
Biology	Pennsylvania (5)	Chemistry	Vermont (3)
Biology	Texas (3)	Chemistry/History	Georgia
Biology	Vermont	Chemistry/Premed	Massachusetts
Biology	Virginia	Classics	Massachusetts

Dental hygiene	Maine (3)	Pharmacology	Rhode Island
Dental hygiene	Rhode Island	Pharmacy	Rhode Island
Dentistry	Nigeria	Physics	Massachusetts
Economics	Massachusetts	Physics, Biology, Math	Vermont
Education	Canada	Premed	Maine
Education	Ohio	Premed	Nebraska
Electrical Engineering	New York	Premed and Classics	Maine
Engineering	Virginia	Psychobiology	New York
English Literature	Massachusetts (3)	Psychology	Illinois
Food & Nutrition	Maine	Psychology	Indiana
Forestry	Maine	Psychology	Maine (2)
General Arts & Sciences	Pennsylvania	Psychology	Massachusetts (2)
Geology	New York	Psychology	Pennsylvania
Health Science	Florida	Psychology/Sociology	Colorado
Health Science	N-B Canada	Religious Studies, Premed	Massachusetts
History	Iowa	Resource management	New York
History	Massachusetts	Science	Connecticut
Human Nutrition	Maine	Science	Iowa
Language	Utah	Science	New York
Life Sciences	Massachusetts	Science	Ontario, Can.
Math	New York	Science	Pennsylvania
Math	Vermont (2)	Science Education	Maine
Math/Biology	Massachusetts	Social Work	Ohio
Math/Biology	New Hampshire	Sociology	Florida
Mathematics	Massachusetts	Sociology	New York
Mathematics	Pennsylvania	Sociology	Pennsylvania
Mathematics	Vermont	Zoology	Maine (26)
Medical Biology	Maine	Zoology	Michigan
Microbiology	Maine	Zoology	Nebraska
Microbiology	Massachusetts	Zoology	New Hampshire (2)
Microbiology	New Hampshire	Zoology	North Carolina
Microbiology	Washington	Zoology	Ohio (2)
Microbiology/cell science	Florida	Zoology	Utah
Molecular, Cellular,		Zoology	Vermont
Developmental, Biology	Connecticut	Zoology	Washington (2)
Natural Sciences	Massachusetts (2)	Zoology, Physiology	New Zealand
Nutrition	New Hampshire	Zoology/Premed	North Carolina

# Master's

Field of Study	State or Country	Field of Study	State or Country
Anatomy	New Jersey	Biology & Educ.	Arizona
Anatomy	Nova Scotia, Canada	Biomedical ethics	California
Biology	New York	Bone biology	Massachusetts
Biology & Educ.	Missouri	Business Admin.	Utah

Cert MIP	New Hampshire	Med chemistry	England
Chemistry	Maine	Microbiology	Maine (4)
Dental Science	Connecticut	Neurosciences	California
Dentistry	Kentucky	OMS	Massachusetts
Dentistry	Ohio	Oral biology	Maryland
Education	Kentucky	Oral physiology	Georgia, USA
Education	Maine	Orthodontics	Virginia
Education	New Mexico	Orthodontics	Indiana
Education	Pennsylvania	Orthodontics	Missouri
Endodontics	Toronto, Canada	Public Health	Maryland, USA
<b>English Education</b>	Massachusetts	Public Health	Massachusetts
Genetics	Connecticut	Public Health	New York
Health Management	Pennsylvania	Social Work	Ohio
Immunology	Maine	Theology	Maine
MagD	Illinois	TMJ	Krems, Austria
MBA	New York		

# **Dental Doctorate**

Field of Study	State or Country	Field of Study	State or Country
DDS	California (5)	Dentistry	California (2)
DDS	Connecticut (3)	Dentistry	Colorado
DDS	Georgia	Dentistry	Connecticut (3)
DDS	Halifax, Canada	Dentistry	Illinois (2)
DDS	Illinois (2)	Dentistry	Iowa
DDS	Iowa (4)	Dentistry	Massachusetts (13)
DDS	Kentucky	Dentistry	New Jersey (2)
DDS	Maryland (3)	Dentistry	New York (4)
DDS	Massachusetts (10)	Dentistry	Nova Scotia, Can. (2)
DDS	Michigan (4)	Dentistry	Ohio (3)
DDS	Minnesota (3)	Dentistry	Pennsylvania (3)
DDS	Nebraska (3)	DMD	Arizona
DDS	New York (14)	DMD	Connecticut 11)
DDS	North Carolina (3)	DMD	Kentucky
DDS	Nova Scotia, Can. (2)	DMD	Massachusetts (53)
DDS	Ohio (12)	DMD	Missouri
DDS	Pennsylvania (7)	DMD	New Jersey (5)
DDS	Texas (3)	DMD	Pennsylvania (23)
DDS	Virginia (2)	DMD	Quebec, Canada
DDS	Washington, DC (13)	Endodontics	Massachusetts
DDS	West Virginia (3)	General Dentistry	Connecticut/USA
DDS	Wisconsin	General Dentistry	Illinois
Dental	Canada	General Dentistry	Kentucky
Dental Medicine	Massachusetts (3)	General Dentistry	Maine (2)
Dental Medicine	Pennsylvania	General Dentistry	Massachusetts (20)

General Dentistry	Nebraska	General Dentistry	Washington, DC (3)
General Dentistry	New York (3)	General Dentistry	Wisconsin
General Dentistry	Nova Scotia, Canada	General, DMD	Connecticut
General Dentistry	Ohio	OMS	Massachusetts
General Dentistry	Pennsylvania (2)	Teeth	Massachusetts

# **Other Doctorates**

Field of Study	<b>State or Country</b>	Field of Study	State or Country
Biochemistry	England	Medicine	Maine
CAGS	Massachusetts	MS, Orthodontics	Minnesota
Endodontist	Pennsylvania	Oral Surgery	Pennsylvania
FAGD	Illinois	Orthodontics	New York
JD Law	New Hampshire	Pediatric Specialty	Massachusetts
MD	Florida	Prosthodontics	Georgia
MD	Massachusetts (3)	Prosthodontics	New Jersey
MD	Nebraska	Surgery	Austria

# **Other Degrees**

Field of Study	State or Country	
AEGD	North Carolina	
AEGD	Ohio	
Anesthesia	Massachusetts	
AS Flight Tech	Florida	
Biochemistry, Post-Bac./BS Mechanical Eng.	Maine	
Certificate in Orthodontics	Ohio	
Certificate of Periodontics	Massachusetts	
Certificate in Orthodontics (3-year program) w/ Master's	Connecticut	
Certificate of Advanced Graduate Studies-Orthodontics	Massachusetts	
Certificate of Advanced Graduate Study Specializing in		
Pediatric Dentistry	Massachusetts	
Certificate of Periodontics	Massachusetts	
Certificate of proficiency in Orthodontics	New York	
Certificate: general practice residency	New York	
Chartered Financial Analyst	Virginia	
Dental Hygiene	Maine (2)	
Dental Hygiene	Massachusetts	
Dental residency	Maine	
Electrical Engineering, 2 year, Endodontics	Massachusetts	
Endodontics	Michigan	
Fellow in Academy of General Dentistry	Maine	
Fellow in the Academy of General Dentistry	Maine	
Master Acad of Gen. Dentistry, Maxillofacial Prosthetic,		
Oncology Fellowship	Texas	

Maxillofacial Surgery

MS

Oral & Maxillofacial Surgery Oral & Maxillofacial Surgery

Orthodontics
Ortho certificate

Orthodontic spec. certificate

Orthodontics Orthodontics

Pediatric Dental Certification Pediatric Dental Certification

Pediatric Dental Certification Pediatric Dentistry Residency

Pedodontics Certification

Periodontics Periodontics/Implants

Prosthodontic residency

Residency FRSH

GPR JD Connecticut Ohio

New York Washington

Massachusetts

Massachusetts Pennsylvania New York

Pennsylvania Connecticut

Ohio

Connecticut Pennsylvania Michigan Pennsylvania Massachusetts

Texas Nebraska

London, England Massachusetts New Jersey

## **Question 24**

Indicate your future plans. "Other"

Add associate in 1-5 years

Buy practice

Consultant

Continue to practice

Depends on what happens with dentistry

Expect to purchase current practice within 5-10 years

Expecting to purchase current practice from senior doctor, hire a new associate, keep current hours (possibly expand hours to one more day/week), practice for at least 25-30 more years

Hire associate

I'm 64 years old and still having fun

Increase teaching and/or speaking

Move out of the state of Maine

Move practice to a new building within same city.

Move to practice location out of state due to restrictive clause in current contract

My son is in dental school

Not ready to retire

Only work in my office full time/leave second office

Open a practice in 1-5 years

Open additional locations

Open another practice

Open new office but continue with underserved population part time

Practice with normal hours except for maternity leave (probably about 2 1/2 months)

Reduce hours if I bring in an associate within 5 years, retire in 15 years

Relocate to another state

Retire 10-15 years

Retire within 10 years

Retired- work 2times per week from June to Oct.

Stay in Maine if I can find enough patients to keep my practice open

Stay in practice at least 20 years

Teach

Try to find work, presently looking in MA, ME, NY, RI

Unknown - may keep some hours but also work in private practice

Want to have a say in transition 1-5yrs

## **Question 25**

In your experience, are there barriers that impede people's ability to obtain dental or dental hygiene services in your geographic area? "Other"

Don't care on part of patient,

Ability to pay for care (2)

Aging population - lack of good jobs

All of the above except language or cultural issues

Basically many patients want treatment for free

Cost of care (6)

Costs/income

Low income/high cost of service

Disposable income - none

Economic/financial barriers

Economic issues - There is not a lack of dentists in Maine

Economic issues/fear/lack of priority

Poor economy, poor job market (2)

Economics-low income = unable to afford care

Financially challenging for most people; especially without insurance

Indigent area, economy getting worse, no manufacturing jobs left, Maine is a welfare state!

Lack of awareness that FQHC dental program is available

Lack of dental clinic providing care for MaineCare and sliding fee patients

Lack of dental providers of any kind

Lack of dentist to take MaineCare

Dentist who will accept MaineCare

Lack of dentists in remote areas

Lack of dentists in rural areas, Lack of dentists accepting MaineCare

Lack of financial commitment or inability to afford (2)

Lack of any payment mechanism

Lack of income (6)

Lack of money (14)

Lack of money after rent, food, gas

Lack of money to pay for any services regardless of type of provider

Lack of sufficient income in a down economy

Lack the ability to pay either by not having insurance or more importantly not seeing the benefit Level of reimbursement from MaineCare

Lack of MaineCare reimbursements sufficient to cover dental costs to providers thus few participate

Liberal ideas of entitlement when job creation is #1 issue

MaineCare - Poorly accepted by providers as it is underfunded and there is no accountability

Money - State reimbursement is pathetic for MaineCare

Poor MaineCare reimbursement

Lack of value or importance of dental care/leaving until it becomes an emergency

Lack of perceived value of services versus other things (cable TV, beer, vacations, etc.)

People would rather spend money on motorcycle, snowmobile, boat, new truck, etc.

Lack of personal finances being placed towards dental health

Limited discretionary funds

No value in a free service/no water fluoridation

Oral health takes a lower priority than other elective expenditures

Other offices' Medicaid policies

Patients do not value the importance of regular care.

**Priorities** 

Public is not aware of the availability of CHC dentistry

Socioeconomic status

Some patients have no interest in their oral health. They have an access problem to free on demand

They don't want to spend the money or are afraid

They don't want to/can't pay for services

Total available funding

Unemployed

Fear and ignorance

Dental phobias

Fear of dental treatment (5)

Hygiene not covered for MaineCare patients

# **Question 26**

# In your experience what is the greatest unmet need for oral health services in your geographic area? "Other"

All needs are being met for patients who want it.

All needs can be met if finances are available

All to some degree

Needs are met

Needs are unmet due to patients not seeking care, not due to a shortage of providers

No money, poor area, ignorant drug-infested rural areas.

No unmet need

No unmet services

There are no unmet needs only the refusal to reimburse or pay for them

There are plenty of dentists and resources for all patient needs

They are all met

I am in a high income area with few unmet needs - so I am not sure how to rank these

I believe all are adequately available

In my particular area, all of these services are provided adequately.

Ongoing relationship with a dental home

Oral surgeons

Desire to go to the dentist - some people do not desire routine care

Education

**Education dentally** 

Education, there is plenty of access to care, it's educating people to not go to the emergency room

Instruction in personal responsibility

Parents who will take care of their children's teeth

Patient apathy

Patient compliance

Patient's orientation to good dental health

Understanding of healthful habits/individuals role in own health

Lack of community coordinator to help with barriers

Anesthesia

Emergency services (3)

Extraction services

Fluoridation

Transportation for patients to dental offices, especially CHC who have many unfilled chairs

Free/on demand emergency dental services

Funding for dental work (2)

Good economy through job creation--best social program is a job

Jobs

Lack of patient's ability to pay for services

MaineCare practices

Management of occlusal issues

Money (2)

# **Question 27**

In your opinion, what population groups are most in need of oral health services in your geographic area? "Other"

All need help

All of the above (6)

All population groups affected by lack of money equally

All these people have a local clinic for treatment

Everyone, because there is no viable economy here anymore, Welfare State mentality.

Fearful patients

I personally do not see any of these groups in need in my immediate area.

Insured individuals with poor reimbursement

It's about money and perceived need

MaineCare-insured adults

Males 17-32, "invincible group"

No way to know as plenty of practitioners are taking new patients.

Nursing home lack of dental care

Of the people that need dental services I have no way of ranking this.

People unwilling to pay for anything in health services

Some segments of all the above

The elderly are most in need

The Portland area is in need of services I assume - but I do not know the neediest population

What about illegal aliens and migrant workers?

Dental services are not a priority to many

# **Registered Dental Hygienists' Comments**

#### **Question 3**

Describe your current primary (the location where you spend the most time) and secondary (if applicable) worksites. "Other"

Primary Worksite Public Health WIC (2)

Aspen Dental-corporate Public health: schools, homeless shelter, etc.

