Recruitment & Expansion of Alaska's Oral Healthcare Workforce

Findings and Recommendations

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Prepared for the Dental Workforce in Alaska Advisory Council
at the request of the
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Division of Health Care Services
Section of Health Planning & Systems Development

Prepared by:
Paul Glassman DDS, MA, MBA
Professor and Director of Community Oral Health
University of the Pacific Arthur A. Dugoni School of Dentistry
2155 Webster St
San Francisco, CA 94115
pglassman@pacific.edu

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Executive Summary

This consultation and report was commissioned by the Alaska Department of Health & Social Services, Division of Health Care Services under Contract # 0610127. The purpose of this consultation and report was to gather information and make recommendations about recruitment and expansion of Alaska's oral health workforce. In particular the Department requested a focus on:

- Recruitment of licensed dentists
- A statewide effort to expand special needs oral healthcare
- Expansion of oral healthcare training
- Expansion of public health dentistry
- National perspective on oral healthcare workforce issues

This consultation was carried out by Paul Glassman DDS, MA, MBA (Consultant), Professor and Director of Community Oral Health at the University of the Pacific School of Dentistry in San Francisco. The consultant made several trips to Alaska in 2009 and 2010, interviewed multiple stakeholders and analyzed supplemental data supplied by those stakeholders. The focus of the consultation was on problems and recommendations for the Non-Native population of Alaska.

Visits to Alaska, stakeholder meetings and interviews and additional data indicated that many individuals and groups have been concerned for some time about the oral health status of certain populations in Alaska and the availability of services for those populations. Among the findings and conclusions are:

- In spite of a higher dentist to population ratio than exists in a number of other states there are still significant shortages of oral health services available to certain segments of the population, particularly low income people, people with complex medical and social conditions and people living in rural areas.
- In spite of having one of the highest dental Medicaid payment schedules in the U.S., there are significant oral health disparities found among low income children and adults, American Indian and Alaska Native (AI/AN) people, people with special needs, and elders in Alaska.
- In spite of several successful efforts to recruit and retain dentists in Alaska, the percent of dentists over 60 years old is growing and the dentist to population ratio is expected to fall without more significant successes in recruiting dentists. This is not the case for dental hygienists.
- There are significant oral health delivery models that have been put in place for the Native population in Alaska which are not available, or not available to the same degree, for the Non-Native population.

In the last several years, many stakeholder groups have meet and developed recommendations and put programs into place to try to improve oral health for underserved populations. These initiatives and recommendations include the following areas:

- Programs to recruit and retain dentists using loan forgiveness and other strategies. The result has been a small increase in the number of dentists attracted to come to Alaska as a result of these programs.
- A small expansion in the scope of duties and practice locations for dental hygienists, although the current allowable duties remain narrower than those found in many other states in the U.S.
- A need to improve data collection and reporting systems.
- Calls for increases in Medicaid payments to dentists.
- Efforts to expand the number and sites for dental residency programs in Alaska.
- Increases in the number and use of community clinics, dental education clinics and other sites used to deliver oral health services to underserved populations.
- Expansion of training for dentists and dental hygienists in care of people with complex medical and social conditions.
- Development and support of community-based prevention or treatment efforts.
- Implementation and evaluation of the Dental Health Aide Initiative as part of the Federal Community Health Aide Program in the Alaska Tribal Health System.
- A need for increased state support for the Dental Health Aide Initiative as the initiative's grant funding cycles come to a close.

The stakeholder recommendations described above come at a time when there are also efforts to reform the delivery of oral health in other states in the U.S. Among the activities taking place in other states and at the federal level are:

- Recognition of the rapidly changing demographics of the U.S. population to one that is older, more diverse and with more disabilities and complex medical and social conditions.
- New understanding and technologies for achieving and maintaining good oral health including recognition that dental diseases are primarily chronic diseases which require different approaches than the previous emphasis on surgical interventions.
- Health Care Reform with greater emphasis on accountability of health delivery systems
- Expansion of the Community Health Center System
- Development of new workforce and delivery models including the use of telehealth technologies, community-based delivery of services, and creation of health homes.

