Registered Dental Hygienists in Alternative Practice: Increasing Access to Dental Care in California

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Executive Summary

In 1998, California officially recognized a new dental health profession: the Registered Dental Hygienist in Alternative Practice (RDHAP). RDHAPs may practice unsupervised in homes, schools, residential facilities and other institutions, and in Dental Health Professional Shortage Areas. Recent RDHAP licensees (over two hundred in the last few years) have been able to set up practices successfully. This study examines the *process* of development and implementation of the RDHAP in California and the impact this new provider is having on access to dental care.

The RDHAP Legal History

The development of the RDHAP took 23 years (1980-2003). The process of development included a Health Manpower Pilot Project (HMPP) study, overcoming two lawsuits, the passing of enacting legislation after a number of political compromises, implementing two university-based training programs and instituting a licensure and certification process with the state. The project in California mirrors efforts across the country to reduce supervision requirements and expand the scope of dental hygiene practice. Today, RDHAP practices are still evolving, with new legislation related to hygiene practice continuing to be introduced in response to ongoing professional and practice concerns.

The legal requirements to become an RDHAP are unique when compared to precedents set by other professions. Unlike most professions, where licensure is based solely on proven qualifications, RDHAPs are mandated to have a "documented relationship" with a dentist as a prerequisite for licensure. While collaborative practice agreements do have precedent, it is unique to require this type of agreement for a profession practicing within its own professional scope. Finally, it is also unique that patients are required to get a prescription for preventive services, as is the case with RDHAP patients, who must provide documentation that they have been seen by a dentist or physician within 18 months of seeing an RDHAP in order to continue preventive care.

The RDHAP Workforce

The RDHAP workforce is derived from the broader registered dental hygiene (RDH) workforce, and therefore is similar in overall demographics. As a group, RDHAPs are more educated, more diverse, more active in the labor market, work longer hours per week with more administrative time, and are more likely to consult with other health care providers than typical hygienists. As well, RDHAPs are more likely to see special needs patients, provide a broader range of services within their scope, work in non-traditional settings, and express a commitment to professional growth, access to care and service to underserved populations and communities. The RDHAP workforce is being educated and licensed to work independently with the goal of increasing access to care for underserved populations and communities. Data show that RDHAPs take this role seriously and are fulfilling their mission in these preliminary stages of practice development.

The RDHAP Experience

While each RDHAP has a unique and personal motivation for the work they do, as a group they share a commitment to working with people in a model of care delivery that is responsive to patients as well as personally and professional satisfying. The patient population of

RDHAPs includes traditionally underserved people, including but not limited to homebound and institutionalized elderly, migrant farm workers and their families, pregnant women on Denti-Cal, rural school children, developmentally disabled children and adults, wards of locked state institutions, and low income rural and urban families. The number and diversity of their patients are emblematic of how many people are unable to access traditional dental services.

The most challenging aspect of RDHAP practice is building the business. RDHAPs report a diversity of activities within their individual practices, as well as a diverse number of practice types and settings across their profession. RDHAPs face business challenges common to any small business owner, but with the added burden of having to negotiate the complex regulatory and fiscal environment that surrounds health care. The business issues RDHAPs must contend with are start-up costs, business planning, marketing, building awareness of a new profession, and developing new collaborative practice models with dentist and medical practitioners in their communities.

A common structural environment underlies these efforts, including legal and regulatory frameworks, financing systems, health care institutions, and professional education. As more RDHAPs develop practices, ongoing efforts by the profession to clarify legislation and regulation are to be expected. Financing systems for dental care such as Denti-Cal and grant-funded programs are central issues for RDHAPs as these systems are designed for many of the patients they serve. RDHAPs work across a variety of institutional and organizational settings, such as nursing homes, schools, hospital, and clinics. As RDHAPs integrate their dental services into these existing systems, they open up new avenues for professional collaboration and new possibilities for positive transformations of care delivery. The education system for alternative practice hygiene has been responsive to the changing needs of RDHAPs, and currently has the capacity to meet the demand for training in this profession.

Conclusion

The combination of professional independence and a required focus on underserved populations powerfully motivates and structures RDHAP practice. The diversity of strategies employed by RDHAPs in developing their practices has opened up multiple pathways to creating and improving access to dental care. These include but are not limited to:

- Reaching out to individuals and communities who need care but can not get to a dental office;
- Creating new consumer choices for preventive treatments and services;
- Providing services in settings and at times that are convenient for patients;
- Decreasing the fear of dental treatment in people who are not used to having their dental care needs addressed, through a gradual introduction to dental procedures;
- Providing referrals for dental care for patients needing restorative treatment;
- Developing collaborative practice models with dental, medical and nursing professionals in a variety of settings;
- Developing data collection systems to track patient outcomes with the goal of showing how dental hygiene care can lead to improvements in oral health and overall health;
- Educating individuals, families, caregivers and health providers on the basics of oral health and dental hygiene, and oral health's connection to overall health and well-being.

Improving access to care, however, is not an undertaking that a profession with a limited scope of practice can do alone. The *independence* of RDHAPs as providers allows them the freedom and flexibility to reach out to patients in new and creative ways. To transform these innovations into comprehensive care delivery for patients, new *collaborative practice* models, with dental, medical, and other caregivers are needed. Many of these models are beginning to emerge in California, but much work remains to be done in both regulating practice and financing care. Meeting the challenge of transforming the system and reconnecting oral health with overall health will require a professional commitment to ensuring a high quality workforce, a regulatory environment flexible enough to allow for innovation, and a care delivery system that is consumer-responsive and affordable.

Recommendations

Alternative care delivery models such as the RDHAP are *essential* to improving oral health and reducing health disparities in California's diverse population. *Public policy should create an environment that supports innovation and creativity, has flexibility to meet needs, focuses on prevention-oriented solutions, and enhances consumer choice while ensuring consumer protection.*

This study's findings indicate that the policy change that allowed for independent hygiene practice has succeeded in spurring innovations in care delivery and improvements in access to dental care. However, many restrictions on alternative practices remain which prevent more Californians from benefiting from their services. Further policy modifications could continue to reduce barriers to alternative practice, and enhance the workforce and financing available for care delivery more generally.

Recommendations: Regulatory Systems

State laws restricting the provision of health care services are beneficial only when there is a clear need for public protection. Some of the current restrictions on RDHAP practice do not provide any clear consumer protection or contribute to the health of the public. Rather they place unnecessary limits and administrative burdens on practice, and restrict consumer choice. To help improve regulatory systems, policymakers should work to:

- Remove the mandated referral agreement as a condition of licensure for RDHAPs. Licensure should be granted based on qualifications. There is no precedent for requiring a practice agreement for *licensure,* nor for services delivered *within a professional's own scope of practice;*
- Remove the prescription requirement for dental hygiene services provided by RDHAPs. In practice, this is simply an administrative hurdle, time consuming for providers, and has not been shown to contribute to positive patient outcomes. Patients should have their choice of dental hygiene care provider, and the public should not need a prescription to receive *basic preventive care*.

It would be beneficial for state policy makers to continue to explore avenues (such as new health workforce pilot projects) for expanding the capacity of the allied dental workforce (including RDHAPs, dental hygienists and dental assistants) to facilitate more efficient and

accessible care.[1] Any new models should be based on proven competency; therefore some expansions would require additional training, while others would not. Examples of possible expansions of RDHAPs scope of practice might include:

- The duties of an RDH that they are already trained to do, but which currently require direct supervision (and hence are not within the RDHAP scope);[i]
- Atraumatic restorative techniques (ART);
- Placement of glass ionomer fillings;
- Extractions of deciduous teeth.

To facilitate the expansion of options for increasing the capacity of the workforce, policy makers should *reform the system of reviewing proposed changes to scope of practice*.[2] Many of the issues brought to the attention of the legislature regarding dental practice are the result of the tension between the state dental society and the state dental hygiene society (or dental assisting society) around supervision, scope of practice and allowable duties. Pilot studies have consistently shown that high quality care can be achieved in expansions of scope of practice for the allied dental workforce,[3] yet concerns about quality of care are employed by organized dentistry to maintain strict requirements over allied personnel. Legislators in the middle of this professional turf battle have few objective resources at their disposal to help them understand the real costs and benefits for their constituents. To remedy this:

- Appoint an independent committee to review and make recommendations to the legislature on scope of practice matters, as has been done successfully in many other States and countries.[4]
- Develop competency based practice models that are more flexible and responsive than the current silos of professional practice that restrict health care from being responsive and adaptive.[5]

In addition to changing the administrative process for deciding on scope of practice and supervision matters, the state might restructure professional boards in a way that allows each profession to regulate members of their own profession to ensure the safety of the public.

- Dental hygiene, including RDHAPs, should be self-regulating. It is inherently a conflict of interest for the dental profession (which employs hygienists and thus has a significant stake in reducing the autonomy of hygiene) to regulate the hygiene profession. Dental hygiene practitioners should be regulated by their own board or bureau, as has been proposed in the past few legislative sessions.
- California should work with other states to encourage reciprocity across state lines for all new models of the dental workforce, including but not limited to the Advanced Dental Hygiene Practitioner being developed in Minnesota[ii] and the Dental Health Aide Therapist developed in Alaska.[6]

Recommendations: Financing Systems

A solid financing system is necessary for building any alternative models for dental care, as shown by the number of RDHAP patients who depend on Denti-Cal as an insurer or require lower cost or free services supported through grant funding. This funding should complement,

[i] http://www.comda.ca.gov/lawsregs/dutytable3-20-06.doc

[ii] https://www.revisor.leg.state.mn.us/bin/bldbill.php?bill=S2895.1.html&session=ls85

not replicate, the private financing system, as the private system does not cover any of these vulnerable populations. Current funding structures need enhancement to ensure access to care for our most vulnerable populations.

- Denti-Cal needs to focus on meeting the needs of the population it serves, as well as the providers that it pays. Cuts in adult benefits have been shown to result in decreases in provider participation and patient utilization, resulting in extreme pressures on FQHCs and other clinics, and exacerbating unmet oral health needs.[7] The State can solidify its commitment to supporting access by strengthening Denti-Cal to support the dental health care needs of underserved populations.
    - The proposed cuts to adult Denti-Cal would decimate the RDHAP services now provided to our State's most vulnerable populations. Enhancements, not cuts in services are needed, particularly for preventive services.[8, 9] If the State cuts these basic preventive services, they will pay much more in treatment later on.[10]
    - Denti-Cal should expand reimbursement to RDHAPs for non-clinical services such as case management, health education and prevention services. These services are essential to RDHAP practice specifically, but also to the development of alternative oral health delivery systems in general.
- The state should support new funding mechanisms such as AB 363/SB400 which allow FQHCs to bill for services provided outside their four walls. Because RDHAPs are mobile, they can treat individuals who are homebound and institutionalized. Legislation that allows for flexibility in payment will enhance flexibility in treatment locations.
- RDHAPs should be able to bill for their services as a corporation, as is common for dentists to do, not just a sole proprietor. This will allow RDHAPs to separate business and personal income for tax purposes.

Recommendations: Quality Improvement and Research

More research is needed to determine the most efficacious and appropriate treatments for health outcomes in vulnerable populations, and help define appropriate benefit levels. Efforts to systematize patient information and outcomes are needed. Dental insurers use a model of insurance based on the expectation of a healthy middle-to-upper income person. This model does not apply to many of the underserved populations that RDHAPs and other safety net providers work with.

- Tracking health outcomes from dental treatment is almost impossible due to the separation of financing and patient record systems between dentistry and medicine. Recent research calls for better integration of these systems in order to reduce health disparities.[11] RDHAPs in some settings are in a position to begin re-integrating dental records into the medical patient record. Electronic information systems have been the backbone of many quality improvement initiatives.
    - Denti-Cal participants are also Medi-Cal participants. While currently separate systems, they could be integrated. If the State were to integrate them, it would be in a unique position to develop a comprehensive data infrastructure able to track expenditures, utilization, diagnoses and health status, leading to an unprecedented research capacity for quality improvement (i.e. examining savings on health costs for diabetes resulting from treatments of dental disease).
- Policy makers might consider incentives for the oral health community to develop better measurements of quality of care that include health outcomes measures and track patient

outcomes. Consumers have no resources from which to judge the quality of their dental practitioner and hence have no information from which to make an informed health care choice.

Recommendations: Care Delivery System

The State should encourage new models of collaborative practice with a variety of new alternative providers such as the RDHAP. These collaborative models can exist across all levels of dental practice, but also across many medical and other care delivery models in the state. Having multiple models of care delivery provides actual options for consumers – convenience of location, choice of provider and ability to access basic preventive dental care.

RDHAPs have shown that more attention needs to be given to dental services provided in health care institutions. Regulation within health care industries, particularly long-term care and skilled nursing facilities, should include more specific standards and care delivery options for the provision of oral health care.

- RDHAPs should be eligible to fulfill the Title 22 provider requirement for a dental program in nursing homes. RDHAPs are well suited, both in skill set and practice model, to be on-site primary dental care practitioners providing preventive and educational services in these settings. In addition, RDHAPs can work as dental case managers for nursing home residents, working with administrators to develop referral networks of local dental providers to ensure avenues for necessary restorative and surgical treatment, and dentures.
- As has been suggested by a statewide taskforce on oral health for aging Californians, policy should support the development of new collaborative models of providing services in institutions such as long-term care settings, using new technology and practice arrangements.[12] One such pilot project is currently underway, funded by the San Francisco Foundation and run by the California Dental Association Foundation.[13]

Recommendation: Workforce Development

Ensuring a high quality workforce will be essential to expanding alternative models of dental care. Regulatory and financing systems will need to be flexible to be able adapt to these new models and support them, and the education system must be able to respond by providing the skills and competencies to new graduates so they are prepared to work in multiple settings.