Endodontic office State

Enrolled student Volunteer at free clinic Mental health dental clinic Work for temp agency

Nonprofit, private practice

Not working currently <u>Secondary Worksite</u>

Pediatric medical office Periodontist

Psychiatric hospital Youth corrections facility

# **Question 4**

Please describe the dentists(s) for whom you work in your primary and secondary worksites. "Other"

Academic (2)

Community-based early intervention program

Dental assisting school

Dental hygiene academics working with multiple general dentists

Dental hygiene school (4)

Holistic and biological practice

I am currently working under Public Health Supervision--a general dentist

Multiple volunteers

No dentist working with me

None - Supervising dentist for public health dental hygiene is not on site

Pediatric (3)

PH supervision

Public Health - no dentist (2)

Tech school for dental assistants

The second site is a nonprofit public health preventive dental service

Work with dental hygiene students

#### **Question 8**

Please indicate your major tasks and roles as a RDH. Please indicate the NUMBER OF HOURS spent weekly on each activity. For clinical tasks, please indicate the level of supervision under which you generally work when performing each task.

Five hygienists in our facility, two deliver local and N2O. I see periodontic patients primarily. All activities overseen as clinical educator and under Maine law supervision levels per function. All under public health supervision

Assist the dentist with emergency patients

Assist the Dr. with surgery

Diet/nutritional counseling

Difficult to state how many hours any of the above are done weekly as I am an educator

Direct intraoral care

Director of a nonprofit

Educator

Fitting perm crowns, seeing emergency patients

I do not work in the summer

I volunteer at a free clinic with offsite dentist supervision

Laser-post quad scaling

Many of these are done occasionally, just not weekly

Marketing of practice

Non-contamination time extremely important

Operatory and instrument clean-up

Presentation on oral health initiative

Program coordination

Room care, instrument care

Sterilization procedures (2)

Surgical assistant

Taking blood pressure, sterilization, writing charts, referrals, adjusting the schedule

**Teaching** 

Testing and bacterial pathology

Unable to provide hours, I work varied days, weeks and hours through the school year

Varies greatly depending on schedule

#### Hours

- 1-2 Assistant in periodontics and implant surgery
- 1-2 Calling next day patients, updating comp info, office work
- 1-2 Clean up confirmation calls, sharpening instruments,
- 1-2 Dentist administers anesthesia for SRP, when a no-show required to assist--some handson, more cleanup, setup
- 1-2 Education oral health classes
- 1-2 Fabricate bleaching trays and instruct patient use
- 1-2 Laser to treat periodontal disease
- 1-2 Make appointments
- 1-2 Management
- 1-2 Medical history review/blood pressure
- 1-2 Notes, 1-2 hours
- 1-2 Outreach education daycare schools
- 1-2 Program administration
- 1-2 Rx review, med treatments
- 1-2 Scheduling patients, instrument sterilization, stocking equip shelves

#### **Question 10b**

# Indicate the location(s) in which you provide volunteer services. "Other"

Annual donated care

Back to School, Ellsworth

Brain Tumor Foundation, volunteer proceeds from half day

**Bright Smiles** 

Dentist give back day - in our office

Dentistry with a Heart day (2)

Dentists with a Dream (profits) benefits, St Jude's Hospital/Brain tumor research

Events handing out toothbrushes, floss, paste

Free dental clinic

Free treatments for 1 day each year

Girl Scouts/Brownies

Head Start-education

Health care for homeless, COHP (Bright Smiles)

Homeless shelters (2)

I volunteer days in another FQHC seeing patients

In-office volunteering (3)

International dental volunteer group

Knox Dental clinic (3)

Lincoln County Dental Clinic

Lobby day Augusta, stand down clinics military and homeless

Local dental clinic

National Guard x-ray screenings

Oasis Dental Clinic (4)

Oral cancer screenings

Patients who have an elderly one at home

Preschool volunteer (2)

Public Health in schools

Services delivered through Saving Smiles, Inc.

Talking to school children during February

The Leavitt's Mill free health clinic

The Root Cellar

Volunteer clinic

We work out of a van at schools

#### **Question 11a**

#### Describe the reasons that securing employment is somewhat or very difficult. "Other"

Current state of economy (8)

Decline in demand for services due to poor economy and fewer patients with dental insurance Dentists do not seem to advertise for hygienist, maybe there's little turn over.

Dentists like to hire part time

Depressed area

Economy - many offices have cut hours (2)

Economy - more hygienists working longer

Economy - patients don't have insurance. They don't come if very low income.

The current economy (3)

The economy in general has fewer patients receiving dental hygiene services

The economy isn't good. People not spending money on dental hygiene, therefore less need for hygienists

Slow economy, patients not keeping or making appointments for care, students come from all over the country not just Maine

Recession, RDHs staying at their current jobs; dentists hiring part time only; somewhat too many hygienists in the area

Most dental offices have had some slow down with the economy. Very little hiring going on Most offices have several part-time DH's and full-time work is hard to find.

Too few patients that can afford care

Loss of patients due to economy and finances

People are losing their dental insurance coverage, so there are less active patients in Maine practices.

Not enough paying patients to fully staff all dentists in Maine. Lack of education in surrounding population

Not enough people seeking preventative care for many reasons-less RDH jobs needed

Few jobs so established RDHs stay in their jobs 20+years, after 6 months a new dentist needed someone so I was hired.

Hygienist are keeping their full-time jobs and not going part time or retiring (2)

Hygienist working longer and hard to find full-time job versus half days a week

Hygienists are practicing longer and not leaving offices due to lack of employment

Hygienists are staying in their jobs rather than moving around.

Hygienists are working more years and field is saturated.

I live more rural where there seems to be a balance here with dentists/ RDH, probably need more dentists-I work in the city where there is a RDH school -more graduates looking for jobs, also more of a concentration of dentists but generally more RDH's

In our office there are many no-shows or cancellations which made our office go from 32-34 hours down to 24 or less

Job availability

Limited by license from working in hospitals, nursing homes and homeless shelters

New grads can't get jobs - Lack of experience (4)

The last full-time job I applied for had 50+ applicants

There should be dental clinics where TRAINED RDH's could work providing supervised dentistry.

Usually jobs are not posted jobs given in office

Older hygienists are working longer and not retiring.

Older practices with staff retention

Once a hygienist finds a dentist she/he likes they're unlikely to move from their job

Practices are not expanding and RDH's not leaving positions

RDH's staying in profession longer than ever before possibly due to economy

Rural areas/not enough dentists and too many hygienists

Local dentists nearing retirement and are not expanding practices in this weak economy

Shortage of dentists in state

The costs for a hygienist to set up a rural practice are challenging. It would be nice to see some grants for this as there are for dentists to set up a practice and to encourage people to live in a rural setting.

Dentists retiring and working fewer hours

Dentists using several part-time hygienists to avoid paying benefits (2)

Too few patients that can afford care

Unfair controls by BODE- limiting growth of professional RDHs to obtain Practitioner degrees – similar to Minnesota.

Being controlled by the dental board as to where and how we can provide prevention services blocks many avenues for employment

No health insurance, no incentives, personalities of dentists

None of the above explains the reasons why securing employment is difficult. In a different model there would be plenty of work for all of the RDH's in Maine

No jobs to apply for!

I don't know

# **Question 14**

# Please indicate your future plans for the next five years. "Other"

Also getting EFDA license 5/2013

Applying to dental school at UNE (2)

Become a dentist

Considering dental school

Dental school (2)

I would love to become a midlevel hygienist to serve the needs of my community. If unable to do so, I will have to seriously reconsider dental school. Many challenges present themselves since I would be a non-traditional student.

Finishing my BS, currently hoping to open more doors for more opportunities

Obtain BS and possible teach, public health or independent

Graduate with BS in Dental Hygiene; teach in clinic setting, DH Programs

If allowed- master's degree in ADHP- advanced dental hygiene practitioner

Obtain a master's degree

Possibly further my education

Consulting and education

Husband's job may cause me to move

Currently temping

I work for per diem and am exploring other employment options. There are not many good ones!

I'm trying to find more hours as a hygienist-if not I may seek another type of job

Increase my hours after my little ones are in school

Become full time in the pedodontist's office I am currently working in

I expect to remain in my current position and hopefully gain more employment.

I hope to acquire a position in private practice in the near future, but because of the extreme lack of opportunity I will continue to practice under public health supervision for the next few years out of necessity and may change careers within 5 years

I hope to become a dental hygiene educator (2)

I may look into working in a nursing home on my day off

I recently received my IPDH, would like to open own practice (2)

I would like to work in dental research.

I would love to work in the schools full time but concerned about lack of funding

Moving west with intentions of practicing as an RDH, initially beginning with volunteer at dental clinic located in a hospital for the uninsured, unemployed and underprivileged

My dentist may be retiring? Hope to find another job locally if a position is available. Not many openings in this area.

Both dentists nearing retirement

Not sure

# **Question 20**

# Please indicate your highest level of completed education. "Other"

Associate, but working on my bachelor's

BS in different field

I have 2 BS degrees premed and dental hygiene

Numerous continuing education courses yearly! (48 hours +/year)

One semester away from my BS

Public Health Certificate

Anesthesia license

# **Question 22**

# In your opinion, what population groups are most in need of oral health services in your geographic area? "Other" (1 being neediest)

All neediest except homeless

All neediest except MaineCare-insured children (3)

All the above should be 1's (6)

**Aroostook County families** 

Homeless have good services in Portland

Middle-income adults who don't qualify for the "give-away" programs and have to pay for their own insurance

Middle income families who have lost jobs recently

Patients with current medical challenges

# **Question 23**

In your experience what is the greatest unmet need for oral health services in your geographic area? "Other" (1 being the most important unmet need)

Advocates

All are most important unmet need (5)

All equal - about a 3

All should be 5's

Care for confined elderly

Desire for health

Emergency care

Lack of access to care

Low-income adult services

Major restorations

Mobile dental units

More dentists

Need more dentists who will take MaineCare

No practice but ours accepting new patients

Not enough dentists

Oral cancer screening

Oral surgery and pedodontic services

Orthodontics

Orthodontics for people with extreme crowding

Periodontic therapy

Reasonable prices for treatment

Very few dentists take MaineCare as the fees are so low and have not changed in several years.

While kids are in school K-12 there should be dental chairs in the schools to do screenings.

# **RDHs Working Under PHS Status Comments**

#### **Question 26**

# How often did you use public health supervision status in the past? "Other"

100% of the time as public health RDH until 3 weeks age when we hired a new dentist.

For over 20 years I went to four elementary schools to do education.

I was working under a federal grant

Once a year

Part-time job

Weekly

Worked with mobile hygiene van for a short time

#### **Question 28**

In what settings do you typically work under public health supervision status? "Other"

FOHC (2)

**Head Start** 

Homeless shelters (3)

Medical centers (2)

Doctor's office

Pediatric medical office

WIC (2)

School classrooms sometimes for education (2)

Nonprofit programs

Community health center

Free dental clinic (2)

Free health clinic

Tooth Protectors/Traveling/Medical Offices

Root Cellar Community Center

Community center

Maine Coast Community Dental Clinic when there was no dentist.

Weekend clinics

Dental van at schools

Dental clinic without a dentist

Private practice dental office

Period of time for FQHC when gap in two dentists being employed by the center

Dental sealant program with ACAP

Lobby day

# **Question 29**

# Indicate your reason(s) for practicing under public health supervision status? "Other"

I have found private practice is too focused on money. (I hate private practice for that reason). I just love to clean teeth. Quit my 30 year job - doctor's concern for \$ more than quality of care. Necessity due to a major lack of job opportunities in private dental offices.

Enjoyed working as a peer with dentist - we had a common employer.

Limited jobs in private practices

Maintain employment

Necessity for working with ACAP

Needed employment

Needed more money

No other options

Paid jobs

School project (2)

Very concerned about homeless access to care

Weekend work

#### **Question 30**

Indicate how the non-volunteer services you provide when working under public health supervision status are paid "Other"

The practice pays me, I primarily see MaineCare children and we bill them.

# **Question 31**

In your work as a RDH under public health supervision status, how often do you provide the following services? "Other"

Administrative

Home care instructions

I see babies with their first tooth in hopes of helping their providers keep them caries free.

Place temporary fillings

#### **Question 32**

Would it be helpful to have a more expensive scope of practice when providing services under public health supervision status?

I would like to be able to call decay, decay.

With proper training and education, I can see a need in the public health setting for simple extractions of baby teeth, as well as fillings. I can usually readily refer in Portland, but in rural areas, I think this is a critical need.

Currently we must notify the Maine Board of Dental Examiners of locations where services will be provided. There have been several times for me when asked to provide services in a location that I had to decline because of the notification process. Contacting previous dental providers to get approval to see a patient is very restrictive and time consuming. If a parent wants a child to have preventative services we should be doing everything we can to provide that service and not delay to contact previous provider for permission for treatment.

I think that it would be easier without public health supervision and start getting the advanced practice dental hygienist out there. Our state board is primarily made up of dentists. We need to be trained to do our work on our own.

The world health organization views the temporary fillings we place as permanent. It would be nice if the state of Maine also viewed them the same. If that were the case we would decrease the time we spend looking for permanent filling placement. To my mind it is redundant and a waste of our resources.

We had to get our radiology license to be a dental hygienist and the dental board has no right to take that away because I practice outside their office. They claim that radiographs are for diagnostics only; I feel they are for identification purposes that can better serve that patient. This is just another way for the dentist to try to force people into their practices for their prevention services. Again, self-regulation would expand the services that people need in order to prevent oral disease.

I don't work under public health supervision status anymore, but it would be easier as a hygienist to provide services such as oral inspections and fluoride varnish w/out general or direct supervision needed by a dentist.

Extractions and restorations.

I would like to be able to diagnose radiographs and provide basic restorations.

Placing temporary fillings.

Remove loose, exfoliating primary teeth with topical anesthesia.

Temporary fillings are currently permitted but we are not able to be paid for them. This would really help us as a nonprofit.

X-rays, access to dental services not just prophylaxis e.g. fillings, crown, etc.

Administer local anesthesia.

Bill insurance companies.

Brush biopsies.

Remove public health notification and reporting procedures. What RDH provides is written in patients charts.

Simple extractions. (2)

Bill out for elderly cleanings thru MaineCare.

Dental hygiene diagnosis! (3)

Diagnose w/ radiographs- send out referrals.

Emergency triage (dental and oral).

Give anesthetic without dentist in the house. (2)

Occlusal restorations.