While all of the approaches listed above have merit and should be pursued to the extent possible, the consultant believes certain approaches are likely to produce greater increases in oral health at lower costs than others. The following are recommendations the consultant believes should receive the highest priority.

- Support existing, as well as develop new community-based, geographically distributed, telehealth enabled systems which have appropriate supervisory and collaborative arrangements to safely provide competent oral health services to underserved populations.

- Improve the data collection and reporting capability of the Alaska Department of Health & Social Services.
- Enhance the ability of current dentists and allied dental personnel to work with complex patients and in distributed telehealth enabled teams.

The next step in addressing the oral health disparities among the populations identified here is to convene groups to develop specific action items for reimbursement, legal, regulatory and educational reforms to create and implement the recommendations contained in this report.

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Purpose and Process

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A preliminary report was prepared for presentation and input at a meeting of the Dental Workforce in Alaska Advisory Council on November 8, 2010. This final report incorporates feedback from that meeting and from the Department of Health & Social Services.

Findings: Oral Health Status and Oral Health Workforce in Alaska

Many individuals and groups have been concerned for some time about the oral health status of certain populations in Alaska and the availability of services for those populations. There have been several reports and recommendations developed by these groups.

In 2007, the Alaska Dental Action Coalition developed a report to the Alaska Health Care Strategies Planning Council on the oral health status of Alaskans.[1] Among the findings were:

- Only 1 in 3 Denali Kidcare beneficiaries received any dental services in a year.
- The uninsured rate for dental care is double that for general health care
- The rate of dental caries in Alaska is 2.5 times the rate of the national average.
- In specific, the 2004 Alaska Basic Screening Survey revealed rates of dental decay among third graders to be higher than the national average for all racial/ethnic groups in Alaska except the white population.

1. . Alaska Dental Action Coalition report to Alaska Health Care Strategies Planning Council. October 12, 2007. http://www.hss.state.ak.us/dph/wcfh/Oralhealth/docs/ADAC-HPSC.pdf. Accessed December 26, 2010.

Also in 2007, the Alaska Center for Oral Health released the *2007 Alaska Health Workforce Vacancy Study*.[2] That study referred to a "perfect storm" of health professional shortages where a long standing "supply side" shortage is being compounded by an burgeoning "demand side" fueled by an expanding and aging population. This study reported that while the estimated vacancy rate for dentists was 10.3%, this masked a 15.3% estimated rural rate and the very high rate reported by tribal health organizations (42.0%), which had 39% of estimated Dentist vacancies. Dental clinics had an estimated vacancy rate of 6.8%. The study also indicated that Dentist vacancy rates were twice as high in rural areas compared to urban areas.

In December 2007, the State of Alaska adopted the *Alaska Oral Health Plan: 2008-2012*.[3] There were a number of findings in that plan that support the idea that there are significant oral health disparities among Alaska's residents and shortages in services. Among them were:

- The dental caries experience in children ages 2-4, in Alaska was 62% compared with 52% nationally.
- Almost 1/3 of kindergarten children covered by Medicaid had untreated dental decay and a need for early or urgent dental care.
- Children with special health care needs (CSHCN) are an at-risk group for caries and often face barriers to routine access to dental care. The 1994-1995 National Health Interview Survey on access to care and services utilized by CSHCN indicated the most common unmet health need was dental care. Among the barriers to accessing dental services found in a 2007 "CSHCN Oral Health Forum" were:
    - finding private dentists accepting Medicaid,
    - long wait times for appointments and difficulties coordinating with children's medical care,
    - not seeing the same dentist on subsequent appointments and therefore having to spend the first appointment repeating the child's medical history, and
    - limited general dentists treating children with special health care needs resulting in reliance on pediatric dentists for dental services for adolescents and young adults.
- The number of children with dental sealants in Alaska was twice as high as the national average, 52% compared to 23%. Factors influencing the higher sealant utilization include Medicaid reimbursement and school-based or school-linked sealants provided by Tribal dental programs. The sealant rate for Alaska Native third graders was 68%. However, many school districts servicing children from low-income households lacked sealant programs. These include:
    - schools in rural communities,
    - schools in urban areas of the state with 50+% of children eligible for the free and reduced school lunch program.
- The majority of children enrolled in the Alaska Medicaid program were not receiving dental services. Specifically:
    - Only about 1 in 3 children received any dental service during a given year.