- RDH programs are primarily located in community college settings, restricting the ability of educators to train the dental team together. New models of dental and hygiene education should be developed which provide training for teams of dental practitioners who can work collaboratively in a variety of health care environments.
- Medical and nursing education needs to have more oral health curriculum, and there needs to be more interdisciplinary educational models to ensure that oral health is not neglected by medical practitioners.
- Much policy discussion focuses on education and practice strategies to encourage doctors and dentists to work with underserved populations. In the case of RDHAPs it is a practice requirement. A set of similar mandates for dental practitioners may go a long way towards improving access to the restorative and surgical treatments needed by many underserved populations.

Introduction

Lack of access to dental care is a persistent problem for vulnerable populations in California resulting in extensive untreated dental disease.[14-16] The State has invested in multiple programs and policies aimed at improving access to dental treatment. These efforts include provider targeted incentives such as loan repayment and scholarship programs, residency training programs, and licensure by credential, as well as public targeted incentives such as funding dental benefits and public clinics.[17] Most efforts seek to expand access to the existing care delivery model, which consists primarily of private dental offices and community dental clinics. Relatively recent additional State efforts promote disease prevention in non-dental office settings.

Registered Dental Hygienists (RDH) are dental disease prevention specialists. They are not well-positioned to significantly improve access for underserved populations because only 2.5% of RDHs practice in non-private practice settings.[18] A key problem of the existing system is that many Californians cannot access care in dental offices as they either do not have the financial means to pay for dental care (i.e. uninsured or low income), or face physical impediments to getting to a dental office, (i.e. not in geographic proximity, institutionalized).[19]

In 1998, California officially recognized a new dental health profession: the Registered Dental Hygienist in Alternative Practice (RDHAP). To become an RDHAP, candidates must have a baccalaureate degree (or equivalent), hold an RDH license, have 2000 hours of clinical practice in the past 36 months, complete a 150-hour accredited educational program and pass an examination on California Law and Ethics administered by the Committee on Dental Auxiliaries (COMDA), a subcommittee of the California Dental Board (CDB). RDHAPs may practice *unsupervised* in homes, schools, residential facilities and other institutions, and in Dental Health Professional Shortage Areas.[20]

Recent RDHAP licensees (over two hundred in the last few years) have been able to set up practices successfully, however they do report difficulties with providing services in underserved areas for a variety of reasons. These obstacles could be removed through policy

adjustments.[18] This study explores the ways in which reasonable policy modifications may improve utilization of the RDHAP workforce. Accordingly, we examine the evolution of RDHAP practices and their progress in creating and expanding access to care for vulnerable populations. The specific aims of this research project are to:

- Profile the RDHAP workforce and compare it to the RDH workforce to understand the unique practice settings, patient demographics and services of RDHAPs.
- Explore the practice realities of RDHAPs as they enter underserved communities and devise new models of care delivery outside of the traditional dental office.
- Discuss laws specific to the RDHAP profession and develop policy recommendations to further enable RDHAPs to expand access to preventive dental care for underserved Californians.

Historical Development of the RDHAP

The dental care system consists of a variety of organizations that strive to meet the dental needs of diverse populations in the U.S. The expansion of private practice dental services in combination with public health interventions such as water fluoridation and the expanded use of personal dental hygiene products have resulted in improvements in oral health status over the past 50 years. However, there is a growing segment of the population which increasingly can not access services and is shouldering a disproportionate burden of dental disease.[19, 21] To address the widening disparities in oral health status, in 2000, the Surgeon General issued a National Call to Action, to which many organizations responded.[15] Proposed solutions ranged from more traditional ways to increase the health workforce through state planning and expansion of educational programs to small pilot projects testing multiple pathways to addressing access issues locally.[17, 22, 23]

The dental workforce is a critical component of health care delivery. Views differ on how providers may best reach underserved people. There have been multiple proposals recommending new categories of providers, more ethnically diverse providers or simply more of the same in greater numbers. Some of these proposed models have been tried, but have not significantly advanced against the dominant delivery system of private practice dentistry.

Only in the last decade have alternative models of independent and public health dental hygiene begun to attain legal recognition across the U.S [24]

Figure 1: Historical Overview of the Dental Hygienist Profession in the U.S.

Early 1900's
Dentists generally oppose the utilization of dental assistants and hygienists.

1950s & Post WWII
Unexpected consumer demand for dental care arises from the baby boom. In response, the dental hygienist workforce, comprising mostly of women, emerges to help meet this demand. The dental profession regulates the training and practice of hygienists from the beginning.

1965
Medicaid and Medicare laws are enacted without provisions for dental care, setting Medicine on a new trajectory but leaving dentistry untouched.

1970's
Predominantly female dental hygiene workforce continues to expand, coinciding with a continued overall expansion of women in the workforce and rising feminist projects regarding equality in working conditions and pay. Efforts toward professional independence originate.

1980s and 1990s
Market solutions to health care crises are explored. The increasing popularity of cosmetic procedures makes private practice dentistry more lucrative. Access to dental care becomes a major policy issue. Dental hygiene continues to push professional independence. States begin to consider using different delivery models, including independent or expanded dental hygiene scopes of practice.

1990s -2000's
Turmoil in health care increases. The Surgeon General's report on Oral Health and Call to Action address health care access, disparities and market failures. States begin to adopt new delivery models, including public health, independent and expanded dental hygiene scopes of practice. California legally recognizes the RDHAP profession, and establishes two educational programs. As of late 2007, the State has 202 RDHAPs.

Several studies have been conducted to examine these new practice models.[6, 24-26] Most have focused on the safety and efficacy of pilot programs, not the actual process of implementation or impact on access of alternative dental hygiene practice. For example, economic and practice studies have been conducted in Colorado where RDHs may now practice independently.[27, 28] In Alaska, preliminary results of the Dental Health Aide Therapist program have shown safe and effective outcomes of the few providers in practice.[6] In

California, studies conducted by researchers as a component of the Health Manpower Pilot Projects Program (HMPP) (now, Health Workforce Pilot Projects Program (HWPP)) examined the RDHAP pilot in terms of practice settings, quality of service and patient satisfaction and demographics. These studies provided the positive evidence needed for the establishment of the RDHAP profession.[29-32] Still, few alternative dental workforce models have been implemented, given the opposition from the mainstream dental community. In spite of this past opposition, however, initiatives to develop new workforce models have finally emerged as a legitimate undertaking, as evidenced by new workforce models being developed by the American Dental Association, the American Dental Hygienists' Association, and others.[6] The RDHAPs' experiences provide the best evidence as to *how new models already in practice actually are working*.

This study does not evaluate the "outcomes" of the RDHAP practices in the traditional way through counts of utilization or services delivered, quality of care, or economics of practice. These areas may be ripe for study in the future; however, they provide no understanding of the change process, only its outcomes. Rather, I examined the qualitative experiences and backgrounds of RDHAPs to understand their motivations, experiences and aspirations that greatly impact what they do, how they do it, and why they do it. Unveiling such data is an important first step in allowing more stakeholders to understand and consider the utilization of alternative dental providers. Accordingly, this paper discusses the context surrounding RDHAP practices, including strategies to develop practices, successes and shortcomings. It then presents policy recommendations to increase the capacity of RDHAPs to treat underserved people.

Research Task and Methods

This study utilized a mixed methods approach, which was approved by the UCSF Committee on Human Research. First, I conducted a standard statistical analysis of the 2005-2006 California Survey of Registered Dental Hygienists.[18] The survey sample represented the State's dental hygiene workforce as of September 2005. The response rate was 74%.

Second, I examined legislative histories, current regulations and commentaries from the 2005-2006 California Survey of Registered Dental Hygienists. I also interviewed practicing RDHAPs and experts from educational institutions and professional associations involved in the development and regulation of the RDHAP profession. The legislative review includes an overview of RDHAP licensure requirements and scope of practice. Sources for the literature review include OSHPD archives.

The open-ended portion of our statewide sample survey of RDHAPs was invaluable to the study. Fifty-two percent of the respondents provided comments on their practices and experiences. These comments were used in combination with other background research to create our final interview protocol. The protocol was used to interview: 1) one focus group, which consisted of seven RDHAPs (five in practice, one graduate currently developing her practice and one student) and 2) five additional practicing RDHAPs, individually. I also interviewed representatives of several key organizations and institutions regarding their roles in the professional development of RDHAPs: the California Dental Hygienists' Association (CDHA), the California Dental Association (CDA), the Committee on Dental Auxiliaries (COMDA), the California Dental Board (CDB), the University of the Pacific (UOP) and West Los Angeles College (WLAC).

Legislative Review[iii]

Historical Development of Alternative Providers

In 1972 the California Legislature enacted AB1503 (Duffy), The Health Manpower Pilots Act, setting the stage for efforts to bring the RDHAP into existence. Today, this program is the Health Workforce Pilot Projects Program (HWPP). It "allows organizations to test, demonstrate, and evaluate new or expanded roles for healthcare professionals or new healthcare delivery alternatives before changes in licensing laws are made by the Legislature." [34] Organizations may use HWPPs to study the potential expansion of a profession's scope of practice to a) facilitate better access to healthcare, b) expand and encourage workforce

[iii] A review of the history of legislative policies conducted by the California Dental Hygienists' Association formed the basis of much of the following analysis.(33. Hurlbutt, M. and K. Menage-Bernie, *RDHAP: Past, Present, Future*. 2007, California Dental Hygienists' Association: Glendale.)

development, c) demonstrate, test and evaluate new or expanded roles for healthcare professionals or new healthcare delivery alternatives, or d) help inform the legislature when considering changes to existing legislation in the Business and Professions code.[34]

In 1980, California State University at Northridge in collaboration with the Southern California Dental Hygienists' Association[iv] submitted an application (HMPP #139) to "teach new skills to existing categories of health care personnel and expand the role of dental auxiliaries, specifically dental hygienists."[35] The approved application was underway in 1985 when Maxine Waters introduced companion bills AB844 and AB845, which would have allowed RDHs to practice without supervision in selected sites.[33] These bills were defeated, and in 1987, a lawsuit against the HMPP project host and participants was initiated by the California Dental Association (CDA). This lawsuit was dismissed. A second class of HMPP participants then entered independent practice, only to be followed by a second lawsuit in 1990 that focused on a technicality of the HMPP process. This lawsuit terminated HMPP#139; however, a subsequent application for HMPP#155 to continue the project was approved. During this time, a payment mechanism had been authorized by Denti-Cal to pay the hygienists enrolled and active in the employment phase of the project.[35]

The second HMPP stated as its purpose to "expand the role of dental auxiliaries to allow the independent practice of dental hygienists."[36] As the safety and efficacy of independent practice had been established by this time, the project objectives of the second HMPP were more specific to examining the metrics of the project, including the economic viability and sustainability of independent hygiene practice, as well as patient flows and outcomes. Two bills sponsored by Areias (AB2353 in 1992 & AB221 in 1993) sought to codify a series of changes in the law regarding licensure and regulation of dental hygienists and establish the independent hygiene category; however they were both defeated.

In 1995 AB560 (Rosenthal/Perata) was introduced to again try to establish the category of independent practice. After becoming a two year bill it was signed into law in 1997. It

[iv] In 1980, Dental Hygiene had two separate associations for Northern and Southern California. Today these are combined into the California Dental Hygienists' Association. The initiative was spearheaded by a group of hygienists in the Southern California Association who raised approximately $500,000 to fund the pilot.

amended the Business and Professions code to extend the scope of practice for dental hygienists, and added a new category of provider, the RDHAP, who could provide independent services *with the prescription of a dentist or physician and surgeon*[v]. The passing of this legislation also terminated the HMPP project #155. The participants in the original HMPPs were considered as having satisfied licensing requirements and were allowed to continue their practices.[36]

Figure 2: Summary of RDHAP Scope of Practice

COMDA Regulations:

Once licensed, an RDHAP may practice as (1) an employee of a dentist; (2) an employee of another registered dental hygienist in alternative practice; (3) an independent contractor; (4) a sole proprietor of an alternative dental hygiene practice; (5) an employee of a primary care clinic or specialty clinic that is licensed pursuant to Section 1204 of the Health and Safety Code; (6) an employee of a primary care clinic that is licensed pursuant to Section 1204 of the Health and Safety Code; (7) an employee of a clinic owned or operated by a public hospital or health system; or, (8) an employee of a clinic owned and operated by a hospital that maintains the primary contract with a county government to fill the county's role under Section 17000 of the Welfare and Institutions code

They may perform the duties established by Board regulation in the following settings:
(1) Residences of the homebound.
(2) Schools.
(3) Residential facilities and other institutions.
(4) Dental health professional shortage areas, as certified by the Office of Statewide Health Planning and Development in accordance with existing office guidelines.

Prior to the establishment of an independent practice, an RDHAP must provide to the board documentation of an existing relationship with at least one dentist for referral, consultation, and emergency services. The dentist's license must be current, active and not under discipline by the Board. Any changes must be reported to the Board in writing, within 30 days following such change.

Existing Practitioners under the HMPP

Persons who completed the required coursework under the HMPP (Health Manpower Pilot Project) and established an independent practice by June 30, 1997, do not need to comply with the above requirements. They may apply for a license by obtaining an application from COMDA. Applicants must provide proof of having established a practice by June 30, 1997, complete the application, and pay a $20 application fee and a $56 fingerprint fee. A license will be issued once the person's criminal history background investigation has been completed.

[v] The original HMPP pilot did not require a prescription requirement for independent hygiene services.

The original participants of the pilot project have been practicing independently since the completion of the HMPP; however a formal education program for RDHAPs did not become available until 2003.[37] Although the curriculum was already developed, it took several years to find a new host for the program. The first RDHAP class graduated from West Los Angeles College in 2003 and, following a Request for Proposals from the CDHA for a distance education program, a second program opened at the University of the Pacific, which has been graduating RDHAPs since 2004.

The enactment of the RDHAP category and state institutional support through education, licensure and billing status of these providers were the critical first steps toward enabling the implementation of RDHAP practices around the state. Since that time, additional legislation has modified the conditions and restrictions on RDHAP practices.