Take radiographs without supervision. (2)

Temporary fillings. (2)

Able to write prescriptions. (2)

Advanced hygiene practitioner (AHP). Master's degree level only. Not expanded hygiene service.

I had never placed or been shown how to place a temporary restoration.

Independent practice with financial assistance (it is very expensive to set-up a hygiene practice plus malpractice insurance.

Not sure, but I believe it would be good to have a expansive scope of practice.

Prophy, fluoride.

X-Rays (4)

# **Question 33**

Indicate the types of patients you typically treat when you are working under public health supervision status. "Other"

All 2nd and 3rd graders are eligible for sealant program at no cost. Other children.

# **Question 34**

Indicate your referral practice for patients in need of dental services. "Other"

Often we will make the appointment and take the patient!

We have two caseworkers who facilitate the referrals.

Work with our program's case manager.

Send referrals home to parents or call parents when there is gross need.

School nurse handles those in need of services.

Do not do referrals.

Gave referral to parent.

I currently work with a dentist; if they see me, they are seeing a dentist too.

Provided name of dentist.

Sent letter home with child with suggestions to take child to dentist.

The employing RDH worked with patients to find dentists.

Worked with the school nurse to find a dentist to provide care.

#### **Question 35**

Describe the overall level of difficulty you encounter in finding a dentist to accept referrals for dental services in your geographic area. "Very Difficult"

Most dentists are not taking new patients.

Not taking new patients, or new MaineCare patients.

# **Independent Practice Dental Hygienists' Comments**

#### **Question 5**

What percent of your work time is spent providing services in the following locations? "Other"

1-10%	Denture center
26-50%	Public health/school settings
51-75%	Independent dental hygiene office
51-75%	My own IPDH office

#### **Question 6**

Indicate the percent of your weekly work time spent doing the following. "Other"

Maintenance, set up, clean up- only person there! (did not indicate % of time) Program management. (did not indicate % of time)

# **Question 11**

Indicate your referral practices for patients in need of dental services. "Other"

Very few are on my list.

I provide a referral to the nursing staff at the nursing home facility.

Referred to social services, they take it from there.

# **Question 12**

Indicate how you are compensated for the services you provide. "Other"

Patient self-pays when working as IPDH, hourly wage when working for a dentist at private practice.

#### **Question 16**

Indicate your reasons for selecting practice as an IPDH. "Other"

Help access to quality care and reduce costs and be able to practice prevention as it should be. Concerned with lack of care for elderly in home or facility. Getting involved with passing laws for future RDH/IPDH.

#### **Question 17**

In your experience, what are patients' attitudes towards receiving services from an IPDH? "Other"

Many don't care that I'm not a dentist - but I will see them and am close so they can make appointments.

Most are very happy I am available to do what I do.

Sons and daughters are thrilled to have care for their disabled parents.

They think it is great that I am running an office and doing hygiene.

## **Question 19b**

Indicate the location(s) in which you provide volunteer services. "Other"

Mostly community volunteering but some on a state level also.

Volunteer to provide input and discussions in how to improve dental care access in nursing homes.

# **Question 28**

Please indicate your future plans for the next five years. "Other"

I am working hard to be one of the first Maine DH Therapists - licensed, minimal supervision. I expect to continue working for a dentist (to get my health insurance) and will continue with and expand my IPDH practice for the elderly and homebound.

Own business, Master's - advanced dental therapist

Advance as much as possible.

I expect to be a full-time IPDH.

I plan to enter dental school.

Eventually open my own independent practice.

#### **Question 30**

In your opinion, what population groups are most in need of oral health services in your geographic area? "Other"

In this area, all ages are in need.

#### **Question 31**

Describe strategies/policy initiatives that might help to address unmet dental need in your geographic area.

Don't let the Board restrict our services to all clients. They are passing a rule at the July board meeting that wants us to service public health supervision clients out of our office site i.e. PHS status client can't come to our office. They also want to restrict our services to children in schools unless we have checked with their family dentist to make sure we have the dentist's permission.

I feel that at least preventive dental care should be covered by MaineCare and Medicare for seniors. It would also be helpful to have nursing homes and assisted living facilities to be required to provide a space or room for in house dental services. This would hopefully help to encourage dentists to look at this aging population and the best ways to serve them. I would love to be able to take x-rays and would like to participate in the pilot program but do not have the

personal funds to purchase a portable x-ray machine. There should be some funding to assist with this process.

Advanced dental hygiene therapist to help at nursing home resident's oral care - IN-House! Local anesthesia, radiographs, extraction of single tooth, broken root-tips, reline/ adjust denture partials, restore 1-2 surface restoration. Our residents have very complex needs, very limited resources and very limited mobility.

Access to care and providers accepting MaineCare or reasonable fee's to uninsured individuals. IPDH. Midlevel dental practitioners.

Access, cost/reimbursement- the list seems endless and getting worse- have to get going sooner than later.

Incentives for dentists to accept MaineCare in private offices. Increased reimbursement for restorative services.

Self-regulation for dental hygiene licensed professionals.

A government grant for an IPDH at the local hospital, The IPDH needs full benefits and to be able to get wages for the work she/he performs.

#### **Question 32**

In your experience what is the greatest unmet need for oral health services in your geographic area? "Other"

Emergency/infection/pain treatment other than ED.

All most important unmet need.

# **Question 33**

Rank the 5 most significant barriers impeding oral health access in your geographic area, from 1 to 5 with 1 being the most significant barrier. "Other"

Lack of affordable preventive care.

# **Expanded Function Dental Assistants' Comments**

# **Question 5**

Please describe the dentists(s) for whom you work in your primary and secondary worksites. "Other"

Does limited orthodontics, a lot of pedodontics, and strong focus on prevention and public health.

#### **Question 7**

Indicate the reason(s) you became an EFDA. "Other"

Not enough services are delegated to auxiliaries and I will train for anything the state will allow. Educator in dental health.

#### **Question 8**

How did you pay for your EFDA training course(s)?

I paid for course and getting reimbursed 75% over 4 years.

Employer paid and I paid back over time.

Employer paid then I earned the \$ back.

# **Question 9**

Indicate the percent of your total weekly work time spent providing the following clinical services to patients. "Other"

41-50% place composites

More than 50% place, trim and adjust composite fillings 41-50% place and contour composite restorations

0% I'm also a dental hygienist. I only did this so I could place filling material

and carve it.

31-40% place composites restorations 1-10% place and contour composites 1-10% place composite and contour

#### **Question 14**

Indicate your race. "Other"

White-Hispanic

# **Question 16**

Please indicate your highest level of completed education. "Other"

Some college

# Appendix B

The following tables use data from the four surveys to display comparisons across oral health professions.

The first table lists dentists, RDHs, RDHs working under PHS status, IPDHS, and EFDAs by work settings and by practice characteristics.

The second table compares the rankings of the various oral health professionals of the populations most in need of oral health services in Maine.

The third table compares the rankings of the various oral health professionals of the greatest unmet need for oral health services in Maine.

The fourth table compares the geographic location s of all oral health professionals in Maine.

The following table shows the location of dentists who were working with EFDAs, RDHs working under PHS status, and IPDHs; and the locations of RDHs, RDHs working under PHS status, IPDHs, and EFDAs in Maine.

Table 82. Percent of Oral Health Professionals by Setting and by Participation with New Workforce Models, Maine, 2012

Settings	Percent of Dentists' Primary Worksite	Percent of Dentists' Secondary Worksite	Percent of Dentists Who Worked with EFDAs	Dentists Who Supervised RDHs under PHS Status	Dentists Who Accepted Referrals from RDHs under PHS Status	Dentists Who Accepted Referrals from IPDHs
Private Dental Practice - Solo	55.4%	2.9%	44.1%	59.6%	52.4%	62.6%
Private Dental Practice - Group	33.3%	4.0%	32.2%	21.2%	29.5%	27.8%
Federally Qualified Health Center	4.1%	2.0%	10.2%	13.5%	6.7%	3.5%
Community/Migrant/Rural Dental Clinic	3.5%	1.4%	8.5%	3.8%	8.6%	3.5%
Indian Health Services	0.3%	0.3%	0.0%	1.9%	0.0%	0.0%
School-Based Dental Program	0.3%	2.3%	0.0%	0.0%	0.0%	0.0%
Academic/Educational Institution	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%
Nursing Home/Long-Term Care	0.3%	1.4%	0.0%	0.0%	0.0%	0.0%
Veterans Hospital	0.6%	0.3%	1.7%	0.0%	0.0%	0.0%
Other	2.0%	3.7%	3.4%	0.0%	2.9%	1.8%
Totals	100.0%	18.6%	100.1%	100.0%	100.1%	99.2%
Settings	Percent of RDHs Primary Worksite	Percent of RDHs Secondary Worksite	Percent of RDHs under PHS Status	Percent of IPDHs	Percent of EFDAs Primary Worksite	Percent of EFDAs Secondary Worksite
Private Dental Practice - Solo	53.7%	6.0%	0.0%	71.4%	50.0%	12.5%
Private Dental Practice - Group	28.7%	3.9%	0.0%	28.6%	25.0%	0.0%
Federally Qualified Health Center	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Community/Migrant/Rural Dental Clinic	1.8%	1.2%	0.0%	0.0%	12.5%	6.3%
Indian Health Services	0.9%	9.0%	0.0%	0.0%	0.0%	0.0%
School-Based Dental Program	3.3%	3.3%	90.6%	7.1%	0.0%	0.0%
Academic/Educational Institution	3.0%	1.8%	0.0%	0.0%	12.5%	6.3%
Nursing Home/Long-Term Care	0.0%	0.0%	3.1%	21.4%	0.0%	0.0%
Veterans Hospital	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	3.9%	0.6%	40.7%	42.9%	0.0%	0.0%
Totals	100.1%	25.8%	*	*	100.0%	25.1%

Source: CHWS, 2012, Surveys. Note \* Totals exceed 100% because IPDHs and RDHs under PHS worked in multiple settings.

The various surveys asked respondents to rank the populations in Maine who were most in need of dental services in their geographic areas. Respondents were provided a list of population groups to rank on a 5-point Likert Scale, from neediest to least needy. The responses to this question were weighted with a mean weighted score, with closest to 5 indicating the neediest populations. There was variation in the rankings across the professions but the professions mainly agreed that low-income children and low-income adults were among the neediest populations in the state.

Dentists and RDHs ranked "other" populations described as all of the listed populations as most in need of oral health services. RDHs and IPDHs ranked MaineCare-insured children as among the neediest populations in Maine, but dentists and EFDAs did not identify these children as being as needy as other groups in Maine.

Table 83. Mean Ranking of Populations Most in Need of Oral Health Services by Profession, in Maine 2012

Patients	Profess	Professional Rankings of Need			
1 attents	Dentists	RDHs	IPDHs	<b>EFDAs</b>	
Low-income children (0 to 18 years )	4.08	3.85	4.30	4.42	
Low-income adults (19 to 64 years)	3.72	3.38	2.43	3.75	
Low-income older adults (65 years and older)	2.88	2.76	3.13	2.83	
Uninsured children	3.05	3.45	2.43	2.62	
Uninsured adults	2.65	2.78	2.25	2.21	
MaineCare-insured children	2.49	3.14	3.63	1.00	
Confined elderly	2.77	2.71	3.45	2.75	
People with special needs	2.48	2.40	2.00	2.50	
Homeless people	2.87	2.96	3.00	3.00	
Other	4.19	4.60	1.00	2.00	

Source: CHWS, 2012, Surveys of Dentists, RDHs, IPDHs, and EFDAs.

Dentists ranked restorative services and then preventive services as the greatest unmet oral health needs in Maine. RDHs and IPDHs ranked preventive services followed by restorative services as the most important unmet needs in Maine. Responses were weighted such that a mean score of 5 would indicate the greatest unmet need for a service.

Table 84. Mean Ranking of the Greatest Unmet Need for Oral Health Services by Profession, in Maine, 2012

D-454	Professional Rankings			
<b>Patients</b>	Dentists	RDHs	<b>IPDHs</b>	
Preventive services	3.81	4.01	4.43	
Restorative services	3.92	3.78	3.64	
Oral health education	3.54	3.39	3.50	
Specialty dental services	2.79	2.74	2.64	
Other	3.66	2.33	2.75	

Source: CHWS, 2012, Surveys of Dentists, RDHs, IPDHs, and EFDAs.

The following table compares the geographic locations of oral health workforces in Maine.

Table 85. Geographic Location of Oral Health Workforce in Maine by RUCA Code,\* 2012

Type of Oral Health Professionals	Metropolitan	Micropolitan	Small Town	Rural
Dentists	51.5%	23.4%	11.7%	13.5%
RDHs	52.4%	18.6%	13.2%	15.8%
RDHs under PHS status	44.2%	15.6%	19.5%	20.8%
IPDHs	35.7%	14.3%	7.1%	42.9%
EFDAs	75.0%	6.3%	0.0%	18.0%

Source: CHWS, 2012 Surveys.

<sup>\*</sup> Note: RUCA codes are a comparatively new Census tract-based classification scheme that utilizes the standard Census Bureau Urbanized Area and Urban Cluster definitions in combination with work commuting information to characterize all of the nation's Census tracts. The metropolitan classification includes areas where there is an urban cluster of 50,000 or more people. The micropolitan classification includes areas where there is a cluster of 10,000 or more people. Small towns include areas with at least 2,500 residents and rural areas comprise settlements with fewer than 2,500 residents. (See USDA Economic Research Service <a href="http://www.ers.usda.gov/briefing/Rurality/MicropolitanAreas/">http://www.ers.usda.gov/briefing/Rurality/MicropolitanAreas/</a>).

# **Appendix C: RDHs Working under PHS Status**

The ME BDE collects data from RDHs working under PHS status about the number of patients they screen and to whom they provide clinical services as well as the locations in which those services are provided. The following lists and table provide summary information about these services. The data that are reported were supplied by the ME BDE to the Center for this report.

RDHs working under PHS status have served patients in a variety of settings. The following lists are locations where services were provided by County beginning in 2002 through 2011.