2. Alaska Center for Oral Health . 2007 Alaska Health Workforce Vacancy Study. December 2009. http://acrh-ahec.uaa.alaska.edu/projects/pdf/2009workforce09.pdf. Accessed December 26, 2010.
3. State of Alaska. Department of Health and Social Services Alaska Oral Health Plan 2008-2012, http://www.hss.state.ak.us/DPH/wcfh/Oralhealth/docs/Oral-Health-Plan.pdf. Accessed December 26, 2010.

    - Only 1 in 5 children received a dental treatment service.
- In 2006, 64% of Alaskans were served by community water systems with optimally fluoridated water.
- As is the case nationally, the rate of edentulism in Alaska adults and seniors has decreased (75% of Alaska seniors have teeth). While this is an improvement it creates a situation where access to oral health services is now more important for seniors than previously. However, over 1/3 of adults reported a lack of routine access to dental services.

The 2007 *Alaska Oral Health Plan: 2008-2012* also reported data about the Alaska oral health workforce. Findings included:

- In 2001, 25% of Alaska dentists were aged 55 and above.
- The report predicted a dentist workforce shortage with implications which are especially significant for rural areas, for Medicaid recipients and the elderly.
- The report also indicated that there is a distribution problem for dentists in Alaska with most dentists practicing in urban areas of the state. Much of rural and remote Alaska has received a designation as dental-health professional shortage areas.

The Alaska Department of Health & Social Services, Division of Health Care Services, Section of Health Planning & Systems Development Section conducted a HRSA sponsored project called *Dental Workforce in Alaska* (DWIA) from October, 2008 to February, 2010.[4] Among the primary findings was agreement that:

- Alaska needs more dentists.
- Oral health practitioners are geographically mal-distributed in Alaska.
- Due to both cost factors & time-until-yield, it is not desirable to seek building a dental school in Alaska.
- Recruitment & retention efforts can be significantly improved.
- Support-for-service programs (e.g. loan repayment, direct incentive) have worked well elsewhere, and thus should be strongly considered for development in Alaska.
- Exploration of continuing education options and dental school training options (e.g. buying "slots" in schools elsewhere) could wait until the next planning cycle
- Consideration of the mid-level oral health provider role is necessary (or at least inevitable), but that this issue can also wait for a future planning efforts.
- Consideration of the mid-level practitioner role will probably likely require ongoing external technical assistance and expertise.

Meetings of the DWIA Advisory Council in February and June of 2009 and data from the Bureau of Labor Statistics[5] revealed the following:

- In 2009 there were 465 licensed dentists in Alaska, up from 411 in 2000.
- In 2008 the dentist to population ratio in Alaska was 1:1462, down from 1:1525 in 2000.

4. Alaska Department of Health & Social Services, Division of Health Care Services Section of Health Planning & Systems Development Section. Dental Workforce in Alaska. Final Report re: HRSA Grant #T12HP10685 (HRSA-08-134), Period: October 1st, 2008 - February 28th, 2010.
5. Data supplied by Robert Sewell , Ph.D., Health Program Manager, Health Planning and Systems Development, Division of Health Care Services, Dept Health & Social Services - State of Alaska