Current RDHAP Legislation (2002-present)

AB1589 (Perata) allowed RDHAPs to be employees of specified clinics in addition to the other areas of practice they are allowed in their licensure category. SB2022 (Figuroa) specified in detail the parameters of practice of dental hygiene and set new limitations on any other profession (besides the RDH or DDS) performing these procedures. Additionally, the bill allowed dental hygienists to provide education and preventive services without supervision in public health programs. Finally, it specified that a dental hygienist may use any material or device approved for use in the performance of a service or procedure within his or her scope of practice if they have the appropriate level of education and training required. This provision essentially allowed hygienists to use new technology as it becomes available without having to revisit the legal requirements of their scope of practice.

AB1334 (Salinas) changed the prescription requirement so that rather than needing a prescription prior to providing care, RDHAPs must *obtain written verification that a patient has been examined by a dentist or physician if the hygienist provides services to the patient 18 months or more after the first date the hygienist provides service… valid for a period not to exceed two years*. Finally, SB238 (Aanestad) was enacted in 2007 allowing a Federally

Qualified Health Center (FQHC) to bill directly for an RDH or RDHAP encounter. This allows a clinic to employ an RDH or RDHAP regardless of whether they employ a dentist.

Dental Hygiene Practice - Related Legislation

The practice of RDHAPs may be affected by legislation pertaining to the practice of dental hygiene. For example, California now allows for RDH licensure by credential. RDHs from other states may thus be re-licensed in California through an expedited application process.[vi] However, the State cannot grant similar reciprocity to RDHAPs because the profession is not recognized outside of California.

In 2006, a California bill proposed to establish a Dental Hygiene Bureau in the Department of Consumer Affairs. The bill would have shifted the licensure and consumer protection duties over the state's RDHs and RDHAPs from COMDA to the self-regulating bureau. However, the bill was vetoed by the Governor.[vii] In 2007 another bill proposed to create the Dental Hygiene Committee of California within the jurisdiction of the Dental Board. The new committee would have been responsible for the licensure of the state's RDHs and RDHAPs. However, the Governor likewise vetoed this bill.[viii] Both bills primarily sought to shift the professional oversight responsibilities from one entity to another, along with reconstituting the oversight committee. If implemented, these changes would not immediately affect RDHAP practice, but might have unknown long-term effects on RDHAP practice.

In 2007, two bills were introduced which would have improved access to oral health care. The bills would have permitted FQHCs to bill for services for FQHC patients when the services are delivered at locations other than FQHC sites. If passed, the bills would have allowed FQHCs to contract with providers in designated offsite locations, such as migrant camps and homeless shelters. However, one bill has been suspended in the Senate

[vi] Cal. Business & Professions Code §1766 (AB 2818 (2002, Aanestad)); "RDH Licensure by Credential," COMDA (2007), http://www.comda.ca.gov/rdhlbc.html.
[vii] SB 1472 (2006, Figueroa).
[viii] SB 534 (2007, Perata).

Appropriations Committee since summer 2007, while the other has been inactive since January 2008.[ix]

Also in 2007, a bill passed which will require COMDA licensees, including RDHs and RDHAPs, to report information regarding their specialty board certification and practice status upon initial licensure and subsequent applications for renewal. The information will be posted on either COMDA's or the Dental Board of California's Internet Web site. Moreover, licensees will be permitted to report their cultural background and foreign language proficiency upon licensure renewal.[x] The new law will not directly impact RDHAP practices. However, the tracking of the dental workforce may assist the State in pinpointing dentally underserved populations.

Examination of Legal Requirements for RDHAP Practice

RDHAP practice is bound by a set of requirements. The first is a condition of practice (see form in Appendix 1). Under the California Code of Regulations, prior to the establishment of independent practice, an RDHAP must provide the Dental Board of California with *documentation of an existing relationship with at least one dentist for referral, consultation, and emergency services*.[xi] However, the Code of Regulations does not define "existing relationship." The minimum standard for the relationship is therefore ambiguous. The standard for the circumstances that warrant "referral, consultation, and emergency services" is similarly vague.

Thus, to provide a frame of reference, we examined the nature of other legally-mandated relationships in the medical community, specifically, between physicians and 1) nurse practitioners (NPs);[xii] 2) certified nurse midwives (CNMs); 3) physician assistants (PAs);[xiii] 4)

[ix] AB 363 (2007, Berg); SB 400 (2007, Corbett).
[x] Cal. Business & Professions Code §1715.5 (AB 269 (2007, Eng)).
[xi] Cal. Code of Regulations §1090.1.
[xii] For an example of an NP agreement see http://www.rn.ca.gov/pdfs/regulations/npr-b-20.pdf
[xiii] For physician assistants, the relationship requires a delegation of services agreement, which explicitly sets out the type of procedures delegated, consultation requirements, practice setting/sites, and emergency specifications. (see Sjoberg 2002)

direct entry midwives;[xiv] and 5) public health nurses.[38] We also found similar legally-mandated agreements between hygienists and dentists in other states, particularly in public health settings where the hygienists may work without dentist supervision if "a stipulated standing order and protocol" is in place.[38]

The mandated relationship between an RDHAP and a dentist is unique in many ways. First, the relationship is required even for procedures that are already within RDHAP scope of practice. Second, other non-physician professions are not required to maintain such relationships as a condition of licensure. Rather, mandated relationships between physicians and non-physicians generally must be maintained only where the non-physician intends to provide services beyond his legal scope of practice.

Table 1: Comparison of Professional Practice Agreements in California

	Supervision Requirement	Expanded Duties	Agreement Type	Institutional Role in Agreement
RDHAP	No	No	Referral Agreement with DDS	No
Public Health Hygienists	Yes-General	No	Standing Orders	Yes
Direct Entry Midwife	No	No	Referral Agreement with MD	No
Nurse Practitioner	No	Yes	Standardized Procedure	Yes
Certified Nurse Midwife	No	Yes	Standardized Procedure	Yes
Physician Assistant	Yes - Direct	Yes	Delegation of Services Agreement	Yes
Public Health Nurse	No	No	Standardized Procedure	Yes
Registered Nurse	No	No	Standardized Procedure	Yes

For example, the "Standardized Procedure" legally permits NPs and CNMs to *perform functions which are considered the practice of medicine*. These procedures must be *developed collaboratively by nursing, medicine and administration in the organized health care system*

[xiv] For the legal code outlining direct entry midwife requirement http://www.leginfo.ca.gov/cgi-bin/displaycode?section=bpc&group=02001-03000&file=2505-2521

in which they practice.[xv] They do not need any agreement with a physician to perform duties within their nursing scope of practice.

The PA-physician agreement constitutes a formal delegation of medical duties from the supervising physician to the PA. The supervising physician must be available in person or by electronic communication whenever the PA is treating patients. Therefore, the physician need not be onsite at all times.[38] The mandated relationship between direct-entry/lay midwives and physicians is more analogous to that between RDHAPs and dentists. Both groups must maintain a relationship with a medical provider in the event of unforeseen circumstances. However, the two groups differ with regard to education and training. Midwives are trained "on the job" to provide services entirely outside of the medical model. The sole purpose of the mandated midwife-physician relationship is therefore to provide pregnant patients with emergency medical care in case a life-threatening need arises. RDHAPs, on the other hand, must maintain relationships with dentists for referral and consultation in addition to emergency situations.

The mandated relationship for RDHAPs is also unique because such agreements between physicians and other non-physician providers are typically overseen by the medical institution in which they practice, such as a hospital or a clinic. Since there are few major "dental institutions" or hospitals with dental departments, the mandated RDHAP-dentist relationship is, in practice, really an agreement between two individual providers, with no organizational support to ensure standardization, good-faith and fairness.

While unique in many ways, the RDHAP is similar to other providers in that it has *Standards for Clinical Dental Hygiene Practice.* These standards guide professional practice both in the "provider-patient relationship" as well as the facilitation of "implementation of collaborative, patient-centered care in multi-disciplinary teams of health professionals."(p3) These standards hold providers accountable to all local, state and federal statutes and regulations over their scope of practice.[39]

[xv] Regulations can be found at http://www.rn.ca.gov

The prescription requirement is a separate provision that limits RDHAPs ability to freely practice under their scope. As discussed, a patient must obtain a dentist or physician prescription for dental hygiene services if the patient seeks treatment from an RDHAP 18 months or more after the first RDHAP visit. This is unique in that most restrictions requiring a prescription of one provider to another are for specialty care, not for primary preventive health care services.

Finally, many RDHAP practices are with the elderly so federal and state laws regarding dental care in nursing homes affect them. Under federal law, nursing homes and skilled nursing facilities are required to "assist residents in obtaining routine and 24-hour emergency dental care."[xvi] Under California law, "arrangements shall be made for an advisory dentist to participate at least annually in the staff development program for all patient care personnel and to approve oral hygiene policies and practices for the care of patients."[xvii] Further, "[i]f [a] service cannot be brought into the facility, the facility shall assist the patient in arranging for transportation to and from the service location."[xviii]

Significant confusion has arisen among nursing home administrators, RDHAPs and dentists over the interpretation of these laws. For example, most facilities comply with the regulations by contracting with a dental provider (usually a Denti-Cal provider) to meet patients' dental needs. Because these contracts are not specifically required by law, their scope and reach are often unclear. For instance, a large percentage of RDHAPs are developing their practices in nursing homes, providing on-site preventive care and education, and referring restorative treatment needs to a dentist. However, many dentists with whom the nursing homes have a contractual relationship *assume* that the relationship grants them exclusive authority to provide dental care to the nursing home patients (which the law does not require), and have sought to have the RDHAPs removed from the homes. This is causing much frustration for nursing home administrators who want to both provide on-site preventive care as well as have a dentist available for treatment needs but who are told they may only have the latter if they deny the former.

[xvi] 42 CFR Ch. IV (10-1-01 Edition) p. 528-29, section 483.55 Dental Services
[xvii] Cal. Code of Regulations §72301.
[xviii] Id.

Legislative Summary: Impacts on Access to Care

In summary, any legislation regarding dental hygiene education, training, licensure, scope of practice, or reimbursement mechanisms may impact the practice landscape of RDHAPs, and consequently, their ability to improve access to care. Neutrally-worded legal provisions can, in effect, constrict the profession's practices. Policy-makers should thus consider potential impediments to access that may follow from seemingly innocuous proposals, such as proposals to "restructure" reimbursement schemes.

The restrictions placed on the RDHAP profession are the result of a political compromise that allows for independent hygiene practice in exchange for improving access to dental care for underserved populations in California. Legislators understood that permitting RDHAPs to practice independently was imperative to meeting this goal because RDHAPs often practice in communities where few dentists practice and few dentists accept Denti-Cal. Logically, therefore, the more ties RDHAPs are required to maintain with dentists, the more constrained RDHAPs will be from reaching the underserved.

Contrary to original legislative intent, many recent proposals have sought to restrict RDHAPs from full independent practice, inevitably creating barriers to access. Policy-makers should instead focus on the purpose of RDHAP profession – to improve access to dental care. The profession's capacity to improve access is inherently tied to reimbursement policies for treating the underserved, including the elderly and developmentally disabled. Legislators may therefore want to consider expanding public financial support structures for RDHAPs.

Profile of the RDHAP Workforce

The results from the 2005-2006 UCSF Statewide Survey of Dental Hygienists in California provide a baseline understanding of who is choosing to enter this licensure category and what kind of work they are doing. [18] The RDHAP workforce, while still small in numbers[xix], is distinct in many important ways. First of course is its very existence. Dental hygienists have

[xix] The survey included 119 RDHAPs as of September 2005. As of September 20, 2007, there were 202 individuals ever licensed as an RDHAP in California, and 196 active licenses (Personal Email Communication, Elizabeth Ware, Executive Officer, Committee on Dental Auxiliaries, September 20, 2007).

been working to expand their scope of practice and reduce their supervision requirements for over twenty years. California was one of the first states to allow a pilot of independent practice and subsequently legislatively enact this new category of provider.[31] The following section describes the overall profile and practice characteristics of the 119 RDHAPs in comparison to the 11,083 RDHs in the workforce as of 2005-2006.

Demographics

In many ways, the RDH and RDHAP workforce are alike given that RDHAPs are a subset of the RDH workforce. The age distribution of the two groups is similar, as are the marital status and gender distributions.

Table 2: Comparison of Workforce Demographics

	RDHAP	**RDH**
Age Distribution		
18-30	5%	7%
31-40	22%	26%
41-50	31%	33%
51-65	41%	32%
65+	2%	2%
Marital Status		
Single	15.0%	13.6%
Married/Partner	64.5%	72.5%
Divorced / Separated / Widow	20.6%	13.9%
Gender		
Male	3.7%	2.5%
Female	96.3%	97.5%
Underrepresented Minority**		
African-American, Hispanic, Native American*	21%	9%

**Statistically significant differences*
*** Reported together due to small sample size*

There are some significant demographic differences, with RDHAPs more likely than RDHs to be from an underrepresented minority group (African American, Hispanic, Native American), more likely to speak a foreign language (35% vs. 27%), and less likely to have children living at home (41% vs. 55%).

Education

The RDHAP workforce is required to have a baccalaureate (or equivalent) education as a pre-requisite for licensure. Hence, RDHAPs are more likely than RDHs to have a bachelor's degree or above (70% vs. 48%). RDHAPs who participated in the original Manpower Pilot Projects (HMPP #139 & #155) were not required to be baccalaureate educated. RDHAPs are equally likely as RDHs to have been educated in-state (78% vs. 77%).

Clinical practice

Many RDHAPs reported that they are maintaining a traditional RDH job in addition to developing their RDHAP practice. Therefore, the clinical practice data we collected cannot be used to specifically distinguish the clinical work of an RDH vs. an RDHAP. In spite of this, we can make some general observations about practice differences between the two groups. First, RDHAPs work a half day more per week on average (3.8 days) than the average RDH (3.4 days). They reported significantly greater difficulty finding an acceptable salary range (18% vs. 11%) and/or benefit package (23% vs. 14%) when last looking for work.[xx] RDHAPs did not report a significant difference from RDHs in difficulty finding work, opinion of the supply of RDHs in the state, or years they intended to work.