ANDROSCOGGIN COUNTY

Abused Women's Advocacy Project

Advocates for Children

Androscoggin Head Start/Tri-Town Center

Auburn Head Start

Auburn Middle School Health Center

**Auburn School District** 

Auburn WIC
B Street Clinic
B Street Dental
B Street Head Start
Boys & Girls Club

**Bruce Whittier Middle School** 

Carrie Ricker School Clover Manor Coburn Head Start

Common ties Mental Health Coalition

**Community Concepts** 

Dental Office of Roger Kay, DDS for Livermore

Elementary D'Youville Pavilion Early Head Start

East Auburn Elementary

Edward Little High School Health Center

Elm Street Elementary Fairview Elementary

**Governor Longley Elementary** 

Hillview Apartments-Lewiston Housing

Authority

Hillview Head Start
Jay School District
Lake Street School
Langley Elementary
Lewiston Head Start
Lewiston School District
Libby Tozier School
Lincoln Elementary

Lisbon Community School

Lisbon Head Start Litchfield Elementary Livermore Schools Livermore Falls Schools Livermore Head Start Margaret Murphy Center

Martel Schools

Minot Consolidated School

Montello Schools

MSAD # 52

Multi-Purpose Child Care/Head Start

New Beginnings Shelter
Park Avenue Elementary
Pettingill Elementary
Pittston Consolidated
Poland Community School
Poland Regional High School
River Street Head Start
Roger Kay's Office

"RSU # 10 District Home-Mexico covering: Buckfield Jr./Sr. High, Dirigo Elementary[Peru];

Dirigo High School [Dixfield]; Hartford-

Sumner"[Sumner];

T. W. Kelly"Dirigo Middle School Dixfield];

Meroby Elementary [Mexico];"

Mountain Valley High School [Rumford];"
Mountain Valley Middle School [Rumford];
Pennacook Learning Center [Rumford];"
Rumford Elementary [Rumford]""

Sabattus Central School Sacopee Valley High School

SAD # 36 SAD # 44

SAD # 52 Central office-Turner covering:

**Greene Central Schools:** 

Leavitt Area HS; Leeds Central School;

Tripp Middle; Turner Elem & Turner Primary SAD 6, 35, 55, 60, & 72 (Auburn, Lewiston,

Sanford, & Westbrook)
Sandcastle Day Care
Sandcastle Pre-school
Sherwood Heights School
Spruce Mountain High School
The Center for Women's Wisdom
Tri County Mental Health Services

Trinity Jubilee Center
Turner Head Start

Union # 44

Wales Central School

Walton Schools Walton Head Start Washburn Schools Washburn Head Start

Western Maine CAP

#### **AROOSTOOK COUNTY**

**Aroostook County Elementary Schools** 

Aroostook WIC
Ashland Elementary
Ashland Head Start
Ashland WIC

Benedicta Elementary Bird Street Head Start Bridgewater School Caribou Center Caribou Head Start

Caribou WIC

Connor Consolidated Danforth Head Start

Danforth WIC

Dr. Levesque Elementary School

Dyer Brook Head Start Dyer Brook High School

Eagle Lake Elementary/Jr. High

Eagle Lake WIC

East Grand Head Start
East Grand High School
Easton Elementary
Fort Fairfield Schools
Fort Fairfield Head Start

Fort Fairfield WIC Fort Kent Schools Fort Kent Head Start Fort Kent WIC

Fort Street School

Gateway Elem

Hilltop Elementary
Hodgdon Elementary
Houlton Schools
Houlton Head Start

Houlton Home Based Head Start Houlton North Street Head Start Houlton Southside School

**Houlton WIC** 

Island Falls WIC Clinic
Katahdin Elementary
Little Feather Pre-School
Little Feathers Head Start
Madawaska Elementary School

Madawaska WIC
Maliseet Head Start
Maliseet High School
Mapleton Elementary
Mars Hill Head Start
Mars Hill Schools
Mars Hill WIC Clinic
MicMac Head Start

New Sweden Consolidated New Sweden Schools North Street Head Start Park Street Head Start Patrick Theriault School Pine Street Schools

Presque Island WIC Clinic

Presque Isle Rehabilitation & Nursing Center

Presque Isle Head Start
Presque Isle High School
River Street Elementary
Saint Francis Elementary

South Aroostook Consolidated
Southern Aroostook Community School

Southern Aroostook Home-based Head Start

St John Valley Dental Teague Park Schools Van Buren Head Start Van Buren WIC

Wallagrass Elementary

Washburn District Elementary

Washburn Head Start Washburn WIC Wellington School Woodland Consolidated

Woodland Elementary

**Zippel Schools** 

**CUMBERLAND COUNTY** 

Air National Guard Baldwin Consolidated Baldwin Schools

Barron Center

**Barron Center Nursing Home** 

Barron/Reiche Clinic Berwick Head Start

Box Factory Boys & Girls Club Brentwood Rehab

Bridgton Dental Hygiene Care

**Bridgton Head Start** 

**Bridgton WIC** 

**Bridgton Youth Alternatives** 

Brown Elementary Brown Street WIC Brunswick Head Start Canal Elementary Casco Bay High School Casco Head Start

Casco WIC

Cathedral School

Catherine Morrill Day Nursery

Children's Dental Clinic

Children's Volunteer Dental Clinic

City Health Stations

City of Portland Dental Clinic

Citywide

Clifford/Ocean Avenue Schools

Congin Elementary
Cornish Elementary

**Cumberland & York County Nursing Homes** 

**Deering High School** 

Deering Place Deering WIC

East End Community School

East End Schools
East End Screening
Edna Libby Schools
Fairfield Elementary
Falmouth High School

**Food Shelter** 

Frank I. Brown Elementary
Fred Morrill Elementary
Freeport Nursing Home
George E. Jack School
Girls Transitional
Gorham School District

Gorham WIC Gray WIC

Greater Portland PEDS Greely High School

Hall Schools

Harrison Elementary

Health Store Hiram Elementary Homeless Health

HUD Stand Down Clinic @ Air Nat'l Guard

Station

**Hunger Clinic** 

James Otis Kaler School King Middle School Lake Region High School

Lincoln Schools
Longfellow School

Lyman Moore Middle School Lyseth Elementary School Mahoney Middle School

Maine Mall

Maine Medical OBG
Maine Medical Peds

Maine Medical Center Clinic

Maine Stay

Memorial Middle School

Midcoast Hunger Prevention Program

MMC Pediatric Clinic Moore Middle School Mt. Ararat Middle School Narragansett Elementary Nathan Clifford School North Berwick Head Start Ocean Avenue School

**Otisfield Elementary School** 

Park Place

Peaks Island Schools
Plummer Motz School

Port Resources

Portland Elementary Schools:Adams, Cathedral, Clifford, Hall,Longfellow, Lyseth, Peaks Island, Presumpscot, Riverton, St. Patrick's, St. Joseph's

Portland Family Health Store"

Portland High School Portland House Portland Pediatrics Preble St. Clinic

Presumpscot Schools Prides Corner Elem Pride's Corner Schools

**PROP Daycares** 

PROP Early Head Start PROP Head Starts Raymond Elementary

Reardon's Place Reiche Clinic

Reiche Health Station

Reiche Schools Reiche/Preble Clinic Riverton City Wide Riverton Schools Riverton Screening Riverton WIC

Saccarappa Schools

Saco House Saco Sweetser

**Root Cellar** 

Sacopee Valley Schools

SAD # 6 : Edna Libby and H.B. Emery Schools

SAD # 6, # 55, # 72, SCARBOROUGH, Westbrook

& Windham Schools

SAD # 6, # 55, # 72, SCARBOROUGH, Westbrook

& Windham Schools

SAD # 6, # 55, # 72, SCARBOROUGH, Westbrook

& Windham Schools

SAD 6, 35, 55, 60, & 72 (AUBURN, Lewiston,

Sanford & Westbrook)
"SAD 6, 55 and Lime School"

Sagamore WIC Scarborough WIC Sebago Elementary

Sebago WIC

Songo Locks School
South Hiram Elementary

South Portland Boys & Girls Club

South Portland WIC St. Brigid's School

St. Elizabeth's Child Development Center

St. Elizabeth's Daycare St. Joseph's Manor St. Joseph's School St. Patrick's School Steep Falls Elementary

The Box Factory Homeless Health

Village Elementary

West School

Westbook Pediatric Office

Westbrook Schools Westbrook WIC Westcott Jr High

White Rock Elementary

Windham WIC

**Woodfords Family Services** 

Yarmouth WIC

Youth Alternatives Steps Program

Youth Builders, Inc

# **FRANKLIN COUNTY**

Cascade Brook School
Community Concepts

**Strong Dental Center** 

East Wilton WIC

Franklin City Dental

Hartford Elementary

Hartford-Sumner

Health Fair Jay Schools

Kingfield Elementary Livermore Schools

Livermore Head Start

**Phillips Elementary** 

SAD # 9 covering: Mt. Blue High School; Mt.

Blue Middle School Strong Schools W.G. Mallett School

Wilton WIC

Wilton Family Practice

# **HANCOCK COUNTY**

**Adams School** 

Blue Hill Consolidated Brooksville Elementary Buxport Head Start

Child & Family Opportunities

Dedham School
Dr. Caddoo's office
Ellsworth Head Start
Frenchboro Elementary
G. Herbert Jewett School

Hancock Elementary
Lamoine School

Maine Coast Community Dental Clinic

Maine Coast Community Portable Dental Clinic

Maine Coast Pediatrics Miles Lane School Mt View School

Stonington Head Start Sullivan Head Start

Sullivan WIC

Surry Elementary School
Swans Island School

#### **KENNEBEC COUNTY**

Albion Elementary

**Atwood Schools** 

Atwood Tapley School

Atwood/Williams School

Auburn, Augusta, Biddeford, Boothbay, Kittery,

Norway, Sacoppe Valley, York County Schools

and WIC programs

Augusta Boys & Girls Club

Augusta Head Start Augusta Rehab

Augusta Schools
Augusta WIC

B.B. Head Start

Belgrade Central School

**Benton Elementary** 

Big Brothers/Big Sisters

Carrie Ricker Middle School

Chelsea Elementary

China Head Start

China Primary School

Clinton Elementary

Cony High School

Dental2U

Fairfield Primary

Farrington Schools

Gardiner Head Start

Gardiner Middle School

**Gardiner Rec Club** 

George Mitchell School

Gilbert School

Gray Birch

**H L Cottrell Schools** 

Hall-Dale Schools

Hallowell Elementary

**Hartland School** 

Health Reach

**Healthy Futures** 

Helen Thompson School

Henry Cottrell School

**Hodgkins School** 

**Hussey Schools** 

James H. Bean School

KVCAP/WIC

KVCAP-Head start Lakeview DayCare

Laura E. Richards School Lawrence High School Lawrence Jr. High Libby-Tozier School Lincoln Schools

Magic Years Head Start Maine Autism Society

Maine General Hosp Rehab & Nursing Care

Maranacook Schools

MDHA Lobby Day - Hall of Flags Messalonskee Middle School

Monmouth Academy
Monmouth Schools

Mount Saint Joseph Nursing Home

MSAD # 11 (Gardiner Schools)

MSAD 11 MSAD 16 Nursing Home

Pittston Consolidated Schools Richmond Health Center River View Community School

**Riverview Schools** 

RSU # 12 (formerly Union # 132) RSU # 12 (formerly Union # 133)

SAD # 16 SAD # 44

Saint Joseph Manor

Skowhegan Community Ctr South Gardiner Head Start

Spurwink School State House

Teresa C. Hamlin School

Togus VA

Vassalboro Community School

Wales Elem

Waterville Alternative Education

Waterville Schools

Waterville Pediatrics

Waterville WIC

Webster Head Start

Whitefield Elementary

Williams School

Windsor Elementary

Winslow Elementary

Winthop Schools

Winthrop Head Start

Winthrop WIC

# KNOX COUNTY

**Bangor Homeless Shelter** 

Camden-Rockport Elementary

Friendship Village School

**Hussey Elementary** 

**ICMS Dental Clinic** 

**Knox County Health Clinic** 

Prescott Memorial School

**Rockland Elementary** 

**Rockland Head Start** 

**Rockland High School** 

South School

Union Elementary

Union Head Start

Vinalhaven School

Warren Community School

#### **LINCOLN COUNTY**

Auburn, Augusta, Biddeford, Boothbay, Kittery,

Norway, Sacoppe Valley, York County Schools

and WIC programs

BERT BEVERLY, MD

**Boothbay Region Elementary** 

Damariscotta Head Start

**Dresden Schools** 

Edgecomb School

Family Health Center

**Great Salt Bay Community School** 

**Great Salt Bay School** 

Jefferson Village School

Lincoln Academy

Medomak Valley High School

Mid Coast Dental Hygiene Services

Miller Grade School Somerville Elementary St. Andrews Hospital Waldoboro Head Start

Warren Consolidated School

Whitefield Elementary Whitefield Head Start Wiscasset Head Start Wiscasset Primary

#### **OXFORD COUNTY**

Agnes Gray Elementary

Auburn WIC

Auburn, Augusta, Biddeford, Boothbay, Kittery,

Norway, Sacoppe Valley, York County Schools

and WIC programs
Baldwin Consolidated
Bethel Family Dentistry
Bethel School District

Brilliant Smiles Dental Hygiene

Buckfield Jr/Sr High School

Canton Elem

**Community Concepts** 

Dirigo Schools

Dixfield Schools

Fred W. Morrill School

Fryeburg Family Dental Independ Hygiene Prac

**Fryeburg Schools** 

**Hartford Sumner Elementary** 

Hebron Elementary Hiram Elementary

Madison Avenue School Maroby Elementary

Mildred Fox Elementary

MSAD # 17 Norway Schools Norway Pediatrics Norway WIC

Oxford Elementary

Oxford Hills School District

Parent Place
Peru Elementary
Porter Head Start

Porter WIC

Riley Head Start

RSU # 10

Rumford Elementary

Sacopee Valley Health Center

Sacopee Valley Middle

Sacopee WIC

SAD # 17 central office Oxford covering: Agnes

Gray [West Paris]; Harrison Elementary [Harrison]; Hebron Station School [Hebron]; Otisfield Community School [Otisfield]; Oxford

Elementary [Oxford]; Oxford Hills

Comprehensive High School [South Paris]; Oxford Hills Middle School [South Paris]; Paris Elementary [South Paris]; Guy E. Rowe School

[Norway]; Waterford Memorial School

[Waterford]

SAD # 39-Buckfield covering: Buckfield Jr./Sr. High Schools; Harford Sumner Elementary

SAD #55

SAD # 72-Fryeburg

SAD 44 Clinic/Bethel Family Dentistry

SAD 6,55 and Lime School South Hiram Elementary Victoria Villa Rehab

Virginia Elementary Waterford Elementary Western Maine CAP

**Norway WIC** 

# PENOBSCOT COUNTY

Abraham Lincoln School

Bangor (and Brewer) Head Starts Bangor Area Homeless Shelter Bangor Christian Academy Bangor Dental clinic Garland Consolidated
Bangor Elementary Schools Glenburn Elementary

Bangor Head Start Grace United Methodist Church
Bangor Health & Community Services Granite Street Elementary

Bangor Health & Welfare Dept Guilford United Methodist Church

Bangor Homeless Shelter Head Start

Benedicta Elementary Health Access Network Dental Clinic

Bradford Elementary Helen Dunn School
Brewer Community School Helen Hunt Health Ctr
Brewer Head Start Helen S Dunn Elementary

Brewer Schools Hichborn Middle School/Penobscot Valley

Brewer Pendleton school

Brewer School Health Program

Holden Dental Ctr.