- In 2009 there were 414 licensed dental hygienists in Alaska.
- The percent of dentists over 60 years old had risen from 10.2% in 2000 to 26% in 2009.
- In 2009 the percent of dental hygienists over 60 years old was 6.5%.
- There was consensus that the University of Alaska Dental Hygiene education programs are producing enough dental hygienists to meet future needs. The problem is that hygiene students from rural/remote Alaska tend not to go back.
- There was some interest in a dental hybrid education program like the WAMI model where students do part of their education in Washington and part in Alaska.
- Alaska has participated in the WICHE program where the state pays for part of the cost of dental education which is intended to reduce the additional out-of-state tuition costs.[6] States may impose requirements for a commitment to practice in that state, but such requirements are discouraged by WICHE. Alaska does not require return. According to WICHE statistics, there were 4 dental students sponsored by Alaska between 2001 and 2005 and 3 returned to Alaska. There were no first year students supported by WICHE in 2010. It should be noted that some students attending dental schools in other states did not use the WICHE program. Given the current structure of the WICHE program in Alaska, some students find it more advantageous to change their official residence to the other state and pay the resident tuition compared to participating in the WICHE program.
- Although there will be an increase in National Health Service Corps funding in 2010, Alaska had no NHSC dentists and only 2 NHSC scholars.
- Dental residency programs are another way to increase recruitment and encourage broader training for practice in underserved dental areas
- Data from the American Dental Education Association about the number of dental students from Alaska attending dental school in other states revealed that in 2007 there were 11 first year dental students, up from 7 in 2000.

In June, 2010, the Consultant conducted a series of interviews with stakeholders which revealed the following:

- There are few pediatric dentists in the state. While most accept Medicaid to some degree, there are not sufficient numbers of these specialists to meet the needs of the State's underserved children.
- There are few dentists who are willing to accept children and adults with special needs. They are not adequately trained to provide this service and neither are most dental hygienists.
- There is little social support for children and adults with special needs.
- It is hard to fill vacancies in community health centers.
- There is room for opening additional community health centers.
- Community health centers can contract out services.
- Historically, the vacancy rate for IHS dental positions has remained steady with at least 1/3 of the positions going unfilled. The recent economic downturn in the U.S. has had a positive effect on the vacancy rate, which in the last year was down to only 4 openings as graduating dentists had a harder time finding a job in the private sector. This is expected

6. WICHE. Student Exchange Programs Statistical Report. Academic year 2010-11. http://www.wiche.edu/info/publications/statReport1011.pdf. Accessed December 26, 2010.

to return to the typical vacancy rates as the economy recovers, which will leave the Tribal Health System struggling to recruit and fill dental positions again.

- Even with the recent, short term success with recruiting for tribal dental positions, the system is still failing to adequately meet the needs of the population it serves.
- The Alaska Tribal Health System has implemented a Dental Health Aide Initiative which is intended to increase access to prevention and basic dental services, including Medicaid enrollees and special needs patients.
- There is more demand for care in safety-net settings, including community health centers, than can be provided.
- There is an effort being made to remove sweetened beverages from food stamp program.
- Alaska has implemented a Fluoride Varnish program that will reimburse Physicians, Nurse Practitioners and Physician Assistants for oral evaluation and application of Fluoride Varnish.
- The IHS has an ECC initiative that will involve age one dental visits and application of Fluoride varnish and iodine.
- There is a high immigrant population in Alaska with multiple challenges.

In November, 2010, the Consultant conducted additional interviews of stakeholders and reviewed data from the Oral Health Program in the Department of Health and Social Services. The findings included:

- Alaska has very good utilization of dental sealants in villages connected with the Tribal care system. There are no school-based or school-linked sealant programs outside of those operated by the Tribal system leaving schools with high percentages of low-income children in urban areas and many regional hub communities with less access to dental sealants.
- Federally Qualified Health Centers (FQHCs) can contract with private practice dentists to provide services that they cannot provide in their own clinics. However, this mechanism is not widely used.
- The IHS has implemented an Early Childhood Caries (ECC) program where allied dental personnel will be performing a number of preventive procedures including application of Fluoride varnish, placement of dental sealants, and placement of interim therapeutic restorations (ITR). These activities will be restricted to Tribal programs.
- Data from the Alaska Medicaid Management System[7] revealed the following:
    - There were 85,889 Medicaid eligible children in FY2009. In that year:
        - 38.3% received some dental service.
        - 31.8% received a preventive dental service.
        - 21.0% received a treatment service.
    - Data about eligibility and utilization of dental services were not available for adults.
    - Data about the number and percent of dentists who provided services in the Medicaid program and the amount and kinds of services they provided were not available.