Table 3: Comparison of Clinical Practice Experience

	RDHAP	**RDH**
Difficulty Finding Work		
None	77.5%	78.3%
Some Difficulty	13.5%	16.8%
Difficult	7.9%	3.5%
Extremely Difficult	1.1%	1.4%
Opinion of RDH Supply		
Too Many	18.4%	12.1%
Adequate Number	62.1%	67.5%
Not Enough	19.5%	20.4%
Years Intending to Practice		
<2	6.6%	4.1%
2-5	11.0%	16.7%
6-10	36.3%	30.4%
10+	46.1%	48.5%

**no statistically significant differences in these categories*

[xx] Respondents did not differentiate whether this was when last looking for a traditional RDH job or when looking for work as an RDHAP. Therefore, it may reflect a difficulty with traditional practice that would have been an impetus to become and RDHAP, or could reflect difficulty establishing RDHAP practice.

Patient Populations

RDHAPs and RDHs reported similar numbers of patients per day (8.5 and 8.4 respectively) and similar racial, ethnic and age breakdowns of their patient populations. The only category showing a statistically significant difference is the 0-1 year olds, however the percentages were extremely low. RDHAPs reported a slightly higher percent of patients (3.5%) they had difficulty communicating with due to language barriers than did RDHs (1.9%), however the differences were not statistically significant. The largest differences in patient populations between the RDHAPs and RDHs were those considered medically compromised, developmentally disabled, mentally ill and having a behavioral management problem[xxi].

Table 4: Comparison of Patient Characteristics

	RDHAP	**RDH**
Age of Patients		
0-1*	0.6%	0.1%
2-5	5.0%	4.2%
6-17	12.3%	12.3%
18-64	61.2%	61.8%
65+	21.3%	21.3%
Race/Ethnicity of Patients		
African-American	5.6%	5.8%
American Indian	0.9%	1.4%
Asian/Pacific Islander	6.9%	8.4%
Hispanic/Latino	18.0%	15.0%
White	67.2%	67.3%
Other	2.4%	2.4%
Special Needs Patients		
Medically Compromised*	25.8%	16.8%
Developmentally Disabled	4.7%	2.9%
Mentally Ill*	5.6%	2.6%
Behavior Management	2.6%	1.4%

**Statistically significant difference*

Practice Characteristics

There are quite a few differences in the practice characteristics of RDHAPs and RDHs. RDHAPs are more likely to work at multiple sites but for fewer clinical hours on average, across all sites than an RDH (31.8 hours vs. 34.6 hours per week).[xxii]

[xxi] These data are reported for all their patients across all their practice sites. They do not distinguish which patients are in their "RDHAP" practices versus those in a traditional RDH practice.

[xxii] These data differ from the total hours worked data reported above in that the question was how many hours you work at each individual site. RDHAPs are working many hours either in independent practice or doing other activities, so while their weekly practice site hours are fewer, their total weekly hours are greater.

Work settings of RDHAPs are much more diverse than for RDHs, with 24.5% of their reported practice sites being something other than a private dental practice, compared to 2.5% of RDHs.

Figure 3: Work Settings of Clinically Active RDHs in California

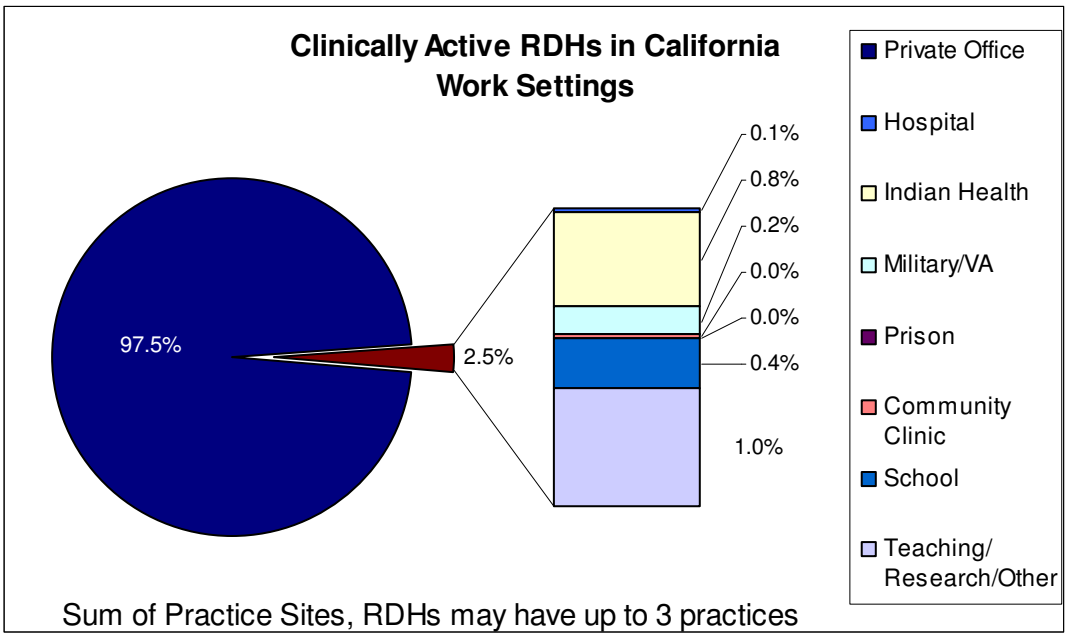
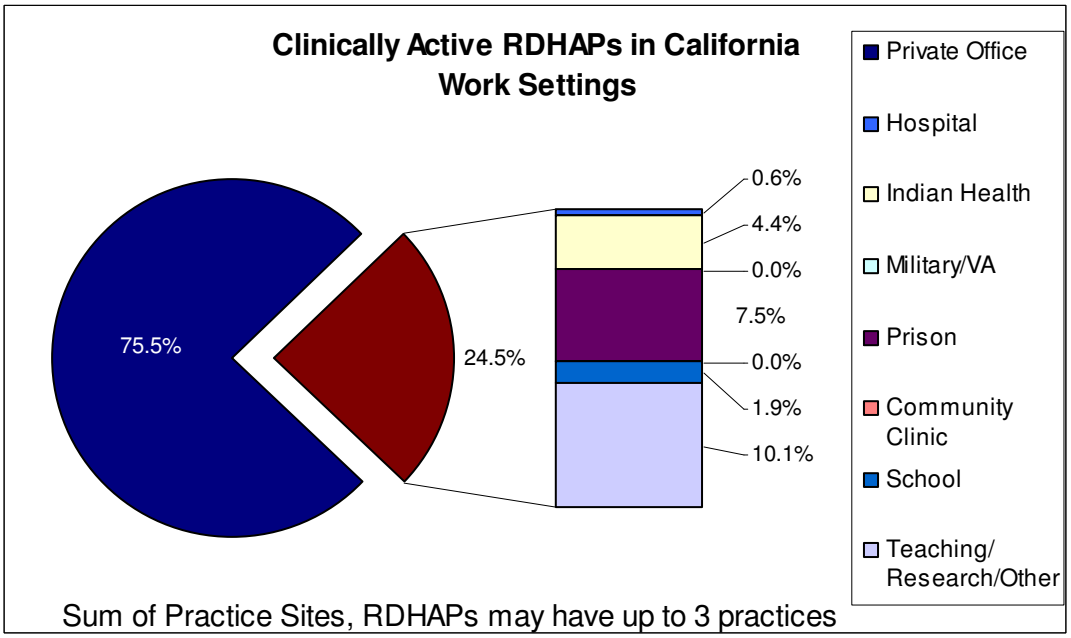


Figure 4: Work Settings of Clinically Active RDHAPs in California



The practice type (general practice, pediatrics, endodonics, etc) of the practices they are in do not vary significantly, except for among "other" types of practices, indicating that for those that continue to work as an RDH, they continue to mirror their peers in work patterns, but as an RDHAP they are in alternative settings. This pattern is further elaborated as RDHAPs report being employed for one or two practice sites, but self-employed for a second or third. No RDHs reported being self-employed. Significantly more RDHAPs reported they had a contract for their second (40.0% v. 19.4%) and third (62.5% vs.12.0%) practice settings than did RDHs.

Table 5: Comparison of wages, benefits and health care consultations

	RDHAP	**RDH**
Benefits		
Continuing Education	45.7%	52.4%
Dental Care/Coverage*	51.1%	64.8%
Disability Insurance	10.9%	7.3%
Medical Insurance	25.0%	26.7%
Paid Liability/Malpractice	9.8%	5.9%
Paid Sick Leave*	12.0%	20.4%
Paid Vacation	45.7%	48.8%
Production Bonus	25.0%	29.0%
Paid Professional Dues	5.4%	2.8%
Retirement/Pension Plan	35.9%	35.4%
Hourly Wage		
Practice 1	$46.47	$45.63
Practice 2*	$48.22	$45.52
Practice 3*	$52.19	$45.06
Average Wage - All Practices*	$50.73	$45.28
Consultations		
Dental Specialist	46.7%	52.6%
Physician*	57.6%	47.4%
Physician Assistant*	14.1%	4.5%
Nurse Practitioner*	14.1%	5.1%
Registered Nurse*	18.5%	6.0%
Nutritionist*	8.7%	2.1%
Other*	12.0%	3.7%
None	26.1%	28.2%

**Statistically significant difference*

RDHAPs reported higher hourly wages across practice sites than RDHs did ($50.73 vs. $45.28) [xxiii]. The benefits reported by RDHAPs and RDHs varied significantly in two categories. RDHAPs reported less coverage for dental benefits and paid sick leave. A significantly greater number of RDHAPs reported consultations with non-dental professionals in the care of their patients. Finally, there were no differences between the two groups in the number of years worked at each practice site.

Scope of work

An RDHAP may perform any preventive or therapeutic duty that an RDH is allowed to perform under general supervision. We found differences in the distribution of work done within this shared scope of practice between the two groups. Table 6 reports the average percent of procedures in each category done by group. Each category encompasses multiple procedures. On average, RDHAPs were performing a greater mix of procedures in each category than were RDHs. As well, RDHAPs, while working an equivalent number of patient care hours per week, were spending significantly more hours in administration, public health and other categories of work than were RDHs.

Table 6: Comparison of Scope and Hours of Work

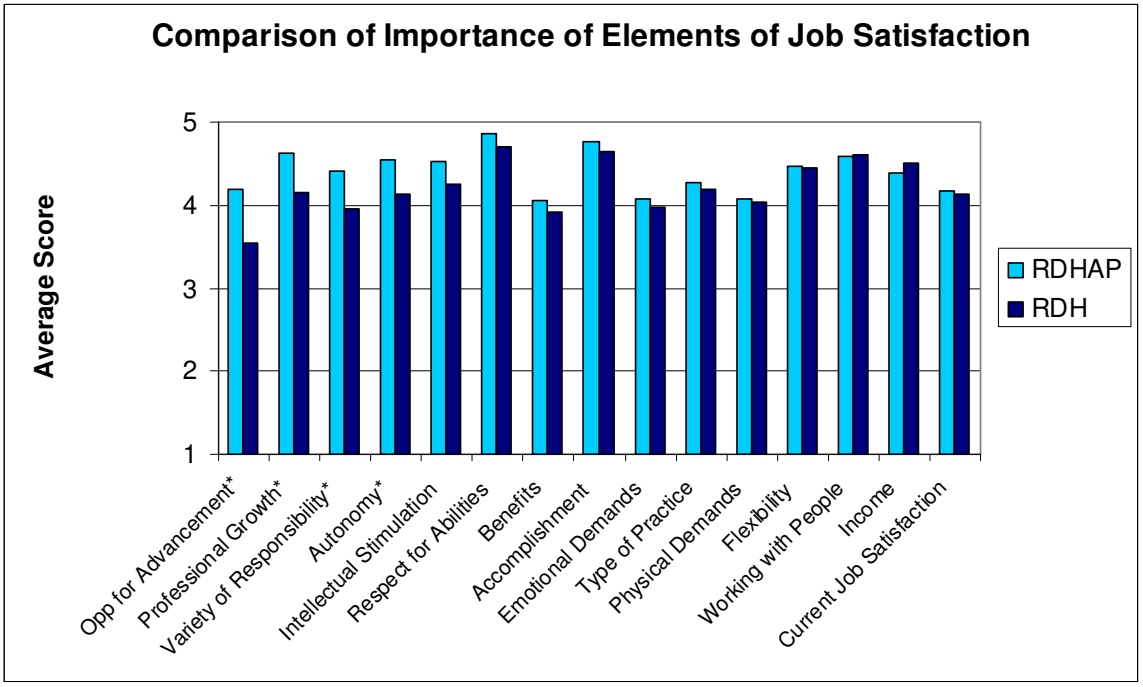
	RDHAP	**RDH**
Scope of Work	Average Percent of Procedures in Category Reportedly Done in Practice	Average Percent of Procedures in Category Reportedly Done in Practice
Diagnostic	73%	68%
Preventive	87%	82%
Therapeutic	94%	92%
Restorative*	16%	8%
Surgical	41%	37%
Cosmetic	23%	13%
Weekly Hours Worked		
Patient Care	22.91	23.33
Administration*	2.20	0.77
Public Health*	1.88	0.11
Teaching	1.38	0.35
Research	0.01	0.02
Other*	1.26	0.20

**Statistically significant difference*

[xxiii] This is not the wage reported for their AP practice, rather the average of the wage they reported at each practice site, one or more of which may have been a private practice.

Job Satisfaction

Both RDHAPs and RDHs report high levels of job satisfaction (4.16 and 4.12 respectively on a 1-5 scale, 5 being greatest). However, they differ in what factors contribute to their job satisfaction. The top items contributing to RDHAP satisfaction are "Respect for Abilities", "Sense of Accomplishment" and "Professional Growth". The top items contributing to RDH job satisfaction are "Respect for Abilities", "Sense of Accomplishment", and "Working with People". The items where there was significant difference between the groups, with RDHAPs rating the factor higher than RDHs, were "Opportunity for Advancement", "Professional Growth", "Variety of Responsibility", and "Autonomy".