Brownville Elementary

Capehart Community Clinic

Hudson Elementary

Carmel Schools

Job Corp Head Start

Catch a Falling Star Childcare Center Journey House
Charleston Schools Katahdin Schools

City of Bangor-Park Woods Transitional Housing Katahdin Valley Health Center

Cleveland St. Head Start

Clinton Elementary

Community Care of Lincoln

Corinna Elementary School

Corinna Elementary School

Kenduskeag Elementary

Kingman Elementary

LaGrange Elementary

Corinth Schools Levant Consolidated School

Corinth United Methodist Church

Dedham School

Dexter Schools

Dexter Family Health

Dexter Family Practice

Dexter First Free Baptist Church

Levant Elementary

Lincoln School (LDS)

Marion Cook School

Mattananwcook Schools

Mattananwcook Academy

Mattawamkeag Town Office

Dover United Methodist Church Medway Church of God

Downeast Millinocket Baptist Church

Dr. Kyes Office Milo United Methodist Church

Dr. Lewis S. Libby School

Drs. Office's in Lincoln

Eddington Elementary

Eddington Elementary

Morison Memorial School

Mt. Jefferson Jr. High

Ella Burr Elementary

Enfield Station School

Etna Municipal. Town Office

Etna/Dixmont School

Newport (and Etna) Head Starts

Newport Congregational Church

Newport Elementary School

Exeter Consolidated School Newport Head Start

**Nokomis High School** 

Office of Dr. H. Joseph Thibodeau
Old Town United Methodist Church

Orono Head Start

Pediatric Clinic @1068 Union St

Penobscot Job Corp

Penobscot Community Health Center

Penquis CAP Head Start

Penquis Community Action Program"

Ridge View Community School Sebasticook Family Doctors Sebasticook Family Medicine Sebasticook Valley Schools

**Shaw House** 

St. Albans Consolidated School

Stetson Elementary

Summer Street Health Clinic

Suzanne Smith School

University College Bangor Dental Hygiene Clinic

Veazie Community School

#### **PISCATAQUIS COUNTY**

**Abbot Head Start** 

Brownville Elementary

Dover-Foxcroft Schools

Exeter Head Start Family Practice Garland Elementary

Greenville Church of Open Bible

**Guilford Primary** 

**Guilford United Methodist Church** 

Harmony Elementary
Marion C. Cook School

Mayo Hospital

Mckusick Elementary
Milo Elementary
Milo Head Start

Milo United Methodist Church

Monson Schools

Morton Avenue Schools

**Piscataguis Community Schools** 

Sedomocha Elementary

#### **SAGADAHOC COUNTY**

Health Center
Union 44 schools
Marcia Buker School
Mt. Ararat Middle School
Boothbay Head Start

Bath Head Start

Richmond Health Center

**Bowdoinham Community School** 

Phippsburg Elementary

#### **SOMERSET COUNTY**

Albion Elementary Athens Elementary Bloomfield Elementary Canaan Elementary

Carrabec Community School

Carrabec Schools
Central High School
Cornville Schools
Embden Elementary
Fairfield Primary Schools
Garritt Schenck Elementary

**Harmony Schools** 

Hartland Consolidated School

**Hartland Schools** 

Helen S. Dunn Elementary

Jackman WIC Klearview Manor

**KVCAP** 

Lawrence Jr and Sr High Schools

**Madison Elementary** 

Maple Crest Rehabilitation & Living Center

Maple Crest Residential Center
Margaret Chase Smith Elementary

Mercer Elementary
Millstream Elementary
Moscow Elementary

**New Portland Central Elementary** 

**Newport Elementary School** 

Nokomis High School

Norridgewock Elementary

North Elementary

Palmyra Consolidated Schools

SAD # 12: Forest Hills Consolidated Schools

Saint Albans Consolidated Schools

**Sebasticook Family Doctors** 

Sebasticook Valley Dental Program

Skowhegan Community Center Skowhegan Family Medicine

Skowhegan Middle School

Skowhegan WIC Solon Elementary

Somerset Residential Center

Somerset Valley Middle School St. Albans Consolidated School

Starks Elementary Vickery Schools

#### **WALDO COUNTY**

**Belfast Community Center** 

Belfast Head Start Belfast YMCA

Burnham Elementary Burnham Village School

**Dresden Elementary** 

Frankfort Elementary School

Islesboro Health Center
Islesboro Town Office

Kermit S. Nickerson School

Liberty Elementary Monroe Elementary

Nickerson Elementary Palermo Consolidated

Palermo Elementary

Searsport Elementary

Stockton Springs Elementary

Stockton Springs School Unity Community Center

Waldo Community Action Program

Waldo Community Action Program- Head Start

Waldo County Dental Project

Walker Elementary

#### **WASHINGTON COUNTY**

**Alexander Elementary School** 

Alexander Head Start

Bay Ridge Elementary

**Bay Ridge Schools** 

**Beals Elementary** 

**Beatrice Rafferty School** 

**Blueberry Camp** 

Bundles of Joy Childcare

Calais Childcare

Calais Day Program

Calais Head Start

Calais Schools

Calais Pre-Kindergarten

Calais Well Child Clinic

**Charlotte Elementary School** 

**Charlotte Head Start** 

Charlotte Pre-K

Cherryfield Elementary

Clinic in Princeton

Columbia Falls Elementary

**Cutler Elementary School** 

**Cutler Head Start** 

Daniel W Merritt School

**East Grand School** 

East Range II Consolidated Schools

**Eastport Elementary** 

**Eastport Head Start** 

Eastport Health Care

Eastport Pre-K

Edmonds Pre-K

**Edmunds Consolidated School** 

Ellis Lewis School

Elm Street School

Fort O'Brien School

Harrington Developmental Preschool

Harrington Elementary
Harrington Head Start
Harrington Migrant H
Harrington Preschool
Jonesboro Elementary
Jonesport Elementary
Jonesport Head Start

Lee Pellon Event Center -Machias, ME-NYUCD Henry Schein Cares Global Outreach Program

Lubec Head Start Machias Head Start Machias Preschool

Machias Valley Head Start Machias Valley Schools

Machias-Harrington Developmental Preschool

Migrant Blueberry Sector

Migrant Head Start

Milbridge Child Care Center

Milbridge Daycare
Milbridge Elementary
Milbridge Preschool
Moose-A-Bec Head Start
Narraguagus High School
Passamaquoddy Head Start
Pembroke Elementary

Pembroke Head Start Perry Elementary Perry Head Start

Pleasant Point Head Start Princeton Elementary Princeton Pre-Kindergarten

Regional Medical Center at Lubec

Robbinston Schools
Rose M. Gaffney School

Sacopee Valley Health Center

Saint Croix Head Start Schools in Lubec

School-Based Health Center in Lubec

Steuben Child Care

University of Maine Machias Head Start

Vanceboro Elementary

Washington County Children's Pre-School

Program

Washington County Developmental Therapy

Group

**Washington County Schools** 

Washington Hancock Community Agency

ChildCare

Washington-Hancock Community Agency of

Machias

Wesley Elementary

West Central Community Center Head Start

Whiting Village Schools Woodland Consolidated Woodland Elementary

Wyman Center

Wytopitlock Elementary

#### **YORK COUNTY**

Acton Schools

Alfred Elementary

Alfred Shelter

Auburn, Augusta, Biddeford, Boothbay, Kittery, Norway, Sacoppe Valley, York County Schools

and WIC programs

Baldwin Consolidated School Biddeford Adult Education Biddeford Early Head Start Biddeford Elementary Biddeford Head Start

Biddeford Primary School

Biddelord Primary School

Biddeford WIC
Buxton Town Hall

**Buxton WIC** 

**Caring Unlimited** 

Carl J. Lamb Elementary

Cornish Schools

Early Head Start Saco

Early Head Start Home Visit -Biddeford

Early Head Start-Home Visit- Old Orchard Beach

**Emerson Schools** 

Eric L. Knowlton School

Fairfield Elementary
Forever Young Daycare
Frank Jewett School
Fred W. Morrill School
Frisbee Elementary

Governor John Fairfield School H. B. Emery, Jr. Memorial School

Hanson Elementary Hollis Elementary Hollis School

Hollis Town Hall

Home Visit - Pregnant Mother - Biddeford Home visit - Pregnant Mother - Old Orchard

Beach

Jack Memorial School John F. Kennedy School Kennebunk Sweetser

Kennebunkport Consolidated Schools

Kittery Head Start

Kittery WIC

**Lafayette Schools** 

Leavitt's Mill Health Center

Lebanon Elementary

Lebanon Head Start

Lincoln Alternative School

Lincoln School

Line Elementary

Lyman Elementary School

Lyman Head Start

Margaret Chase Smith School

Massabesic Schools

Mitchell School

MSAD # 60 covering: Mary Hurd School [North Berwick]; Vivian E. Hussey [Berwick]; Eric L. Knowlton [Berwick]; Lebanon Elementary [Lebanon]; Noble High School [North Berwick]; Noble Middle School [Berwick]; North Berwick

Primary [North Berwick];

**Noble Schools** 

North Berwick Elementary North Berwick Head Start

Old Orchard Beach Head Start

Parsonsfield Head Start

Porter Head Start Saco Head Start Saco House

Saco Pediatricss

Saco Schools

Saco Sweetser

Sacopee Health Center

Table 86. Number of Patients and Services Provided by RDHs working under PHS Status in Maine, 2002-2011

m Mane, 2002-2011										
County	Seen	Screened	Sealed	Cleaned	Other	Referred				
Androscoggin County	16,816	18,909	6,750	18,120	5,852	4,160				
Aroostook	16,327	15,321	2,905	6,579	10,163	1,744				
Cumberland	26,973	22,638	7,538	11,353	7,300	24,150				
Franklin	4,265	2,044	662	3,176	735	1,122				
Hancock	1,868	1,304	599	1,226	1,180	349				
Kennebec	13,476	11,772	4,295	9,777	3,406	5,148				
Knox	1,374	1,034	213	1,171	169	558				
Lincoln	853	849	266	581	317	411				
Oxford	7,851	7,261	4,200	4,986	2,745	3,675				
Penobscot	11,946	8,712	3,678	7,957	2,312	2,918				
Piscataquis	984	954	676	480	252	392				
Sagadahoc	192	114	80	123	50	67				
Somerset	4,215	4,042	1,604	2,537	421	2,088				
Waldo	1,139	1,117	380	507	297	958				
Washington	9,162	6,853	1,575	2,309	2,859	2,663				
Waldo	8,201	6,930	3,316	4,678	3,121	4,234				
Totals	125,642	109,854	38,737	75,560	41,179	54,637				

Source: ME BDE, 2012

# **Appendix D: The Survey Instruments**

# **Survey of Dentists in Maine**

Center for Health Workforce Studies School of Public Health, University at Albany, SUNY

The Center for Health Workforce Studies at the University at Albany in collaboration with the Maine Oral Health Funders is conducting a study of the oral health workforce in Maine. This survey is an important component of the study. It is designed to obtain up-to-date information about demographics, current employment, services provided to patients, and your opinions about access to oral health services in Maine. Your responses will be confidential and will be reported only in aggregate. This survey should take approximately 15 minutes to complete.