7. Medicaid data from Brad Whistler DMD, Brad Whistler, DMD, State Dental Officer, Oral Health Program, Division of Public Health, Section of Women's, Children's and Family Health, Department of Health & Social Services, State of Alaska.

    - Data about Medicaid eligibility and utilization could not be separated for Native and non-Native children or adults.
- Alaska's participation in the WICHE program, which supports Alaska students attending dental school in other states, is funded as a type of service option loan. The amount of forgiveness does not always cover the full cost between resident and non-resident tuition for dental school. Alaska students may participate in the program for dental school seats available to WICHE students. However, as indicted earlier, some students may choose to change residency prior to admission to dental school to get resident tuition rates. Only 4 students were enrolled in this program in 2009-10. The Alaska Dental Society has tried to change this program to provide direct subsidies for out-of-state tuition but has been unsuccessful.
- There are 142 health centers in Alaska. The number of health centers and the number with dental facilities are likely to grow in the future given the federal investment in health centers that will be made through health reform. However, there is no current strategy for being able to fill new dental positions that may become available as a result of this expansion.
- Although the major urban areas of Alaska are not dental shortage areas by federal definition, there are still underserved populations. These include frail elderly and children and adults with disabilities. For example, it was reported that among families served by the MCH family services program, parents identify lack of access to dental care for their children as a major problem.

Findings: Previous Recommendations

The 2007 *Alaska Oral Health Plan: 2008-2012* made a number of recommendations.[3] These included:

- Advocate for continuation of continued preventive and restorative adult dental benefits in the Alaska Medicaid program.
- Allow dental hygienists to
    - place dental restorations under the direct supervision of dentists,
    - provide local anesthetic agents under direct, indirect or general supervision, and
    - allow experienced dental hygienists to practice under a collaborative agreement with a dentist that would allow services to be provided without the dentist present and in settings outside the dental office.
- Track Medicaid non-kept appointments in the Medicaid Management Information System.
- Implement reimbursement for non-dental providers (e.g., physicians and nurses) for fluoride varnish application on young children.
- Implement loan forgiveness and other methods that assist both recruitment and retention of dentists and dental hygienists practicing in dental health professional shortage areas.
- Develop a training program or integrate existing training programs for enhanced dental screenings by non-dental providers and provide for Medicaid reimbursement for these services.
- Continue development and maintenance of Alaska's oral health surveillance system.

The DWIA Advisory Council concluded that:

- The focus of current dental workforce development efforts should be on developing a multi-disciplinary "support-for-service program" (SFSP) for Alaska.
- Future planning efforts should include consideration of
    - enhanced continuing education options, and strategy for such,
    - cataloging, prioritizing and then selecting "dental school slot" options, & strategy for such, and
    - determination of which mid-level practitioner option(s) are "best fit" for Alaska, and strategy for such.

As a result of the consensus achieved by the DWIA Advisory Council a "Health Care Professions Loan Repayment & Incentive Program" (HCPLRIP) was developed. The HCPLRIP program concept outlined a wholly state-sponsored and managed support-for-service program, which offers two kinds of support: (a) loan repayment for eligible education debt, and (b) direct incentive for those practitioners that are needed in Alaska but who do not hold education loans. A bill, Senate Bill 139 (SB 139), was introduced in the Spring of 2009 but has not yet been passed. This bill was reintroduced as Alaska HB78 and continues to garner support.

Another accomplishment of the DWIA Advisory Council was the development of HRSA-sponsored "State Loan Repayment Program" (SLRP) in Alaska.[8] Alaska successfully applied for this award and HRSA granted AK DHSS $600,000. Another $600,000 in non-federal match funds is being provided by the Alaska Mental Health Trust Authority (AMHTA). The Alaska SLRP is now known as the "Alaska Supporting Healthcare Access (through loan) Re-Payment Program" (SHARP). SHARP provides loan repayment awards to eligible health-care practitioners in exchange for at least two years of service in a Health Professional Shortage Area (HPSA). At this time three dentists are participating in this program. Two of these are working in non-tribal clinics and one in a tribal clinic. It is expected that there will be an additional round of funding next year and there may be a few more dental positions created.