Opinions on Professional Issues

Survey respondents were asked to personally agree or disagree with a set of statements about professional issues. There was a statistically significant difference on answers to all questions between RDHs and RDHAPs. A much greater percentage of RDHAPs think access to care is an important issue and express a personal desire to work with underserved patients and communities. In addition to significant differences in opinion on the major issues facing the profession, 78.8% of RDHAPs report being a member of their professional association, vs. 36.1% of RDHs.

Table 7: Comparison of Professional Opinions on Hygiene Practice

	RDHAP	**RDH**
Professional Issues*	Percent Agreeing	Percent Agreeing
Would like Self Employment without Supervision	95.9%	39.1%
Would like General Supervision Only	91.8%	69.5%
Would like Prescriptive Authority	94.9%	64.8%
Would like to do Restorative Procedures	70.4%	40.1%
Is Not Practicing to Full Extent	59.0%	34.5%
Thinks Current Environment Good Fit	87.4%	93.9%
Would like to Work Outside Dental Office	95.8%	49.8%
Would like to be Directly Reimbursed	88.4%	28.1%
Desires to Work with Disadvantaged Patients	**88.7%**	**31.9%**
Desires Work with Underserved Community	**77.1%**	**30.0%**
Thinks Improving Access is Important	**94.9%**	**66.5%**
Thinks Current Regulatory Structure is OK	16.5%	58.0%
Would Agree to License Fee Increase for Self-Regulation	94.7%	56.7%
Would like to Interact with non-Dental Health Providers	95.8%	67.3%
Would Have Liked Loan Repayment Option	69.5%	51.9%
Would be part of Volunteer Emergency Registry	81.3%	53.7%
Is Interested in Job in DH Administration or Education	79.4%	57.6%

**Statistically significant difference in all categories*

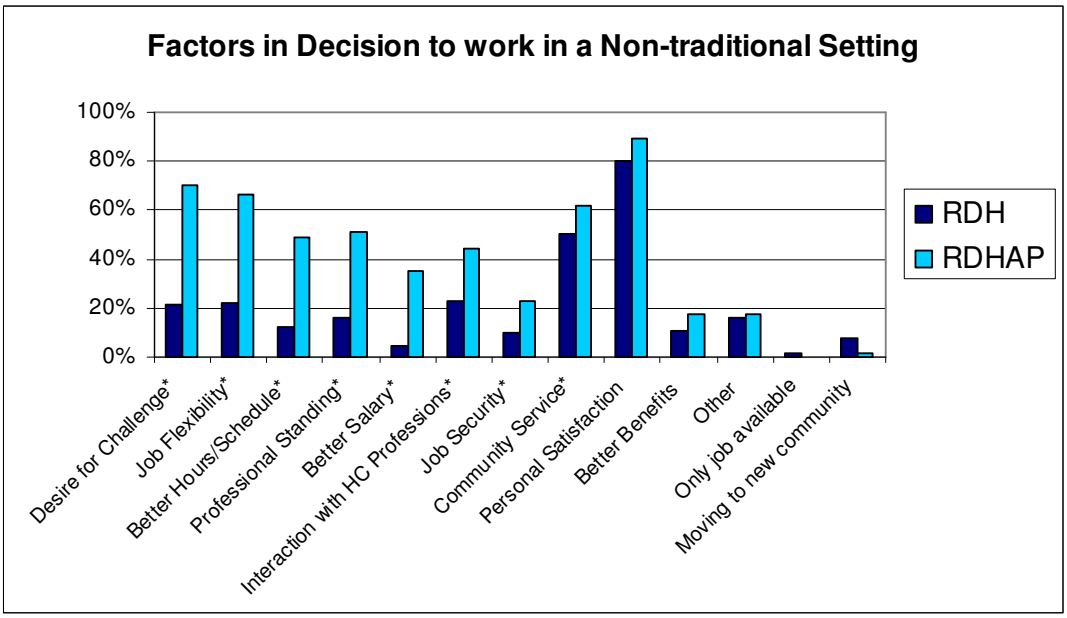
Non-Traditional Practice

Consistent with their scope of practice and restrictions on work settings, RDHAPs are significantly more likely to work in non-traditional settings. These are defined as any practice site that is not a private dental office or clinic. RDHAPs were more likely than RDHs to provide services in a non-traditional setting under general supervision of a dentist or other employer (67.0% vs 9.8%), to work unsupervised in a public health program (25.0% vs. 1.4%), and to desire to work in a non-traditional setting in the future (88.8% vs. 23.6%). Of those hygienists working in a non-traditional setting, RDHAPs are more likely than RDHs to be compensated by patients (60.8% vs. 3.5%), and less likely than RDHs to be compensated by an employer (20.3% vs. 32.3%). They are equally likely to be compensated by the institution they work for (33.8% vs. 34.0%).

Both RDHAPs and RDHs report personal satisfaction as the number one reason for choosing to work in a non-traditional setting. However, RDHAPs report different additional reasons for choosing a non-traditional setting than do RDHs. Overall, RDHAPs were more likely to feel

an alternative setting provided more challenge, flexibility, salary, professional standing and intra-professional contact than were RDHs.

Figure 5: Factors in Decision to Work in a Non-traditional Setting



RDHAP Workforce Profile Summary

These results are important in that they document the baseline practices against which the future characteristics of the profession can be measured. The RDHAP workforce is being educated and licensed to work independently with the goal of increasing access to care for underserved populations and communities. The survey results show that RDHAPs take this role seriously and are in fact fulfilling their mission in these preliminary stages of practice development. As a group, RDHAPs are more educated and diverse than RDHs. They are also more active in the labor market, work longer hours per week with more administrative time, and more likely to consult with other health care providers than are typical hygienists. As well, RDHAPs are more likely to see special needs patients, provide a broader range of services within their scope, work in non-traditional settings, and express a commitment to professional growth, improving access to care and providing services to underserved populations and communities.

It is essential to understand that this professional model is evolving rapidly, so the results presented here reflect the experiences of the first several cohorts as of 2006. Today, in 2008, there is almost double the number of RDHAPs, so their practices may have evolved. What is unlikely to have changed is the profile of the larger RDH workforce from which RDHAPs are drawn.

The RDHAP Experience

To explore the evolution of RDHAP practice, I interviewed a variety of RDHAP providers. The interviews focused on understanding the experiences RDHAPs are having setting up their practices, developing their business models, and providing services. While the development of alternative practice has been many years in the making, the RDHAP as a practicing provider is new to the dental care marketplace. Understanding what successes and barriers the new RDHAPs are encountering in finding employment and/or establishing practices with underserved communities will shed light on the oral health care landscape in these communities and identify ways to build on the expansion of access to dental care they have begun.

Pressing Practice Issues: 2005-2006

In 2005-2006 RDHAP respondents to a statewide sample survey indicated concerns in three areas. The first concern was the impact of structural issues arising from the regulatory, fiscal and administrative environment in which they work. The second concern was the business aspect of their work. The final concern was professional issues that both advance and hinder their practices. I structured my interviews around these themes and found that RDHAPs felt that while improvements had been made in the intervening years, many challenges remained. In the following section, I report on the main findings from my interviews with RDHAPs. I group these findings into four sections: a) motivations for practice, b) patient populations, c) business challenges and d) structural conditions. Responsibility for the interpretation of their statements is my own. However, whenever possible I try to use the RDHAPs' own words, so the reader may understand the experience of an RDHAP from their own perspective.

RDHAP Motivations to Practice

> *"To do things well it takes much effort and hard work. This whole vision takes a special person, not all hygienists would do this work."*

The RDHAP workforce is engaged in independent dental hygiene practice that is limited to underserved communities. Entrants into the field tend to be experienced, innovative and sincerely motivated to increase access to dental care.

> *"I think you really need to be a dynamic dental hygienist, a go-getter, seasoned, able to handle any situation. I really enjoy it."*

RDHAPs reported many attractions to their type of practice. The rewards of being able to serve patients in their communities, and the sense of accomplishment from building their own unique practices, were the two most common themes.

> *"I think it's people who have always worked with developmentally disabled, always worked with the elderly population, always worked in the schools. All of us had some extended involvement with the community outside of just working for three days, five days a week in a regular dental practice. We all were involved in a different capacity, and I think that's what this program attracts is people who really, sincerely want to help. It's not a money thing."*

RDHAPs feel their practices provide opportunities for teamwork and collaboration with medical and dental providers not normally afforded to a dental hygienist in a private practice[xxiv]. The work itself, while challenging, is also interesting, rewarding, and needed in the community.

> *"There's enough business out there for all of us. I mean, I could work 24 hours a day 7 days a week and still not fill the void."*

The RDHAP provides a career opportunity for hygienists who are dissatisfied with private practice, allowing them to remain in the profession, but in a new capacity. Hygienists seeking alternative practice have expressed frustration with being bound to a private practice model that does not afford full employment or professional advancement for hygienists and where job conditions, security and satisfaction depend more on the quality of the interpersonal relationship with a dentist than the on the quality of their work.

> *"I have worked 20 years full time and have no pension plan or benefits to show for it, and certainly no respect. The dentist expects much but gives little. As an RDHAP I have become partners with a dentist who provides mobile services. I will not work for him, but with him."*

[xxiv] As shown in Table 5, RDHAPs are two to three times more likely to collaborate with a non-dental health care professional than an RDH.

Hygienists also expressed dissatisfaction that within a traditional dental practice they are unable to provide the quality of services they want to provide, and work with the special populations in their communities they know need care.

> *"Our population was getting booted left and right out of dental care because of behavior issues. Many of our federally qualified health centers, our safety net clinics, are so busy putting out fires they don't have time for behavioral support and behavioral management. So many of the patients that I was seeing to route into care – there was no place to route them. It was a frustration for me. I even went to work at a community clinic so I could see – I took a job for a lot less money in a clinic so that I could actually provide good preventive hygiene care to these patients because I saw the need."*

In sum, the interviews showed that while each RDHAP has a unique and personal motivation to do the work they do, they share a commitment to working with underserved patients in a model of care delivery responsive to patients as well as personally and professionally satisfying.

RDHAP Patients and Communities

Central to any assessment of access to care is the question of "for whom." The law specifies which communities and institutions may be served by RDHAPs[xxv]. The particular situation of individual providers is unique and specific to the communities in which they work and live. RDHAPs take the mission to work with vulnerable and marginalized populations seriously. The patients they are reaching out to, for the most part, have been neglected by the dental care system. This is particularly true of the homebound and institutionalized frail elderly patients for whom many RDHAPs provide care.

> *"The hygienists in my office, they in no shape, way, or form want to do this. One girl said, "I don't know how you could do that." But these patients are just like you and I -- they just haven't been seen in a while. There's a person attached to those teeth. She just thinks it's all yucky. But we've all seen that yuk. We just don't see it as much in private practice. Maybe once a month we'll get somebody who hasn't been -- or once every couple of months we'll get somebody who has not been seen in years. Where as, opposed to this, it's just daily.*"

[xxv] Defined as (1) Residences of the homebound. (2) Schools. (3) Residential facilities and other institutions. (4) Dental health professional shortage areas. The specific populations they received training to treat are geriatric, pediatric, developmentally disabled and medically compromised patients. B&P Code 1073.3 (e)(1)(c).

Medicare does not provide dental benefits for the elderly population, adding dental disease to the already heavy burden of multiple health problems many older people shoulder. In nursing home and long-term care settings, dental health is usually neglected. Few dentists attend to the preventive health care needs of nursing home residents, and the nursing and medical staff in these homes is minimally trained in the provision of oral health care. One RDHAP who specialized in nursing homes provides a particularly graphic example of the implications of this neglect:

> *"They don't even know what's wrong with him and why he smells. But they're thinking maybe it could be his teeth because they kind of know nobody's really taken care of it. And when we- I had a nurse with me. I said, "Will you just open his mouth for me?" I took a picture, and there's blood everywhere. And there's no caries. It's just, you know, deep sub and no saliva, and the smell. The other nurse wouldn't come with me – but the RN wanted to come, and we finally put him on some medication. And then I had a nurse holding his arms. I asked the doctor yesterday what would be better. I would like something that is a little -- he doesn't want to flail like that, but it's involuntary. And so we've cleaned his teeth three times now, you know, gotten in there. And there are other cases like that. I think that, you know, you'll find degrees of that statewide. So the advent -- and I love this part too -- the advent of the RDHAP has opened a can of worms. Not only were these people underserved, they were underserved even when they were being served."*

RDHAPs report that they are choosing to focus on the people who need the most care in their communities. The homebound and institutionalized elderly population is often one of these underserved groups.

> *"We are there to provide services and to make these people have a sense of dignity and care because they are basically forgotten. Nobody wants to take care of their dental needs. Some of these people have been going to the dentist for years and then they get into a situation where they're in a nursing home and all of that is gone."*

The following list of the populations RDHAPs report working with is representative of the type of underserved communities the profession is reaching out to: homebound and institutionalized elderly, migrant farm-worker families, pregnant women on Denti-Cal, rural school children, developmentally disabled children and adults, wards of locked state institutions, and low income rural and urban families. Although they are unable to provide the restorative care their patients need, the preventive interventions they provide are making a difference for their patients. RDHAPs are creating accessible preventive dental services where none existed before, and improving the health of these communities in the process.

> *"I think that we have accomplished a lot with our fluoride varnish program, and we're talking about a rural area with limited access to care. I have seen children where literally people are living like squatters in a lot of these areas. It's just really sad. I see kids who are just filthy and never brushing yet the decay is arresting itself. I just last week, in two days, saw 137 children. Seven children that I actually saw that had caries three years ago still had not been treated. After treating them, none of them had pain. The tissue was healthy at those sites because the caries were arrested. It's just phenomenal. What we have seen from the program that we've done is just -- I honestly think if this kind of thing were adopted statewide it would just save taxpayers hundreds of thousands of dollars in restorative dentistry; it really would"*

A constant focus on the needs of communities and patients is a core value emphasized by RDHAP providers. Their practices engender a commitment to a patient-centered, consumer responsive model of care delivery. RDHAPs are dedicated to developing mechanisms for reaching out to patients and improving ways of managing care for patients with special needs.