<u>Practice</u>	<u>Characteristics</u>	_	
1. How m	nany years have you been licensed as a dentist	?	
2. Are you	u currently actively practicing dentistry in Main	e? [	☐ Yes ☐ No
3. Describ worksite.	pe your current primary worksite (the location v	where	e you spend the most time) and secondary
Р	rimary Worksite		Secondary Worksite
O P	rivate dental office – solo	0	Private dental office – solo
O P	rivate dental office – group	0	Private dental office – group
O F	ederally qualified health center	0	Federally qualified health center
O C	community/migrant/rural dental clinic	0	Com./migrant/rural dental clinic
O Ir	ndian health services	0	Indian health services
O 5	chool-based dental program	0	School-based dental program
O A	cademic/educational institution	0	Academic/educational institution
$\circ$ N	lursing home/long-term care	Ο	Nursing home/long-term care
O C	Community hospital	Ο	Community hospital
0 V	eterans hospital	0	Veterans hospital
0 0	Other. Describe:	0	Other. Describe:
4. Please worksite.	indicate the zip code, city, and state of your o	currer	nt primary worksite and secondary
	Primary Worksite		Secondary Worksite
Zip code:			
City and St	tato		

5. How many clini	ical p	atient	care hou	rs do you	ı typical	ly work	on a we	ekly bas	is at you	ır worksite(s)?
	0	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	More than 40
Primary Worksite	0	0	0	0	0	0	0	0	0	0
Secondary Worksite	0	0	0	0	0	0	0	0	0	0
Other Worksite	0	0	0	0	0	0	0	0	0	0
6. Indicate your p	rima	ry and,	if applic	able, sec	ondary	dental s <sub>l</sub>	oecialty.	•		
Primary S	pecia	alty					Secon	dary Spe	cialty	
O Gene O Pedo O Ortho O Perio O Prost O Endo O Publi O Oral a O Oral a	dont dont hodo dont c hea and r	tics cics ontics ics alth de maxillo	ntistry	ırgery			O P O C O P O E O P O C O C	eneral of edodon Prindor Prosthod Indodon Ublic he Pral and Pral path	tics ntics itics lontics tics ealth de maxillo	,
7. Do you own the Primary wo Secondary	orksit	e	ctice(s) i Yes O	No O	you wor	k?				
How many of the	follo	wing do	o you em	ploy in y	our den	tal pract	ice(s)?			
For this question, pl week and a full-tir			-							30 hours per
Dentists Dental hygienists Dental assistants			Prima Full-tim	ry Works ne - -	Part-tim	ne  		Second Full-tim	d <b>ary Wo</b> le	rksite Part-time

8. Do you curre	ently u	use expand	ed function dent	tal assistants in	your dental prac	ctice(s)?
	<u> </u>	⁄es	□ No			
8a. If yes, how	many	y?				
	□ 1		□ 2	□ 3	<b>□</b> 4	☐ 5 or more
9. Have you ev status?	er sup	pervised an	y registered den	tal hygienists w	orking under pu	ublic health supervision
	□ \	⁄es	□ No	☐ Unsure		
9a. If yes, how	many	y?				
	□ 1		□ 2	□ 3	<b>□</b> 4	☐ 5 or more
9b. In what loo status? (Indica			-	ntal hygienists v	vork under publ	ic health supervision
	0	Give Kids	a Smile event			
	0	Dentists \	Who Care for M	IE		
	0	Communi	ity health/denta	al fairs		
	0	Special O	lympics			
	0	School-ba	ised oral health	programs		
	0	Nursing h	ome/long-term	n care facility		
	0	Mobile de	ental van			
	0	Faith base	ed organization	ı		
	0	Don't kno	w			
	0	Other. De	escribe:			
			patients referre		ice by registered	d dental hygienists
☐ Yes	□ N	lo	Unsure			
10a. How many	y pati	ent referral	ls do you accept	on an annual ba	sis?	
□ 1-10	□ 1	1-20	<b>21-30</b>	□ 31-40	<b>41-50</b>	☐ More than 50
11. Do you cur hygienists?	rently	accept any	y patients referre	ed to your pract	ice by independ	ent practice dental
☐ Yes	□ N	lo	Unsure			
11a. How many	y pati	ent referral	ls do you accept	on an annual ba	isis?	
<b>1-10</b>	□ 1	1-20	<b>21-30</b>	□ 31-40	<b>41-50</b>	■ More than 50

12. Does your dental pr patients?	ractice cu	rrently	have an	y additio	nal capa	city to p	rovide de	ental servi	ces to new
☐ Yes ☐ No		Uns	ure						
13. Did the recent econ	omic rec	ession	affect de	mand fo	dental	services	in your d	ental prad	ctice?
☐ Yes ☐ No		☐ Uns	ure						
13a. If yes, please indic practice. (Indicate all to			of the e	conomic	recessio	n on you	ır dental	patients c	or your
0 0 0 0	Patients	s defer ntal pra ours we	red den actice sh ere shor	patients tal servi nortened tened.	ces.		tion.		
Patients Served									
14. Approximately how	many de	ental vi	sits did y	ou provi	de in 201	1 (exclu	ıding den	tal hygier	ne visits)?
Please provide your best e	estimate: _								
15. Approximately how	many pa	tients	does you	ır primar	y practic	e serve a	nnually?		
16. What percent of pa	tients tha	at you t	reat in y	our dent	al practio	e(s) are	in the fo	llowing a	ge groups?
			0%	1-10%	11-25%	% <b>2</b> 6-5	50%	51-75%	76-100%
Infants (age 0 to 3 year	•		0	0	0	C		0	0
Children/adolescents	. •	.8)	0	0	0	C		0	0
Adults (age 19-64 yea Older adults (age 65 a	•	r)	0	0	0	C		0	0
17. What percentage of	f your dei	ntal ser	vices is	reimburs	ed by the	e followi	ng?		
		0%	1-10%	6 11-2	.5% 2	26-50%	51-75	% 76-:	100%
Commercial dental in	surer	0	0	0	•	0	0	(	0
MaineCare		0	0	0		0	0	(	0
Patient payments		0	0	0		0	0		0
Other (describe below	v)	0	0	0	(	0	0	(	0
Describe other:									

17a. Which that apply.		llowing g	roups	of MaineC	are-ins	sured pati	ents do you pro	vide ca	are? <i>(Indicate all</i>		
0	Infants	(0 to 3 ye	ears o	f age)							
0	Childre	n/adoleso	ents	(4 to 18 y	ears o	f age)					
0	Adults (	Adults (19 to 64 years of age)									
0	Older adults (65 years of age and older)										
17b. Do you	u limit th	e number	of Ma	ineCare-in	sured	patients ii	n your practice(	(s)?			
☐ Yes	r	No		Unsure							
17c. What i	is the mo	st importa	ant rea	ason you d	o not t	reat Main	eCare patients?	•			
0	Reimbu	ırsement	is toc	low							
0	Paperw	ork is bui	rdens	ome							
0	Other.	Describe:									
18. Describ	-	ient servi	ce c <b>h</b> a	nracteristic	s of yo	ur primar	y and secondary	y work	sites. ( <i>Indicate all</i>		
Primary Wo	orksite										
0	Provide	s care to	all ne	w patient	ts						
			•		•		self-pay new p	atient	:S		
				eCare-ins							
			_				es for low-inco	me pa	atients		
O	Provide	s some u	ncom	pensated	care t	or patier	its				
Secondary	Worksite	!									
0	Provide	s care to	all ne	w patient	ts						
0	Provide	s care on	ly to	commerci	ially in	sured or	self-pay new p	atient	:S		
_			_	eCare-ins							
		•	_	•			es for low-inco	me pa	atients		
O	Provide	s some u	ncom	pensated	care f	or patien	its				
18a. Please basis.	estimat	e the num	ber of	patients v	who are	e provided	l with uncompe	nsated	care on a monthly		
O 1-5	0	11-15	0	21-25	0	31-35	O 41-45				
O 6-10	0	16-20	0	26-30	0	36-40	O 46-50	0	More than 50		

18b. Please est	timate	the numb	18b. Please estimate the number and type of uncompensated services provided on a monthly basis.								
Diagnostic Preventive Restorative Therapeutic  18c. Please estir a monthly basis		5-10 O O O O	0 0 0	5 6-20 O O O O ients who		0 0	31-35 O O O O	36-40	More than 40 O O O O Scale fee services on		
O 1-5 O 6-10		11-15 16-20		21-25 26-30	0	31-35 36-40	O 41-45 O 46-50	0	More than 50		
<b>18d.</b> Please estir basis.	nate <b>th</b>	ne numbei	r and t	ype of red	luced-1	fee/sliding	j fee scale s	<b>ervices</b> p	rovided on a <b>monthly</b>		
			O O O			o) O O O O O	31-35	36-40	More than 40  O O O O O O O Ofee/sliding fee		
scale patients	must w	ait for an a	ppointn	ment for the	e follow	ving:					
Preventive Restorative Therapeutic Emergency  19. Do you par office?  Yes	ticipat □ No	e in volun	teer a	usiness Da		n you prov	  	ew patie	nt visit utside your dental		
□ 1es	□ 140	J		isui e							

19a. Please des apply.)	scribe	the location	on(s) wh	ere you	provide	voluntee	er dental s	services. (	Indicate all that
19b. Please est	0 0 0 0 0 0	Free den Maine Do Give Kids Dentists Commun School-ba Nursing h Mobile d Faith bas Other. Do	onated I a Smile Who Ca ity heal ased ora nome/lo ental va ed orga escribe:	Dental S event re for N th/dent Il healtl ng-terr n nization	ME cal fairs in progra in care fa	ims acility		 ovided on	an annual basis.
				, i			·		
	1-4	5-10	11-15	6-20	21-25	26-30	31-35	36-40	More than 40
Diagnostic	0	0	0	0	0	0	O	0	0
Preventive	0	0	0	0				0	0
Restorative	0	0	0	0			0	0	0
Therapeutic	0	0	0	0	0	0	0	0	Ο
Personal Dem	ogra	<u>phics</u>							
20. Indicate yo	ur ge	nder.		☐ Mal	e	☐ Fema	le		
21. Indicate yo	ur rad	ce.							
O Bla O Am O Wh	tive Hick/Anerica	Hawaiian/ frican Am an Indian/ Describe:_	erican						
22. Are you of I	Hispa	nic/Latino	origin?		☐ Yes		□ No		

associated education program.	of stu	idy for e				
Field of Study			State	e/Count	ry of Educ	ation Program
Baccalaureate						
Master's						
Dental doctorate  Other doctorate						
Other degree (describe below)						
Other degree (describe below)						
Describe other:						<del></del>
24. Indicate your future plans. (Indicate all th	at app	oly.)				
O Retire or leave dental practice v	vithin	one yea	ar.			
<ul> <li>Retire or leave dental practice v</li> </ul>	vithin	1 to 5 y	ears.			
O Reduce hours within one year.						
O Reduce hours within 1 to 5 year						
O Increase hours within one year.						
O Increase hours within 1 to 5 yea						
O Move practice location to anoth						
O Expect to remain in practice for		-				
O Other. Describe:						
Attitudes and Opinions						
25. In your experience, are there barriers that hygiene services in your geographic area?	imped	de peopl	e's abilit	ty to obt	ain dental	or dental
☐ Yes ☐ No ☐ Unsure/Don't know						
From 1 to 5 with <b>1 being the most significant</b> , rayour geographic area.	nk the	5 most si	gnificant	barriers i	mpeding or	al health access in
Lack of dental insurance	1	2	3	4	5	
Logistical issues (transportation,						
time off work, etc.)	1	2	3	4	5	
Poor oral health literacy/lack of patient						
awareness of importance of oral health	1	2	3	4	5	
Language or cultural issues	1	2	3	4	5	
Lack of available dentists	1	2	3	4	5	
Lack of available dental hygienists	1	2	3	4	5	
· -			3			
Other.	1	2	3	4	5	
Describe:						

Rank the following with 1 being t	he most	import	ant un	met nee	d and 5 k	eing th	e least i	mportant	
Preventive services	1	2	3	4	5				
Oral health education	1	2	3	4	5				
Restorative services	1	2	3	4	5				
Specialty dental services	1	2	3	4	5				
Other.	1	2	3	4	5				
Describe:									
27. In your opinion, what pop area? From 1 to 5 with 1 being the new									eographio
Low income children (0 to 1	8 years	of age)	)	1	2	3	4	5	
Low-income adults (19 to 64	•	•		1	2	3	4	5	
Low-income older adults (69	=			der)1	2	3	4	5	
Uninsured children	•	J		1	2			5	
Uninsured adults				1	2	3	4	5	
MaineCare-insured children	l			1	2	3	4	5	
Confined elderly				1	2	3	4	5	
People with special needs				1	2	3	4	5	
Homeless people				1	2	3	4	5	
Other				1	2	3	4	5	
Describe:									
28. In your opinion, would an improved access to oral health			ine?	health w		expans			) achieve
Carrier of the stable and the			Yes		No		Uns	ure	
Community dental health co	ordina	tor	0		0		0		
Dental therapist		0		0					
Dental hygienist therapist			0		0		0		
Advanced practice dental hy	/gienist		0		0		0		

26. In your experience what is the greatest unmet need for oral health services in your geographic

area?

19. Please provide comments about access to oral health services in Maine. (If you need extra space, lease feel free to include additional paper) **Please write legibly.							

You have reached the end of the Survey
Thank you for completing this important Survey

## **Survey of Registered Dental Hygienists in Maine**

Center for Health Workforce Studies School of Public Health, University at Albany, SUNY

The Center for Health Workforce Studies at the University at Albany in collaboration with the Maine Oral Health Funders is conducting a study of the oral health workforce in Maine. This survey is an important component of the study. It is designed to obtain up-to-date information about demographics, current employment, services provided to patients, and your opinions about access to oral health services in Maine. Your responses will be confidential and will be reported only in aggregate. This survey should take approximately 15 minutes to complete.

#### **Employment** 1. Are you currently working as a Registered Dental Hygienist (RDH) in Maine? ☐ Yes $\square$ No 2. Please indicate how many hours per week you are working as a RDH for each of your employers. **Hours per Week** 11-15 16-20 21-25 26-30 31-35 36-40 More than 40 0 1-5 6-10 O O O Employer #1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Employer #2 0 0 0 Employer #3 O O 3. Describe your current primary (the location where you spend the most time) and secondary (if applicable) worksites. **Primary Worksite Secondary Worksite** O Private dental office – solo O Private dental office – solo O Private dental office – group O Private dental office – group O Federally qualified health center O Federally qualified health ctr. O Community/migrant/rural dental clinic O Com/migrant/rural dental clinic O Indian health services O Indian health services O School-based dental program O School-based dental program O Academic/educational institution O Academic/educ. institution O Nursing home/long-term care O Nursing home/long-term care O Community hospital O Community hospital

O Veterans hospital

O Other. Describe: \_\_\_\_\_

O Veterans hospital

O Other. Describe:

4. Please describe the dentist(s) for whom you work in your primary and secondary worksites. *(Indicate all that apply.)* 

all that apply.)  Worksite										
	Primary Worksite	Secondary worksite	Total number of Dentists							
General Dentist	0	0								
Pedodontist	0	0								
Orthodontist	0	0								
Periodontist	0	0								
Prosthodontist	0	0								
Endodontist	0	0								
Public Health Dentist	0	0								
Oral/Maxillofacial Surgeon	0	0								
Other (describe below)	0	0								
5. Indicate the zip code, city, a	and state of your curre Primary Employer	nt primary employer and Secondary Employer	secondary employer.							
Zip code:										
City/State:										
6. Describe the patient service <i>apply.)</i>	characteristics of your	primary and secondary v	vorksites. (Indicate all that							
<ul><li>O Provides care to</li><li>O Provides a sliding</li></ul>	ly to commercially in MaineCare-insured	fee services for low-inc								
<ul><li>O Provides care to</li><li>O Provides a sliding</li></ul>	all new patients ly to commercially in MaineCare-insured	fee services for low-inc								

7. What percent of patients that you treat in your dental hygiene practice(s) are:

	0%	1-10%	11-25%	26-50%	51-75%	76-100%
Infants (0 to 3 years of age)	0	0	0	0	0	0
Children/adols. (age 4-18)	0	0	0	0	0	0
Adults (age 19-64 years)	0	0	0	0	0	0
Older adults (age 65 + older)	0	0	0	0	0	0

8. Please indicate your major tasks and roles as a RDH. Please indicate the **NUMBER OF HOURS** spent **WEEKLY** on each activity. For clinical tasks, please indicate the level of supervision under which you generally work when performing each task.