> *"Most of us that have gone in there are not looking at the business, but as an opportunity to go serve all these people and make a difference and help. It's a helping vocation. And it's really pronounced with the RDHAP. Because this is what they really, really -- like once they get seeing these patients and they help these little ladies and the staff, they feel real good about what they're doing. And that's real common in almost all of them."*

In sum, the RDHAPs I interviewed all described a high level of commitment to the patients they provide services and advocate for. RDHAP patients fall squarely in the standard policy definition of "underserved populations." The number and diversity of their patients is emblematic of how many different people are unable to access services in the traditional way.

The Business of RDHAP Practice

RDHAPs are allowed by law to work independently in underserved settings. There are two ways to achieve this: they must either fill an existing position in an organization or develop their own business. RDHAP training programs (located at West Los Angeles College and The University of the Pacific) may devote a maximum of 25% of their curriculum to business development. Both programs cover business topics, and the WLAC program ensures that RDHAPs graduate with a business plan in hand. As there are rarely RDHAP positions waiting for graduates, a business plan is essential to their success. A number of RDHAPs are currently enrolled in, or have already finished, formal education programs in various fields (public health, education, geriatrics, business) to help them succeed in their practices. In the following section, I outline the multitude of successes and barriers RDHAPs are having developing their businesses.

Practice Diversity: The types of practices RDHAPs are developing vary as widely as the local populations they serve. Many RDHAPs continue to work part-time in a traditional hygiene practice as they develop their RDHAP business. Unfortunately, some dentist/employers, rather than seeing a partnership as an opportunity to improve community health, only see RDHAPs as competition. The result is that RDHAPs have been laid off from their hygiene job when their dental employer discovered they were attending the RDHAP program.

RDHAPs grandfathered in from the original HMPP, or those who work in a Dental Health Professional Shortage Area (DHPSA), are able to set up an independent dental hygiene clinic. The more common business model is to set up a mobile practice and work in skilled nursing facilities, long-term care or residential care homes, schools, or public health clinics, or some combination of settings, as this hygienist does:

> *"I work 2 days a week with elementary school children in a rural area conducting exams, and placing fluoride varnish applications and sealants. Two days a week, I treat patients at an FQHC facility. I work two days a week in my own practice, as well as many evenings. I incorporate my mobile practice within this two-day period."*

RDHAPs offering preventive treatment in all of these settings report collaborating with medical and dental providers in their communities. Regardless, it continues to be challenging to find restorative treatment options for patients who are immobile (such as the institutionalized or homebound), or unable to pay (such as the poor uninsured and some of those covered by Denti-Cal). A hygienist working in a rural area with very few dentists and no Denti-Cal providers recounts:

> *"The way I refer -- there's one gentleman in there. He had his last extraction -- he's had pain for the last two years. I went to my office and talked to my dentist about it -- my private office. He gave me a referral to the oral surgeon. I gave it back to nursing -- I made him an appointment. I went back to the social worker and said okay, I've got an appointment for him on this day. They gave the referral to his physician who has to write a referral. So he got to the oral surgeon. So I had to go a long way around… some of these people aren't able to travel. They're bed-bound. To get them in a wheelchair and to get them on the bus and get them to a dental office, and then just sit there for hours on end -- because they're Medi-Cal, they're Denti-Cal. They're not going to -- they'll filter them in with the rest of their patients. Somebody needs to come in."*

As this example shows, case management and developing referral networks are essential skills for RDHAP's in practice, in addition to clinical work (hygiene services, sterilization, client

charting) and business development and administration (billing, marketing). In some settings such as a regional center (part of the department of developmental services), or a public health department, case management and program management are what RDHAPs are hired to do full time. In sum, RDHAPs have a diversity of practice types, as well as the option of diversifying across traditional and alternative practices to balance their personal, professional and client needs.

The Logistics of Business: The logistical issues RDHAPs face in setting up their business are start-up costs, developing a record keeping system, creating a fee schedule and getting a provider number with Denti-Cal and other insurers. RDHAPs found these logistics to be the more tedious and frustrating aspects of developing their practices. Start-up costs for an RDHAP are far less than what would be required for a stand alone dental practice. However, most RDHAPs need a small business loan to get started as the mobile equipment costs about $25,000. Many providers do custom modifications to their mobile kits to make them more user and patient friendly. The dental equipment companies have reportedly been enthusiastic about working with RDHAPs; however, the equipment currently available is not entirely satisfactory, as one hygienist notes,

> *"A friend of mine went out and purchased the equipment and then we thought, "Oh my goodness. This is heavy. This is too noisy; patients do not like all the noise. I find the mobile equipment quite cumbersome and am waiting for better equipment to be made available."*

RDHAPs can set up their business as a sole proprietorship, or they may incorporate. They can work independently or contract as vendors with public and/or private health organizations and institutions. They need billing numbers, vendor numbers and malpractice insurance, all of which have been challenges to obtain.

> *"We also had trouble getting malpractice insurance. They don't know who we are and we have to send in COMDA. Even though I've had malpractice insurance for years, especially being with a regional center, I had to send you know, all this paperwork. They don't even know."*

If an RDHAP is employed by an organization (such as in a case management or public health program role) they may be paid as an employee. If working as a sole proprietor or corporation, an RDHAP may employ other RDHAPs and staff such as a receptionist or an unlicensed

dental assistant, but they may not employ a registered dental hygienist or any type of licensed dental assistant[xxvi].

RDHAP's are billable providers of clinical services for all major public and private insurance plans, including Denti-Cal. Both RDHs and RDHAPs are now billable providers in FQHCs. Most RDHAPs report setting up their Denti-Cal provider number right at graduation, due to the paperwork and time needed to secure a provider number. RDHAPs can only bill as a sole proprietorship, causing some frustrations with differentiating individual and business income for tax purposes. RDHAPs can legally incorporate with IRS the same as dentists, but the code does not list an RDHAP corporation as billable [xxvii]. Many RDHAPs noted struggles with getting payors to recognize them as providers, particularly payors located in other states where RDHAPs do not exist. However, many of the California-based insurers now have RDHAPs in their system, so new providers can more easily get set-up.

Balancing payment sources and setting fees for private pay patients is an area of contention within the RDHAP community. RDHAPs expressed tension between what fees to charge in comparison with one another, in comparison to what they would make (and would be charged to the patient) in a private office, and in comparison to what patients they wanted to serve could afford. One AP states:

> *"Financially I know I'm not charging as much as some of these other people I've talked to, as far as private home visits. I don't know, I'm having an issue with what to charge."*

While RDHAPs do not want to undersell their services they also realize that if they charge rates equivalent to a private dental office they will exclude the very people they are trying to help. Insurance companies have a set rate of reimbursement that varies by insurer and can change over time, adding another layer of complexity.

In order to make their practices work financially, RDHAPs can balance the number of patients they accept from different payment sources and in different settings. A major concern

[xxvi] Laws on the regulation of dental assisting have changed significantly as of January 1, 2008. New laws state an RDHAP may not supervise a licensed dental assistant. http://www.danb.org/main/statespecificinfo.asp#CA
[xxvii] Cal. Business & Professions Code §1775 (a) Responsibilities of RDHAPs & Welfare & Institutions Code Section 14132(q)(2)

expressed by RDHAPs is the projected changes in Denti-Cal billing for services provided to elderly residents of nursing homes and long-term care facilities. The Denti-Cal program, in an attempt to emulate private insurance plans (none of which are designed to cover these populations) is proposing restricting the preventive work that can be done for the frail elderly and other at-risk populations. As one RDHAP put it:

> *"Well that's not helping the patients at all. And the presumed care is just going to be worse because eventually that means I really can't see patients more than once a year -- a Medi-Cal patient. And the beauty of RDHAP over the last five or six years is you can see them four times a year and give good, preventive care. And it's amazing how well that has worked. I mean, we have pictures of before and after of at how easy these people get to be as far as agreeing to the treatment and not being combative, and having the treatment done."*

In sum, RDHAPs face many challenges in setting up their businesses, some of which are typical of any small business owner, and some of which are unique to the regulatory and fiscal environment of dental services. As RDHAPs become established some of these challenges may lessen.

Marketing and Building Awareness: RDHAPs are a new provider in the field of dentistry and health care. A major part of the business development RDHAPs are doing is in marketing the services to their local communities. Much of this marketing is simply raising awareness in the dental and medical community, as well as with patients and administrators, as to what RDHAPs are, what they can do and what added value their services can bring. Many RDHAPs noted that "word of mouth" was the primary way they found clients. In communities or institutions where people currently are not receiving any care, the RDHAPs have been a welcome addition.

> *"When I called her [the nursing home administrator], she said, "Where have you been all my life, you know? I didn't even know you did this." And I was in. And I'm still in.*"

Unfortunately, this outreach has not always resulted in positive attention, particularly from local providers who are determined to keep competition away from their dental practices. One frustrated RDHAP sums it up:

> "*And I think that comes down to, again, the fight – who wants to fight the fight. If we market ourselves then someone is going to come out of the woodwork and come up against us. And I know a lot of hygienist APs have said this to me: "I'm working way down here on the radar screen for the purpose of that. I've already run into trouble. I don't want to initiate it again." And it's really unfortunate because there is such a thing as fair trade, you know? And it is*

unfortunate that we feel like we can't go out there and toot our horns and say, "Look, we're providing a wonderful service."

Negative responses have varied and several lawsuits against RDHAPs have ensued. One dental provider mailed notices to every patient in his practice "warning" them about a local RDHAP, and a mobile dental company faxed slanderous leaflets to nursing homes across the states "warning" them against hiring RDHAPs. These tactics have not succeeded in stopping RDHAPs from practicing, but have cost them time and energy – both of which they would have preferred to spend on care provision.

Competition vs. Collaboration in the Business of Dental Care: The final business issue RDHAPs confront is how to develop a collaborative model of business practice within their communities when local dental providers view the RDHAP profession as competition. The business practice experiences of RDHAPs are contingent on the local community structure and resources, their prior relationships with other providers in the community, and the level of support from the institutions within which they work. One woman recounted how positive her experience had been:

"Oh, no, he's [the local dentist] real supportive. He's not in the least bit -- he's been in practice for 30 some odd years and he's getting ready to retire. He thinks I'm doing a wonderful service. He's in no way threatened that I'm going to steal all his patients. Actually, he's going to be getting patients, from my referral… if I get this one residential care facility, one of our patients is there. I plan on giving her the option to see if they still want to take her there, and I'm definitely going to tell him about it. I'm not out to steal anybody's patients. I have not come across anybody who's been negative. I'm sure I will, but all the ones that I've talked to think it's a real good idea. They don't want to see these people -- the people in the nursing homes. They know they've been neglected. A couple of the dentists say how can you stand to do that? I've seen what their hygiene's like…"

Despite some positive experiences, RDHAPs expect to encounter resistance, particularly in the nursing home arena. A woman who had been providing care for nursing home residents for months describes the backlash:

"So one day I come in, and the social services director says, "The dentist was here, and he yelled and screamed and swore at me that you were taking his patients." And I said, "Well you know that's not true. I'm just cleaning their teeth. And I swear to God, these teeth have never been cleaned before. So I'm really not -- " She goes, "I know that, but I don't know what to do, you know?" And I said, "Well, I don't know what you're supposed to do either."

This situation, unfortunately, is a common one, where providers at odds put patients out of options. Not only are RDHAPs losing the business they have developed, but patients who had been receiving regular preventive care return to being neglected.

> *"And we're seeing this on a daily basis and new dentists are coming into the facilities or wherever we are and they're threatening the facilities and saying "If you let that RDHAP come in I will go away and you will not be able to fill your state requirement." So I think a lot of APs are not willing to walk away from that safety home of a dental office and employment to risk their whole entire – everything they've built for their twenty years in dentistry to have some guy come in and put them out of business after they've already invested $25,000 in equipment."*

RDHAPs are very cognizant of their role and their mission. Given the restrictive nature of their practice, both in scope and community type, they do not see themselves as competing with dentists. RDHAPs feel very strongly that developing relationships with dentists willing to collaborate is essential to ensure the provision of restorative treatment to their patients. However, relatively few dentists take any sort of sliding fee, accept Denti-Cal, or work in nursing homes, hospitals or with disabled patients, thus restricting RDHAPs ability to get their patients the restorative dental care they need. This woman working with disabled patients describes a typical situation.

> *"I have a young lady who had a stroke. She's a respiratory therapist and she's got it made at this place. She needs a filling and she's in a huge wheelchair and she can't get to any dental office where I live in my community. We need help with dentists for us to refer to once we're out there and that's a big – we need someone that cares to go out there and do that as well. "*

In communities with an FQHC or some other safety net provider, RDHAPs find it easier to route patients to treatment than in communities with no dentist willing to provide this care. In this case the referral network can be divided between a dental clinic for low income people and a dentist who takes private pay, as this RDHAP describes:

> *"Well, I have a Dentist who I work with at the FQHC, and then I have another general dentist who years ago I filled in for him… I actually contacted his office when I opened my practice and said, "Look, if I have patients that have private insurance or self-pay and I need to send them to somebody and they're not already established would you take these?" And he said, "Absolutely." And I'll tell you, I have sent hundreds of patients. His whole staff takes me out to lunch and they're like, "We just love the patients you send. They're healthy, they're educated."*

In other cases dentists are the ones motivated to find better ways to manage their patients and initiate collaboration with an RDHAP, such as illustrated in this story:

> "A *dentist that I work for right now has five different facilities that he goes to and he needs a hygienist. And he doesn't want to do any of the cleanings. So he talked to me and he said, "Why don't you go and take the course and get your AP? I want to bring you in. I'm going to*

do the dentistry part, do the exams, do the restorations, and I want you to help me out. We'll be in partnership and you do the cleaning."

The possible avenues for productive collaborations that benefit providers and patients are numerous, however they are still in the beginning stages. As the RDHAP workforce grows, a further transformation of care delivery focused on improving access to care for underserved populations in California can be expected.

"I think it has a long way to go, but more and more dentists and the dentist communities in the different counties that I'm in are treating me more as a colleague rather than an auxiliary person. And I think once that is established, and again it's just a matter of time. "

In sum, there is no single career path for an RDHAP; the opportunities for practice are as diverse as the individuals and communities in which they live and work. Like any new business owner, RDHAPs face logistical issues and start-up costs. In order to succeed, RDHAP have developed unique and community-specific ways to practice. Given the small number of RDHAPs in the field, they face a considerable uphill battle in raising awareness among their colleagues, other health care providers, and the broader public, of the services they offer, while still fighting to overcome the historical negativity toward independent practice from within the dental community. RDHAPs have developed many positive, collaborative relationships with dental providers, organizations and patients from which there is great potential to transform access to care in their communities. There is a long way to go, and there are clearly major issues with the structural conditions of practice that impact RDHAPs ability to succeed.

The Structural Environment of RDHAP Practice

Much of the explanation for how any particular RDHAP practice develops can be linked to the motivations of the individuals who enter this practice, the strategies they develop to serve patients, and the business or employment opportunities that exist in their individual communities. What ties these strategies together into a common set of RDHAP practices is the structural environment in which they work, including the legal and regulatory framework, financing systems, other health care and social institutions, and the system of professional education. All RDHAPs share these common elements, although how they adapt within this

structure varies by community. Policy intervention at the state level can have an important impact on the components of this structural environment, and hence, the practices of RDHAPs.

State Laws & Regulations: As outlined in the regulatory review section of this report, there are a number of state laws and regulations that impact practice; who can be an RDHAP, how RDHAPs are trained, where an RDHAP can practice and under what conditions, what an RDHAP can do (scope), and who an RDHAP can bill. This regulatory framework was first codified with the establishment of RDHAP as a licensure category. Since 1998, "clean up" legislation has been introduced and passed to address continuing issues as needed[xxviii].

The RDHAPs in practice feel there are still many details that need to be changed by the legislature in order for them to be able to provide more effective services to underserved patients. The prescription requirement is felt to be an unnecessary administrative hurdle, (it was noted that the medical and dental providers who must provide the "hygiene" prescription are many times annoyed at the administrative paperwork and do not understand why they are being asked for it), as is the documented relationship with a dentist as a condition of licensure. RDHAPs felt that the law places too many restrictions on their practice. They feel that they should be able to work in any setting, all consumers should have a right to their services, they should have the full scope of dental hygiene practice that they are licensed for, and they should be able to prescribe the necessary treatments and medications required to provide comprehensive hygiene care. Some in the public health community feel that an expansion of scope of practice to allow for a few basic restorative services would help RDHAPs better serve patients who have no way to get restorative dental treatment. The rationale for these further modifications expanding the scope of what RDHAPs can do, as well as where they can do it, is to enable them to continue to build practices that are responsive and focused on serving the needs of their communities.

Oversight of the hygiene profession is another issue RDHAPs feel passionately needs to change, and they favor instituting a mechanism of state regulation specific to hygiene.

[xxviii] See Legislative Review Section for full history

> *"I feel that a board or a committee, or whatever you want to call it, is needed for oral hygiene for hygienists. This board should set the standards for hygienists and make sure they follow them to the best of whatever system we can develop. It's a tremendous policy issue."*

The current regulatory requirements for RDHAPs are a means of consumer protection. State boards are the entity legally required to enforce these protections, not other health care professionals (such as employers). It is particularly problematic to have one profession with a stake in the terms of employment of another profession also to regulate that profession, as is the history in dental hygiene. Binding RDHAP (or RDH) practices to the dentist sets up a dynamic where political actions are focused on regulating the terms of employment under the guise of consumer protection or quality of care.

> *"I think oversight is a big, big issue. And oversight for dentists stinks. Oversight for hygienists doesn't exist. If you think that the dentists are supposed to be providing oversight in the office are doing that when they don't even know what they're doing, you know, what the hygienist is doing, -- they don't allow us -- when I clean a person's teeth that has subcalculus and pockets, and we're not going to send them to the periodontist, I would like to see them in one month to see whether what I did worked. You cannot do that. So I have never been able to see the fruits of my own labor except when I go into the nursing home. It may not be economically feasible, but at least I'm learning whether or not I am actually producing –hygienists do not know what their outcomes are."*

The Dental Board of California (DBC) delegates the licensing function of hygienists to COMDA, but the complaint and disciplinary functions rest with the Board. When requested, the DBC could not provide data that differentiated among the complaints filed against the different types of dental professionals the board regulates. Therefore reporting how RDHAPs compare to the other dental professions is impossible.

> *"it's just absolutely important that a group who has a certain scope of practice be in control of that scope and be able to monitor their own licensees for the good of the public. And I think that's a tremendous issue. And how it has gotten to this point, you know, power and money speak a lot, but, you know, who's going to speak for the consumer down there and make sure that our own people are practicing to the extent that they promised to do."*

The process of continuing to modify and improve the legislation and regulation surrounding practice is a contested area, with opposition lining up along the traditional division between dentistry -- which prefers to restrict the practice of other professions -- and dental hygiene -- that seeks to expand the scope and reduce the supervision requirements of their practice. Both professional groups acknowledge the problem this contentious history is causing when trying to move forward:

> *"I don't believe that the fear and feelings that dentistry needed to be threatened by what may happen with hygiene exists in any way to the degree that it used to. And I think with that has come a much greater openness to reacting with an open mind about alternatives. And whether they really do make the most sense for the patient, as opposed to whether it just is something that we like or hygiene likes. But is this going to be the best way to get care to patient. If I ever see a day where leadership within hygiene and leadership within dentistry truly acknowledge the -- are actually respectful of one another's roles and approach discussions with an open mind and not in a fear-based way, I would say -- what that would do to really facilitate the collaboration would be tremendous."*

Both representatives of the dental and hygiene associations that I interviewed see access to care as an important issue to address and acknowledge each other's roles, however they continue to be unable to agree on a common strategy of action to address the problem.

State Financing of Dental Care: A second area of structural constraint is the pubic financing mechanisms for dental care through Denti-Cal, Healthy Families and FQHC payment systems. These payment systems are essential for the patients that RDHAPs treat. Whether an elderly patient in a skilled nursing facility on Medi-Cal, or a migrant farm worker receiving treatment at a FQHC, or a pregnant mom trying to get herself and her kids' dental needs addressed, these payment systems are essential to connecting underserved patients to the care they need. Ensuring that treatments and procedures that patients need are covered is of great concern to RDHAPs. The current financing system is inadequate, and what does exist is oriented to support private dental practices or clinics, not comprehensive preventive care. The vulnerability of these already fragmented and under-funded systems to political whims and budget negotiations is an area of serious concern. Indigent, medically compromised, or otherwise disabled patients must have, at minimum, a basic financing system to help them access both preventive and restorative dental care.

The Health Care Environment and Care Delivery Systems: A third structural issue affecting RDHAP practice is the organizational environment of the care systems they work with. While RDHAPs are "independent" providers, this independence refers only to supervision by a dentist. In fact, almost all RDHAPs are working in some capacity within complex institutional setting such as schools, long-term care facilities, residential care homes, FQHC clinics, grant or state funded public health programs, state prisons or wards, hospitals, skilled nursing facilities and regional centers. Each of these institutions has its own set of rules, customs,

certification processes, payment and patient tracking systems, as well as administrative and professional staff. RDHAPs are new to many of these organizational environments, and are creating working relationships that must bridge a professional and institutional divide that has traditionally kept dental care separated from the rest of health care.

As RDHAPs create new systems of integrating dental services into these institutions, it will be inevitable that rules and regulations will need to adjust to accommodate a new set of services and interactions. RDHAPs can help reformulate guidelines to make sure patients are not neglected and that health outcomes, not simply regulatory checkboxes, drive the decisions care givers and administrators make, as this AP explains:

> *"The MDS report is the guideline the nursing homes follow for the health of the patient. On admission, within the first 14 days of admission, all of these different things -- their diet has assessment, and if they can't feed themselves. If they can walk. If they need assistance in their bowels, or anything. And there is supposed to be a dental assessment within the first 14 days of admission. And that has never been done. I've never seen it done. Not since I started. And then if they haven't been to the dentist within the last six months, they are supposed to have a dental exam. And then every year thereafter. The MDS report on oral care should be extended in the dental category. The dental hygiene should be separate from hygiene care. It should not be whether they shaved that day and washed their hair and brushed their teeth. Dental care should be separate. It should be its own separate part in the MDS report."*

As RDHAPs gain more experience working across a variety of settings they will be a valuable resource for administrators and policy makers for their insight in how to incorporate oral health into institutional care delivery systems. Those who are working with homebound patients can be a source of referral for all sorts of services these homebound patients may need. RDHAPs have a skill-set of prevention-oriented dental care that is transportable across care delivery settings. This allows them to play a facilitative role in community health, adding value far beyond just the hygiene services they provide. In this example, an RDHAP describes how she helped severely disabled adults achieve better dental health:

> *"They're wards of the state, and they're disabled adults who can't live anywhere else; in group homes, or in their own home. They've tried everything. And they're really severe cases. I mean they are a danger to themselves and others. And they didn't want any part of going to the dentist. And they started this project with my practice in this one state developmental center so that -- too see how well it would work because they still have to take them out to the dentist somewhere. But by me being there, I'm there once or twice a month and I see as many people as I can that day, and we've got them all cleaned up, and they all now come in and sit down and open their mouths and we have a good time. And then when they go to the dentist, they're very good patients. They'll sit and have their work done."*

In sum, working across a variety of institutional and organizational settings in the community is both a challenge and a great opportunity for RDHAPs. While RDHAP practices are expanding access to care, they are also stimulating new collaborations, which is opening up new avenues to improving access to oral health care.

Professional and Continuing Education: Dental hygienists are educated at the upper division level in community colleges as well as four-year colleges. Either an associate or baccalaureate degree will qualify a graduate for the RDH license. All of these programs focus on educating hygienists for the private dental office environment.

> *The way that dental hygienists developed in California in the community colleges, it's a four-year program for which somebody gets a two-year degree. And focusing on the clinical as much as we do in some schools, instead of the bigger picture in terms of health outcomes-- it's a problem in education in general is that we tend to compartmentalize.*

The existence of a differentiated education system without differentiated practice is similar to the situation that nursing has struggled with for many years. The RDHAP provides a level of differentiated practice, as the current requirements for the RDHAP are higher than what an RDH requires. The current RDHAP education programs however, are not degree-granting programs, which some feel they should be, given the effort it takes to complete the curriculum.

> *"It's a certificate of continuing education, and I can tell you I've put in a lot more than 144 hours. That degraded what I had done and all the effort that I had put into it, and that to me was really, really frustrating."*

Also, the practice requirements (2000 hours in the last 36 months) for licensure restrict some qualified RDHs (those working in public health for example) from receiving an RDHAP license due to lack of clinical hours. Some practitioners felt that waivers for this clinical competence requirement should be provided. Others felt that more advanced education at the master's degree or higher should be provided for hygienists wanting to go on to roles in research and education.

Both education programs have been adapting as quickly as possible to the changing laws, financing rules and equipment available in order to best provide their students with all the information they need to practice. Each program must follow guidelines on the basic curriculum, but they structure the experience differently. The WLAC program meets in

person several times a year[xxix], while the UOP program primarily a distance education program, meeting only at the start and end of the program. Balancing the curriculum content to meet the needs of students who will end up going into such diverse settings has been challenging for the programs.

RDHAP education programs have plenty of capacity for the current level of interest in the licensure category. The first few classes were the largest due to the backlog of demand for the program. Enrollment has evened out at around 10-20 students per class. It is not known whether interest in the program will grow as more providers graduate and develop awareness of the versatility of RDHAPs practice opportunities. RDHAP alumni resources include annual symposiums and regional meetings, as well as numerous dental and hygiene association meetings. The California Dental Hygienists' Association (CDHA) has also created a set of resources for RDHAPs, providing the current students and graduates access to helpful information and guidance as they set up their practices. The California Dental Association (CDA) has opened up an auxiliary membership status (not full membership) to all allied dental occupations, which includes RDHAPs, and has extended offers of assistance in finding dentists for RDHAP patient referrals. However, due to the contentious history between the CDA and CDHA, most RDHAPs remain suspicious of these efforts.

All of these structural systems are important in California, as they are a model for other states trying to implement similar measures to address the preventive dental care needs of their populations. This is happening on an informal basis already, as one AP notes.

> *I get people to call me back and I get calls from all over the country of different states that want to get started and why they want to do it, and how to get started. And then when they get their first patient they call me back and they're so happy to be doing what they're doing.*

California has been at the forefront of innovation in many fields, but in health care and technology in particular. RDHAPs have adapted to the constraints they are given, but as preventive care providers, they can only work on one end of the spectrum. The State should ensure that all constraints on practice balance ensuring the safety of the public with improving to access to affordable and quality health care.

[xxix] Originally, the WLAC program met every three weeks for a 3-day weekend class. The implementation of internet technology has reduced the meetings required and shifted some of the learning to online format.

In summary, there is tension between the needs of individuals in communities, and the structural constraints on providers seeking to meet those needs. These interviews reveal a general consensus among practicing RDHAPs that there are barriers in place that prevent them from being able to provide the level of care that they are capable of providing. A number of regulations seem to be unnecessarily constraining practice, neither protecting the public's safety nor enhancing access to services, and in fact may be working against the public's welfare on both fronts by limiting their consumer choices. Financing care is an endemic problem for all underserved populations. RDHAPs, unlike dental practices with much greater overhead costs, have been successful within the constraints of the existing payment systems. However, if these financing systems are further constrained, this situation may change. When the benefits of RDHAP services become more recognized across a variety of other institutions, there will inevitably emerge a number of new avenues for innovative solutions to improving access. The RDHAP educational system will need to continue adapting to the changing needs of these practitioners as they create pathways for positive change.