		Numb	oer of Ho	ours Wee	Level of Supervision					
	1-2	3-4	5-8	9-16	17-24	25-32	33-40	40+	Direct	General
Dental hygiene assessment	0	0	0	0	0	0	0	0	0	0
Oral cancer screenings	0	0	0	0	0	0	0	0	0	0
Cleaning and prophylaxis	0	0	0	0	0	0	0	0	0	0
Patient education	0	0	0	0	0	0	0	0	0	0
Fluoride treatments	0	0	0	0	0	0	0	0	0	0
Sealant applications	0	0	0	0	0	0	0	0	0	0
Subgingival irrigation	0	0	0	0	0	0	0	0	0	0
Scaling and root planing	0	0	0	0	0	0	0	0	0	0
Smooth/polish Amalgam restorations	0	0	0	0	0	0	0	0	0	0
Place temporary restorations	0	0	0	0	0	0	0	0	0	0
Cement pontics/facings	0	0	0	0	0	0	0	0	0	0
Re-cement crowns	0	0	0	0	0	0	0	0	0	0
Take impressions	0	0	0	0	0	0	0	0	0	0
Nitrous oxide analgesia	0	0	0	0	0	0	0	0	0	0
Local anesthesia	0	0	0	0	0	0	0	0	0	0
Suture removal	0	0	0	0	0	0	0	0	0	0
Place/remove dressings	0	0	0	0	Ο	0	0	0	0	0
Radiography	0	0	0	0	0	0	0	0	0	0
Other (describe below)	0	0	0	0	0	0	0	0	0	0

Describe other:	

	•	•	•		ent doin	g adminis	trative activi	ties related to you	r dental
hygie			VEEKLY bas	sis?					
	0	0%							
	0	1-10%							
	0	11-20%							
	0	21-30%							
	0	31-40%							
	0	41-50%							
	0	More tha	n 50%						
10. Do	you p	-	-	nteer acti		which you	ı provide dei	ntal hygiene servic	es?
		☐ Yes	5		No				
10a.	Indica	ate the ap	proximate n	umber of	hours <b>A</b>	NNUALL	<b>Y</b> that you v	olunteer to provide	e oral health
5	service	es.							
1-4	5-10	) 11-15	16-20	21-25	26-30	31-35	36-40	More than 40	
0	0	0	0	0	0	0	0	0	
10h	Indic	ato the loc	ration(s) in v	which you	ı provido	voluntoo	r sorvicos (	Indicate all that ap	anly)
100.			a Smile ev	•	i provide	volunteel	SCIVICES. (1	muicate all that ap	piy.)
			Who Care f						
			ity health/		nirc				
		Special O	•	aentai i	111 3				
		•	ased oral h	oolth pr	arame				
				•	_				
			ome/long-	term ca	re raciiit	У			
	_		ental van						
			ed organiza 						
	O	Other. De	escribe:						
100	Do vo	NI LISA NUH	olic health su	ınarvisiar	n status t	o provido	these volum	teer services?	
106.	DO yc	use pub Yes			No	o provide	THESE VOIUIT	icoi seivices:	

11. Please as:	sess the degree of difficulty securing employment faced by defital hygienists in the
geograph	ic area in which you live/work?
0	Very easy
0	Somewhat easy
0	Neither easy nor difficult
0	Somewhat difficult
0	Very difficult
	be the reasons that securing employment is somewhat or very difficult.
ОТ	here are too few dentists working in the area.
ОТ	here are too many RDHs in the area.
	entists hire dental assistants to provide some services usually provided by dental ygienists.
ОЕ	ducation programs in Maine graduate too many dental hygienists annually.
0 0	ther. Describe:
_	urrently practicing as any of the following?
	DH under public health supervision status
	xpanded function dental assistant (EFDA)
_	oth of the above
ON	one of the above

# 13. Rank your level of interest in the following expanded practice opportunities for RDHs with **1 being the most interest and 5 being the least interest**. (Please Circle)

Expanded function dental assistant	1	2	3	4	5	Not Interested
Public health supervision status	1	2	3	4	5	Not Interested
Independent practice	1	2	3	4	5	Not Interested
Dental therapist	1	2	3	4	5	Not Interested
Dental hygienist therapist	1	2	3	4	5	Not Interested
Advance practice DH (ADHA model)	1	2	3	4	5	Not Interested

14. Please i	ndicate your future	plans for the next five ye	ears.	
0	I expect to remain	in my current positio	n.	
0	I expect to seek a	similar position in and	the	r setting.
0	I expect to leave of	lental hygiene and see	ek ei	mployment in another field.
0	I expect to retire.			
0	I don't know.			
0	Other. Describe: _			
Personal D	Demographics and	<b>Education</b>		
15. Number	of years licensed as	s a RDH:		
16. Indicate	e your gender.	☐ Male ☐ Fer	nale	
17. Indicate	e your race.			
0	Asian		0	American Indian/Alaska Native
0	Native Hawaiian/Pa			White
0	Black/African Ameri	can	0	Other. Describe:
18. Are you	of Hispanic/Latino o	origin?		□ No
19. Please i	ndicate the zip code	, city, and state of your	prin	nary residence.
Zip	code:			
City	y and state:			
20. Please i	ndicate your highest	level of completed educ	catio	n.
0	Certificate/Diplon	na		
0	Associate Degree			
0	Bachelor's Degree	<u>j</u>		
0	Master's Degree			
0	Post-Master's Cer	tificate		
0	Doctoral/Advance	ed Professional Degree	e/D[	OS .
0	Other. Describe: _			<del></del>
Attitudes a	and Opinions			
04 1				
-	experience, are then s in your geographic		eop	le's ability to obtain dental or dental hygiene
Sel VICES	Sili your geographic  ☐ Yes	□ No □ Uns	ure	
	<del>-</del>			

22. In your opinion, what population groups are most in *need* of oral health services in your geographic area? From 1 to 5 with **1 being the neediest**, rank the 5 neediest population groups in your geographic area. (Please circle)

Low-income children (age 0 to 18)	1	2	3	4	5	
Low-income adults (age 19 to 64)	1	2	3	4	5	
Low-income older adults (age 65 and olde	r) 1	2	3	4	5	
Uninsured children	1	2	3	4	5	
Uninsured adults	1	2	3	4	5	
MaineCare-insured children	1	2	3	4	5	
Confined elderly	1	2	3	4	5	
People with special needs	1	2	3	4	5	
Homeless people	1	2	3	4	5	
Other. Describe:	1	2	3	4	5	

23. In your experience, what is the greatest unmet need for oral health services in your geographic area? Rank the following with 1 being the most important unmet need and 5 being the least important. (Please circle)

Preventive services	1	2	3	4	5	
Oral health education	1	2	3	4	5	
Restorative services	1	2	3	4	5	
Specialty dental services	1	2	3	4	5	
Other. Describe:	1	2	3	4	5	

	strategies/policy initiatives that might help to address unmet dental need in your geographic ase write legibly.
Public Healt	th Supervision Status
25. Have you	ever practiced as a RDH under Public Health Supervision Status?
Ö	Yes, I currently practice under Public Health Supervision Status.
0	Yes, I have practiced under Public Health Supervision Status in the past.
0	No
26 How ofte	n did you use public health supervision status in the past?
0	Rarely
0	Sometimes
0	Frequently
0	Other. Describe:
27 What nor	cent of the total time you work as a RDH under public health supervision status is?
27. What per	
Paid emp	loyment: %
Voluntee	time: %

28.		what settings do you typically work under public health supervision status?  Idicate all that apply.)
		School-based dental programs
	0	Nursing homes/long term care facilities
		Community health fairs
		·
		Institutional settings
	Ο	Other. Describe:
29.	Ind	icate your reason(s) for practicing under public health supervision status.
	(Ir	ndicate all that apply.)
	0	Interest in working in a public health setting
	Ο	Concern about lack of dental access in my area
	0	Desire for expanded practice opportunities
	0	Desire to participate in oral health volunteer activities
	0	Other. Describe:
30.	Ind	icate how the non-volunteer services you provide when working under public health supervision
		tus are paid. (Indicate all that apply.)
	Ο	I am employed by an organization that bills for my services.
	0	My services are paid through a program grant.
	0	My dentist employer bills for my services.
	0	I bill directly for my services.
	0	I provide these services only on a volunteer basis.
	0	Other. Describe:

31.	In your work as a RDH	under public healt	h supervision	status how	often do	you provide	the	following
	services?							

	Never	Rarely	Sometimes	Often	Always
Take dental histories	0	0	0	0	0
Perform oral inspections	0	0	0	0	0
Take/expose radiographs	0	0	0	0	0
Complete prophylaxis	0	0	0	0	0
Root planing	0	0	0	0	0
Sealant application	0	0	0	0	0
Fluoride varnish	0	0	0	0	0
Temporary fillings	0	0	0	0	0
Smooth/polish amalgam restorations	0	0	0	0	0
Supra gingival polishing	0	0	0	0	0
Apply topical anesthetics	0	0	0	0	0
Take impressions	0	0	0	0	0
Cement pontics/facings	0	0	0	0	0
Other (describe below)	0	0	0	0	0

Describe other:			
32. Would it be help health supervision s		ore expansive s	cope of practice when providing services under public
	☐ Yes	☐ No	☐ Unsure
Describe the service	s you would like	e to provide that	t are not currently permitted. **Please write legible

33. Indicate the types of patients you typically treat when you are working under public health supervision status.

	0%	1-10%	11-20%	21-30%	31-40%	41-50%	50%+
Low-income children (age 0-18)	0	0	0	0	0	0	0
Low-income adults (age 19-64)	0	0	0	0	0	0	0
Low-income older adults (65+old	er)O	0	0	0	0	0	0
Uninsured children	0	0	0	0	0	0	0
Uninsured adults	0	0	0	0	0	0	0
MaineCare-insured children	0	0	0	0	0	0	0
People with special health needs	0	0	0	0	0	0	0
Homeless people	0	0	0	0	0	0	0
Confined elderly	0	0	0	0	0	0	0
Other (describe below)	0	0	0	0	0	0	0
Describe other:							

34. Indica	te your refer	ral practice for patients in need of dental services. <i>(Indicate all that apply.)</i> I refer to the supervising physician.
	•	
	O	I have an established dental referral network to which I generally refer.
	0	I give the patient a referral and suggest they find a dentist.
	0	I work with the patient to find a dentist to provide care.
	0	Other. Describe:
35. Descri	be the overa	Il level of difficulty you encounter in finding a dentist to accept referrals for dental
servic	es in your ge	eographic area.
	0	Very easy

0

Ο

0

Ο

Somewhat easy

Very difficult

Somewhat difficult

Neither easy nor difficult

You have reached the end of the Survey
Thank you for completing this important Survey

## **Survey of Independent Practice Dental Hygienists in Maine**

Center for Health Workforce Studies School of Public Health, University at Albany, SUNY

The Center for Health Workforce Studies at the University at Albany in collaboration with the Maine Oral Health Funders is conducting a study of the oral health workforce in Maine. This survey is an important component of the study. It is designed to obtain up-to-date information about demographics, current employment, services provided to patients, and your opinions about access to oral health services in Maine. Your responses will be confidential and will be reported only in aggregate. This survey should take approximately 15 minutes to complete.

<ul> <li>1. Are you currently working as an Independent Practice Dental Hygienist (IPDH) in No</li> <li>Yes  No</li> <li>2. What percent of your total work time as an IPDH are you self-employed?</li> <li>0%</li> </ul>	Maine?
2. What percent of your total work time as an IPDH are you self-employed?	
0.0%	
0 0/0	
O 1-10%	
O 11-25%	
O 26-50%	
O 51-75%	
O 76-100%	
3. Do you ever work under the supervision of a dentist?	
☐ Never ☐ Sometimes ☐ Always	
If yes, Indicate the percent of your total work time is spent working supervised by dentist.	а
O 0% O 26-50%	
O 1-10% O 51-75%	
O 11-25% O 76-99%	
4. Please indicate how many hours per week you work as a self-employed or er IPDH.	nployed
Hours per Week 0 1-5 6-10 11-15 16-20 21-25 26-30 31-35 36-40 More th	nan 40
Self employed O O O O O O O	
Employer #1	
Employer #2	

# Please describe the dentist(s) for whom you work. (Indicate all that apply.) Worksite

	Primary Worksite	Secondary worksite	Total number of Dentists
General Dentist	0	0	
Pedodontist	0	0	
Orthodontist	0	0	
Periodontist	0	0	
Prosthodontist	0	0	
Endodontist	0	0	
Public Health Dentist	0	0	
Oral/Maxillofacial Surgeon	0	0	
Other (describe below)	0	0	

Other dentist(s):	
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# 5. What percent of your work time is spent providing services in the following locations?