Conclusions

The simple answer to the question, "are Registered Dental Hygienists in Alternative Practice (RDHAP) increasing access to care?" is yes. The combination of professional independence and a required focus on underserved populations is powerful in both motivating and structuring RDHAP practice. Their professionalism is central to their success. "The ideology of professionalism asserts above all else devotion to the use of disciplined knowledge and skill for the public good."[40] RDHAPs embody this devotion. The diversity of strategies employed by RDHAPs in developing their practices has opened up multiple pathways to creating and improving access to dental care. These include but are not limited to:

- Reaching out to individuals and communities who need care but can not get to a dental office;
- Creating new consumer choices for preventive treatments and services;
- Providing services in settings and at times that are convenient for patients;
- Decreasing the fear of dental treatment in people who are not used to having their dental care needs addressed, through a gradual introduction to dental procedures;

- Providing referrals for dental care for patients needing restorative treatment;
- Developing collaborative practice models with dental, medical and nursing professionals in a variety of settings;
- Developing data collection systems to track patient outcomes with the goal of showing how dental hygiene care can lead to improvements in oral health and overall health;
- Educating individuals, families, care givers and health providers on the basics of oral health and dental hygiene, and on oral health's connection to overall health and well-being.

The lack of access to dental care in California has created enormous need in populations that are underserved by the traditional system of care. RDHAPs are "social entrepreneurs," using entrepreneurial principles to create and manage a venture of social change, and measuring the impact of their success not only in profit and return, but in the impact on the health of their communities. By doing this, they are truly innovators, using their skill and passion to repackage oral health services to reach some of California's most vulnerable citizens.

Improving access to care, however, is not an undertaking that a profession with a limited scope of practice can do alone. The *independence* of RDHAPs as providers allows them the freedom and flexibility to reach out to patients in new and creative ways. To transform these innovations into comprehensive care delivery for patients, new *collaborative practice* models, with dental, medical, and other caregivers are needed. Many of these models are beginning to emerge in California, but much work remains to be done in both regulating practice and financing care. Meeting the challenge of transforming the system and reconnecting oral health with overall health will require a professional commitment to ensuring a high quality workforce, a regulatory environment flexible enough to allow for innovation, and a care delivery system that is consumer-responsive and affordable.

A central element of success of the RDHAP experience in California is the community-responsive and patient-centered strategies employed. National efforts to develop new models for the dental workforce should carefully review the experiences of RDHAPs. The process of

development of a new provider type, from legislative efforts, to developing education, to implementing practice holds many lessons for similar efforts in other states as these are necessary parts of any overall effort to improve the oral heath status of the nation.

Policy Recommendations

Policy Framework

RDHAP practices provide great insight into both the care providers and underserved people who populate the oral health landscape. The sheer complexity of this landscape indicates many levels on which public policy may have an impact, and likewise, may be improved. To guide policy making toward improvements in access to dental care it may be helpful first, to provide a framework for thinking about the direct and indirect impact of policy on access to care, and second, to provide specific examples in several policymaking areas that exemplify strategies that can be employed towards this end.

Reform is needed in dental care for all the same reasons as health care reform is needed. The cost of care is high, access is problematic, and quality of care in dentistry is difficult for any consumer to determine. As policy-makers decide on funding, regulation, legislation and education they must consider whether the reforms they implement actually help people obtain affordable, accessible, and quality care. Alternative care delivery models such as the RDHAP are *essential* to improving oral health and reducing health disparities in California's diverse population. *Public policy should create an environment that supports innovation and creativity, has flexibility to meet needs, focuses on prevention-oriented solutions, and enhances consumer choice while ensuring consumer protection.*

The current policy environment is filled with incentives (statutory, regulatory, financial, educational, etc.) geared toward maintaining and sustaining the existing dental delivery system – a system not equipped to address the problems of cost, access and quality. Continuing to do more of the same is not going to solve these problems. Alternative models of care are needed. For these alternative practice models to succeed, the incentive structures

must adapt to support the new models of dental care. Incentives should encourage innovations in care delivery, as well as collaborative, patient-centered health care models that can be responsive to local communities and populations.

This study's findings indicate that the policy change that allowed for independent hygiene practice has succeeded in spurring innovations in care delivery and improvements in access to dental care. However, many restrictions on alternative practices remain which prevent more Californians from benefiting from these services. Further policy modifications could continue to reduce barriers to alternative practice, and enhance the workforce and financing available for care delivery.

Recommendations: Regulatory Systems

State laws restricting the provision of health care services are beneficial only when there is a clear need for public protection. Some of the current restrictions on RDHAP practice do not provide any clear consumer protection or contribute to the health of the public. Rather they place unnecessary limits and administrative burdens on practice, and restrict consumer choice. To help improve regulatory systems, policymakers should work to:

- Remove the mandated referral agreement as a condition of licensure for RDHAPs. Licensure should be granted based on qualifications. There is no precedent for requiring a practice agreement for *licensure,* nor for services delivered *within a professional's own scope of practice;*
- Remove the prescription requirement for dental hygiene services provided by RDHAPs. In practice, this is simply an administrative hurdle, time consuming for providers, and has not been shown to contribute to positive patient outcomes. Patients should have their choice of dental hygiene care provider, and the public should not need a prescription to receive *basic preventive care*.

It would be beneficial for state policy makers to continue to explore avenues (such as new health workforce pilot projects) for expanding the capacity of the allied dental workforce (including RDHAPs, dental hygienists and dental assistants) to facilitate more efficient and accessible care.[1] Any new models should be based on proven competency; therefore some

expansions would require additional training, while others would not. Examples of possible expansions of RDHAPs scope of practice might include:

- The duties of an RDH that they are already trained to do, but which currently require direct supervision (and hence are not within the RDHAP scope);[xxx]
- Atraumatic restorative techniques (ART);
- Placement of glass ionomer fillings;
- Extractions of deciduous teeth.

To facilitate the expansion of options for increasing the capacity of the workforce, policy makers should *reform the system of reviewing proposed changes to scope of practice*.[2] Many of the issues brought to the attention of the legislature regarding dental practice are the result of the tension between the state dental society and the state dental hygiene society (or dental assisting society) around supervision, scope of practice and allowable duties. Pilot studies have consistently shown that high quality care can be achieved in expansions of scope of practice for the allied dental workforce,[3] yet concerns about quality of care are employed by organized dentistry to maintain strict requirements over allied personnel. Legislators in the middle of this professional turf battle have few objective resources at their disposal to help them understand the real costs and benefits for their constituents. To remedy this:

- Appoint an independent committee to review and make recommendations to the legislature on scope of practice matters, as has been done successfully in many other States and countries.[4]
- Develop competency based practice models that are more flexible and responsive than the current silos of professional practice that restrict health care from being responsive and adaptive.[5]

In addition to changing the administrative process for deciding on scope of practice and supervision matters, the state might restructure professional boards in a way that allows each profession to regulate members of their own profession to ensure the safety of the public.

- Dental hygiene, including RDHAPs, should be self-regulating. It is inherently a conflict of interest for the dental profession (which employs hygienists and thus has a significant stake

[xxx] http://www.comda.ca.gov/lawsregs/dutytable3-20-06.doc

in reducing the autonomy of hygiene) to regulate the hygiene profession. Dental hygiene practitioners should be regulated by their own board or bureau, as has been proposed in the past few legislative sessions.

- California should work with other states to encourage reciprocity across state lines for all new models of the dental workforce, including but not limited to the Advanced Dental Hygiene Practitioner being developed in Minnesota [xxxi] and the Dental Health Aide Therapist developed in Alaska.[6]

Recommendations: Financing Systems

A solid financing system is necessary for building any alternative models for dental care, as shown by the number of RDHAP patients who depend on Denti-Cal as an insurer or require lower cost or free services supported through grant funding. This funding should complement, not replicate, the private financing system, as the private system does not cover any of these vulnerable populations. Current funding structures need enhancement to ensure access to care for our most vulnerable populations.

- Denti-Cal needs to focus on meeting the needs of the population it serves, as well as the providers that it pays. Cuts in adult benefits have been shown to result in decreases in provider participation and patient utilization, resulting in extreme pressures on FQHCs and other clinics, and exacerbating unmet oral health needs.[7] The State can solidify its commitment to supporting access by strengthening Denti-Cal to support the dental health care needs of underserved populations.
    - The proposed cuts to adult Denti-Cal would decimate the RDHAP services now provided to our State's most vulnerable populations. Enhancements, not cuts in services are needed, particularly for preventive services.[8, 9] If the State cuts these basic preventive services, they will pay much more in treatment later on.[10]
    - Denti-Cal should expand reimbursement to RDHAPs for non-clinical services such as case management, health education and prevention services. These services are essential to RDHAP practice specifically, but also to the development of alternative oral health delivery systems in general.

[xxxi] https://www.revisor.leg.state.mn.us/bin/bldbill.php?bill=S2895.1.html&session=ls85

- The state should support new funding mechanisms such as AB 363/SB400 which allow FQHCs to bill for services provided outside their four walls. Because RDHAPs are mobile, they can treat individuals who are homebound and institutionalized. Legislation that allows for flexibility in payment will enhance flexibility in treatment locations.
- RDHAPs should be able to bill for their services as a corporation, as is common for dentists to do, not just a sole proprietor. This will allow RDHAPs to separate business and personal income for tax purposes.

Recommendations: Quality Improvement and Research

More research is needed to determine the most efficacious and appropriate treatments for health outcomes in vulnerable populations, and help define appropriate benefit levels. Efforts to systematize patient information and outcomes are needed. Dental insurers use a model of insurance based on the expectation of a healthy middle-to-upper income person. This model does not apply to many of the underserved populations that RDHAPs and other safety net providers work with.

- Tracking health outcomes from dental treatment is almost impossible due to the separation of financing and patient record systems between dentistry and medicine. Recent research calls for better integration of these systems in order to reduce health disparities.[11] RDHAPs in some settings are in a position to begin re-integrating dental records into the medical patient record. Electronic information systems have been the backbone of many quality improvement initiatives.
    - Denti-Cal participants are also Medi-Cal participants. While currently separate systems, they could be integrated. If the State were to integrate them, it would be in a unique position to develop a comprehensive data infrastructure able to track expenditures, utilization, diagnoses and health status, leading to an unprecedented research capacity for quality improvement (i.e. examining savings on health costs for diabetes resulting from treatments of dental disease).
- Policy makers might consider incentives for the oral health community to develop better measurements of quality of care that include health outcomes measures and track patient outcomes. Consumers have no resources from which to judge the quality of their dental

practitioner and hence have no information from which to make an informed health care choice.

Recommendations: Care Delivery System

The State should encourage new models of collaborative practice with a variety of new alternative providers such as the RDHAP. These collaborative models can exist across all levels of dental practice, but also across many medical and other care delivery models in the state. Having multiple models of care delivery provides actual options for consumers – convenience of location, choice of provider and ability to access basic preventive dental care.

RDHAPs have shown that more attention needs to be given to dental services provided in health care institutions. Regulation within health care industries, particularly long-term care and skilled nursing facilities, should include more specific standards and care delivery options for the provision of oral health care.

- RDHAPs should be eligible to fulfill the Title 22 provider requirement for a dental program in nursing homes. RDHAPs are well suited, both in skill set and practice model, to be on-site primary dental care practitioners providing preventive and educational services in these settings. In addition, RDHAPs can work as dental case managers for nursing home residents, working with administrators to develop referral networks of local dental providers to ensure avenues for necessary restorative and surgical treatment, and dentures.
- As has been suggested by a statewide taskforce on oral health for aging Californians, policy should support the development of new collaborative models of providing services in institutions such as long-term care settings, using new technology and practice arrangements.[12] One such pilot project is currently underway, funded by the San Francisco Foundation and run by the California Dental Association Foundation.[13]

Recommendation: Workforce Development

Ensuring a high quality workforce will be essential to expanding alternative models of dental care. Regulatory and financing systems will need to be flexible to be able adapt to these new models and support them, and the education system must be able to respond by providing the skills and competencies to new graduates so they are prepared to work in multiple settings.

- RDH programs are primarily located in community college settings, restricting the ability of educators to train the dental team together. New models of dental and hygiene education should be developed which provide training for teams of dental practitioners who can work collaboratively in a variety of health care environments.
- Medical and nursing education needs to have more oral health curriculum, and there needs to be more interdisciplinary educational models to ensure that oral health is not neglected by medical practitioners.
- Much policy discussion focuses on education and practice strategies to encourage doctors and dentists to work with underserved populations. In the case of RDHAPs it is a practice requirement. A set of similar mandates for dental practitioners may go a long way towards improving access to the restorative and surgical treatments needed by many underserved populations.

The preceding recommendations are just a sampling of key issues that need to be addressed if policymakers want to continue to support the success of alternative practice hygiene as well as create an environment that allows for future innovations in care delivery. Most of these recommendations echo previous studies' findings, as indicated throughout in the references provided. With out innovations, lack of access to care and disparities in health outcomes are sure to remain problems for many Californians in the future.

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Appendix 1: Glossary of Acronyms

ADHA	American Dental Hygienists' Association
CDA	California Dental Association
CDB	California Dental Board
CDHA	California Dental Hygienists' Association
COMDA	Committee on Dental Auxiliaries
FQHC	Federally Qualified Health Center
HMPP	Health Manpower Pilot Project (renamed HWPP, Health Workforce Pilot Project)
RDH	Registered Dental Hygienist
RDHAP	Registered Dental Hygienists in Alternative Practice

Appendix 2: Documentation of Relationship Form

DOCUMENTATION OF RDHAP RELATIONSHIP WITH DENTIST

RDHAP Name:_____

Address:_____

City/State/Zip:_____

RDHAP License Number:_____

Pursuant to Business and Professions Code Section 1775(g), I have an existing relationship with at least the following dentist for referral, consultation, and emergency services:

Dentist Name:_____
License Number:_____
Address:_____
City/State/Zip:_____
Telephone Number:___(_____)_____

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

_____ _____
DENTIST Signature Date

_____ _____
RDHAP Signature Date

Pursuant to California Code of Regulations Section 1090.1, the dentist's license must be current, active and not under discipline by the Board. An RDHAP must report any changes to the Board, in writing, within 30 days following such change.