#### **Percent of Time**

	1-10%	11-25%	26-50%	51-75%	76-100%
Private Dental Office - Solo	0	0	0	0	0
Private Dental Office - Group	0	0	0	0	0
Federally Qualified Health Center	0	0	0	0	0
Indian Health Service	0	0	0	0	0
Academic/Educational Institution	0	0	0	0	0
Community Hospital	0	0	0	0	0
Veterans Hospital	0	0	0	0	0
School Based Dental Program	0	0	0	0	0
Nursing Home	0	0	0	0	0
Homes of Patients	0	0	0	0	0
Institutional Settings (e.g., prisons	) ()	0	0	0	0
Med. Setting (e.g., physician office	e) O	0	0	0	0
Other (describe below)	0	0	0	0	0
Other location: describe:					

6. Indicate the percent of your weekly work time spent doing the following.

	Percent of Time					
	0%	1-10%	11-25%	26-50%	51-75%	76-100%
Clinical Services	0	0	0	0	0	0
Administration functions	0	0	0	0	0	0
Education	0	0	0	0	0	0
Other (describe below)	0	0	0	0	0	0

7. Indicate the zip code, city, and state of your current primary worksite and secondary worksite.

	Primary Worksite	Secondary Worksite
Zip code:		
City/State:		

8. What percent of patients that you treat are in the following age groups?

	0%	1-10%	11-25%	26-50%	51-75%	76-100%	
Infants (age 0-3)	0	0	0	0	0	0	
Children/adolescents (age	4-18)〇	0	0	0	0	0	
Adults (age 19-64)	0	0	0	0	0	0	
Older adults (age 65 and ol	der) O	0	0	0	0	0	

9.	What	percent	of	patients	that	you	treat	are:
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O Not at all difficult

O Slightly difficult

O Moderately difficult

	0%	1-10%	11-20%	21-30%	31-40%	41-50%	50%
Low-income children (age 0-18)	0	0	0	0	0	0	0
Low-income adults (age 19-64)	0	0	0	0	0	0	0
Low-income older adults (age 65 and older)	0	0	0	0	0	0	0
Uninsured children	0	0	0	0	0	0	0
Uninsured adults	0	0	0	0	0	0	0
MaineCare-insured children	0	0	0	0	0	0	0
People with special health needs	0	0	0	0	0	0	0
Homeless people	0	0	0	0	0	0	0
Confined elderly	0	0	0	0	0	0	0
Other:	0	0	0	0	0	0	0

10.	ndicate the overall level of difficulty you encounter in finding dentists in your
	eographic area to accept referrals to provide needed dental care for patients.

0	Considerably difficult
0	Extremely difficult
	e your referral practices for patients in need of dental services. te all that apply.)
0	I refer to a supervising dentist.
0	I have an established dental referral network to which I generally refer.
0	I give the patient a referral and suggest they find a dentist.
0	I work with the patient to find a dentist to provide care.
0	Other. Describe:

12. In	dica	te how you are o	ompe	nsated fo	or the services you	provide. (In	dicate all that apply	.)				
	0	Patient self-pay										
	0	Salary/hourly/per unit pay from employer										
	0	Grant funds for ora	Grant funds for oral health program									
	0	Direct MaineCare r	Direct MaineCare reimbursement									
	0	Direct commercial insurance reimbursement										
	0	Other. Describe:					<del></del>					
13. If	you	are billing for yo	our ow	n service	es, do you accept pa	atients with	MaineCare?					
		Yes	□N	lo	☐ Not applicable							
14. WI	nat <sub>l</sub>	percent of your s	ervice	s are pai	d by:							
			0%	1-25%	26-50%	51-75%	76-100%					
	Priv	rate insurance	0	0	0	Ο	0					
	Mai	ineCare	0	0	0	0	Ο					
	Pati	ient self-pay	0	0	0	0	0					
	Oth	er	0	0	0	0	0					
	I do	n't know	0	0	0	0	0	_				

15. Please indicate your major tasks and roles as an IPDH Please indicate the **NUMBER OF HOURS** spent **WEEKLY** on each activity. For clinical tasks, please indicate the level of supervision under which you generally work when performing each task.

	Number of hours weekly							Level of Supervision					
	0		3-4	5-8		17-24	25-32	33-40	More than 40	Direct	Gener	al Uns	upervised
Dental hygiene assessment	0	0									0		
Dental history											0		
Periodontal/restorative charting		9									0		
Oral cancer screenings		0				0					0		
Patient education		0									0		
Take impressions		0				0					0		
Complete prophylaxis													
Partial prophylaxis													
Fluoride treatments											0		
Sealant applications													
Apply desensitizing agents													
Apply topical anesthetics											0		
Place topical antimicrobials													
Subgingival irrigation											0		
Scaling and root planing													
Place temporary restorations		0				0					0		
Smooth/polish amalgam restorations		0				0					0		
Cement pontics/facings		0				0					0		
Place/remove rubber dams		0				0					0		
Wire/ligature adjustments											0		
Local anesthesia											0		
Nitrous oxide analgesia					0						0		
Suture removal													
Place/remove dressings											0		
Radiography					0						0		
Other (describe below)					0						C		

Describe:			

16. Indica	ate your reasons for selecting practice as an IPDH. (Indicate all that apply.)
0	Interest in working in a public health setting
0	Concern about lack of dental access in my area
0	Desire for expanded practice opportunities
0	Interest in owning a business
0	Other. Describe:
-	ur experience, what are patients' attitudes towards receiving services from an? (Indicate all that apply.)
0	Patients are cautious.
0	Patients ask questions about my clinical skills.
0	Patients are happy to have available oral health care.
0	Patients are generally not concerned at all.
0	Other. Describe:
	e describe any limitations in practice that you experience because of regulations estrict your scope of services.
19. Do yo	u participate in any volunteer activities as an IPDH?
	☐ Yes ☐ No

	icate the approxima Ith services.	ite number	of hours ANNUA	ALLY that yo	ou volunteer to	provide					
C	0										
C	) 1-5	1-5 O 21-25									
C	) 6-10	O 26-30									
C	) 11-15	O 31-40									
C	) 16-20	O More tha	n 40								
19b. Ind apply.)	icate the location(s)	) in which y	ou provide volu	nteer servi	ces. (Indicate a	all that					
C	Give Kids a Smile ev	/ent									
C	Dentists Who Care f	for ME									
C	Community health/o	dental fairs									
C	Special Olympics										
C	School-based oral h	ealth progran	ns								
C	Nursing home/long-	term care fac	ility								
C	) Mobile dental van										
C	Faith-based organiz	ation									
C	Other. Describe:										
	ld you be interested able in Maine?	in any of th	ne following pra	ctice oppor	tunities if they	/ were					
avaii	able III Mairie:			Yes	No	Unsure					
D	ental therapist			0	0	0					
D	ental hygienist therapi	st		0	0	0					
А	Advanced practice dental hygienist (ADHA model) O O										
_	ou expect to partici <sub>l</sub> e Legislature?	pate in the r	adiography pilo	ot program	recently autho	rized by the					
	☐ Yes	☐ No	☐ Unsure								
<u>Personal</u>	Demographics and	<u>Education</u>									
22. Num	ber of years license	d as a RDH	(including years	s as an IPD	н):						
23. India	cate your gender.	Male	☐ Female								

24. Indicate ye	our race.						
Asia	n	Amer	rican Indian/Alaska Native				
Nati	ve Hawaiian/Pacific Islander	White	9				
Blac	k/African American	Othe	r. Describe:				
-	Hispanic/Latino origin?	☐ Yes	□ No				
26. Please ind	icate the zip code, city, and	state of your pri	mary residence.				
Zip code City and	e:   state:						
27. Please ind	icate your highest level of c	ompleted educat	tion.				
O Asso O Bac O Mas O Pos O Doc	tificate/Diploma ociate Degree helor's Degree ster's Degree t-Master's Certificate toral/Advanced Professional Decr. Describe:	_					
	icate your future plans for t						
	spect to remain in my current p	-					
O lex	spect to seek a similar position	in another setting.					
O lex	spect to return to a RDH positio	n.					
O lex	spect to leave dental hygiene ar	nd seek employmer	nt in another field.				
O lex	spect to retire.						
O I do	on't know.						
O Oth	er. Describe:						
Attitudes and Opinions  29. In your experience, are there barriers that impede people's ability to obtain dental or dental hygiene services in your geographic area?							
	☐ Yes ☐ No	☐ Unsure/Don't	know				

geogra	your opinion, what population groups are most in need of oral health services in your phic area? From 1 to 5 with 1 being the needlest, rank the 5 needlest population groups in ographic area.
	Low-income children (0 to 18 years of age)
	Low-income adults (19 to 64 years of age)
	Low-income older adults (65 years of age and older)
	Uninsured children
	Uninsured adults
	MaineCare-insured children
	Confined elderly
	People with special needs
	Homeless people
	Other. Describe:
	scribe strategies/policy initiatives that might help to address unmet dental need in ur geographic area.
geo	your experience what is the greatest unmet need for oral health services in your ographic area? Rank the following with 1 being the most important unmet need and 5 ng the least important.
	Preventive services
	Oral health education
	Restorative services
	Specialty dental services
	Other. Describe:

	1 to 5 with 1 being the most significant, rank the 5 most significant barriers oral health access in your geographic area.
l	ack of dental insurance
l	ogistical issues (transportation, time off work, etc.)
F	oor oral health literacy/lack of patient awareness of importance of oral health
l	anguage or cultural issues
l	ack of available dentists
L	ack of available dental hygienists
(	Other. Describe:
	e provide us with any comments about issues not covered in this survey. (Feel free ed additional sheets of paper). Please write legibly.
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You have reached the end of the survey

Thank you for completing this important survey

## **Survey of Expanded Function Dental Assistants in Maine**

Center for Health Workforce Studies School of Public Health, University at Albany, SUNY

The Center for Health Workforce Studies at the University at Albany in collaboration with the Maine Oral Health Funders is conducting a study of the oral health workforce in Maine. This survey is an important component of the study. It is designed to obtain up-to-date information about demographics, current employment, services provided to patients, and your opinions about access to oral health services in Maine. Your responses will be confidential and will be reported only in aggregate. This survey should take approximately 15 minutes to complete.

# **Employment**

1. Are you cu Maine?	rrently	actively	emplo	yed as	an expa	anded f	unction	dental	assista	nt (EFDA) in
Yes	☐ No									
2. Do you wo	rk with	other E	FDAs ir	n any w	orksite	?				
☐ Yes	□ No □ Unsure									
If yes, indicate the number of other EFDAs at your worksite(s).										
01	02		О3		04		O5		O6 or more	
3. Please indi assistant for				-	ek you	work a	s an ex	panded	functio	on dental
				Hours	per We	ek				
	0	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	More than 40
Employer #1	0	0	0	0	0	0	0	0	0	0
Employer #2	0	0	0	0	0	0	0	0	0	0
Employer #3	0	0	0	0	0	0	0	0	0	0

secondary (if applicable	e) worksites.	where you spe	ilu tile i	nost time) and	
Primary Worksite		Sec	ondary W	/orksite	
O Private dental office - O Private dental office - O Federally qualified he O Community/migrant/ O Indian health services O School-based dental p O Academic/educations O Nursing home/long-to O Community hospital O Veterans hospital O Other. Describe:  5. Please describe the worksites. (Indicate a	group alth center rural dental clinic crogram al institution erm care  dentist(s) for whom you	Secondary Worksite  O Private dental office – solo O Private dental office – group O Federally qualified health center O Com./migrant/rural dental clinic O Indian health services O School-based dental program O Academic/educational institution O Nursing home/long-term care O Community hospital O Veterans hospital O Other. Describe:  you work in your primary and secondary			
	Dutas and Manhaite	Worksite	a ulvate a	Tatal assessing of Doublets	
General Dentist	Primary Worksite	Secondary w	orksite	Total number of Dentists	
Pedodontist	0	0		<del></del>	
Orthodontist	0	0			
Periodontist	0	0			
Prosthodontist	0	0			
Endodontist	0	0			
Public Health Dentist	0	0			
Oral/Maxillofacial Surgeo	n O	0			
Other (describe below)	0	0			
Other dentist(s):  6. Indicate the zip codemployer.	e, city, and state of you	r current prima	ry empl	oyer and secondary	
	Primary Employer	Secondary	/ Emplove	er	
Zip code:	, [,		, , , , , ,		
City/State:					

7. Ind	icate the reason(s) you became an EFDA. (Indicate all that apply.)
0	For career advancement
0	My employer encouraged me to do so
0	I had a personal interest in learning to do more
0	Other. Describe:
8. Ho	w did you pay for your EFDA training course(s)? (Indicate all that apply.)
0	I paid the total cost of the course(s).
0	My employer paid the total cost of the course(s).
0	My employer and I shared the cost of the course(s).
$\bigcirc$	Other: Describe:

# 9. Indicate the percent of your total weekly work time spent providing the following clinical services to patients.

	0%	1-10%	11-20%	21-30%	31-40%	41-50%	More than 50%
Apply sealants	×	×	×	×	×	×	×
Apply topical fluorides	×	X	×	×	×	×	×
Supragingival polishing	×	X	×	×	×	×	×
Expose radiographs	×	×	×	×	×	×	×
Perform vitality testing	×	×	×	×	×	×	×
Take impressions	×	×	×	×	×	×	×
Place temporary restorations	×	X	×	×	×	×	×
Place amalgam restorations	×	×	×	×	×	×	×
Contour amalgams	×	X	×	×	×	×	×
Cement crowns/bridges	×	X	×	×	×	×	×
Place periodontal dressings	×	×	×	×	×	×	×
Place/remove retraction cord	×	×	×	×	×	×	×
Other (describe below)	×	X	×	×	×	×	×

Describe other:		
Personal Demographics	and Education	
10. Year of birth:		
11. Number of years wor	king as a dental assistant:	
12. Indicate your gender	·	
× Male		
× Female		

Zip code:
City and state:
14. Indicate your race.
X Asian
X Native Hawaiian/Pacific Islander
Black/African American
X American Indian/Alaska Native
× White
Other. Describe:
15. Are you of Hispanic/Latino origin?
Yes  No
16. Please indicate your highest level of completed education.
X Certificate/Diploma
X Associate Degree
X Bachelor's Degree
X Master's Degree
X Other. Describe:
17. Are you a registered dental hygienist?
X Yes X No

13. Please indicate the zip code, city, and state of your *primary residence*.

#### **Attitudes and Opinions**

18. In your opinion, is there unmet need for dental care in your geographic area?

X Yes X No X Unsure/Don't know						
	×	Yes	×	No	×	Unsure/Don't know

19. In your opinion, what population groups are most in *need* of oral health services in your geographic area?

From 1 to 5 with **1 being the neediest**, rank the 5 neediest population groups in your geographic area.

Low-income children (0 to 18 years of age)
Low-income adults (19 to 64 years of age)
Low-income older adults (65 years of age and older)
Uninsured children
Uninsured adults
MaineCare-insured children
Confined elderly
People with special needs
Homeless people
Other. Describe:

<ol> <li>Describe strategies/policy initiatives that might help to address unmet dental need in your geographic rea. Please write legibly</li> </ol>

You have reached the end of the survey. If you have any questions regarding this survey, please contact:

Margaret Langelier Center for Health Workforce Studies University at Albany, School of Public Health One University Place/Suite 220 Rensselaer, NY 12144-3445 (518) 402-0250

Thank you for completing this important survey.