As a result of the activities described in the 2007 *Alaska Oral Health Plan: 2008-2012* legislation was introduced and passed which allows Alaska Dental Hygienists to enter into a collaborative agreement with a dentist that, if approved by the Dental Board, permits them to perform dental hygiene procedures without the presence of a dentist. The specific statutes governing these agreements are contained in Alaska Statutes – Section 08.32.115: Collaborative agreements. However, even though this legislation was passed and enabling regulations adopted, it was reported that it has been very difficult to establish these arrangements. Stakeholders who were interviewed were unaware of any successful applications and reported that several applications that had been submitted for approval have been denied because of a provision in the regulations that prohibits an agreement from being adopted if the hygienist proposes to practice in a location where they were previously providing services.

8. Sewell R. Alaska Department of Health & Social Services. Section of Health Planning & Systems Development Division of Health Care Services. Alaska State Loan Repayment Program (SLRP). December 2009. http://www.hss.state.ak.us/dhcs/healthplanning/sharp/assets/SLRP_ppt_webinar.pdf. Aceesed December 26, 2010.

In June, 2010, the Consultant conducted a series of interviews of stakeholders who had the following recommendations in addition to those listed above:

- Train dentists and dental hygienists to provide care for people with special needs and provide an incentive for dentists to take this training.
- Do a demonstration project of a new model for delivering oral health services to underserved populations with the Public Health Department.
- Provide State support for the Dental Health Aide Initiative, including training programs.

In January of 2011 a meeting of the Alaska Dental Action Coalition developed several priorities for action over the next several years.[9] These priorities included these priotities:

- Expand children's prevention activities and attempt to attract more pediatric dentists to Alaska.
- Continue efforts to increase the number of dental providers in Alaska, especially rural areas.
- Enhance Medicaid reimbursement for dental services.
- Improve surveillance activities and oral health literacy among the population.

National Oral Health Activities

There is increasing evidence that a significant portion of the US population has trouble accessing dental services. The American Dental Association has estimated that about 30% of the population is not well served by the current oral health care delivery system. The data described above indicates that there are similar disparities in Alaska. There are numerous activities in the U.S. that are changing the traditional approach to providing oral health services and improving oral health. These include:

- Changing Population Demographics
    - There is tremendous growth in the number of people who are disabled or over 65. These increases include the absolute numbers of people in these categories and as a percent of the population. Individuals in these groups face significant problems accessing oral health services and maintaining good oral health. The US Census Bureau reported that, in the US between 2000 and 2050 the number of people over 65 years old is expected to grow by 58%. In Alaska the increase is expected to be 158%, making Alaska the state with the fastest growing population of people over 65.[10] The rate of disability accelerates as people age, although the number of younger people with disabilities is also increasing.
- New understanding and technologies for achieving and maintaining good oral health
    - There is increasing recognition that oral diseases are primarily chronic diseases and that the emerging science and techniques for managing chronic disease are very different than traditional strategies employed in the treatment of acute diseases.[11] Chronic disease management strategies have been developed for a number of medical diseases and similar strategies are beginning to be employed

9. Summary of Alaska Dental Action Coalition Evlauation. January 6, 2011.
10. U.S. Census Bureau. U.S. Population Projections. Highlights. Table 3. http://www.census.gov/population/www/projections/projectionsagesex.html. Accessed December 26, 2010.
11. World Health Organization. Oral Health. http://www.who.int/mediacentre/factsheets/fs318/en/index.html. Accessed December 26, 2010.

for oral diseases as well.[12] Management of chronic disease involves far more emphasis on behavioral strategies and integration of oral health activities with social and general health services.

- Health Care Reform
  - While the emphasis in recently enacted health reform legislation is on general health services there are a number of provisions that will increasingly impact the delivery of dental services. A significant issue is the requirement that health plans include coverage for children. This is expected to result in a large increase in the number of children with oral health coverage.[13] However, it is unclear that there is capacity in our current oral health delivery system to serve these children. In Alaska it is evident that there are inadequate resources and low utilization of oral health services among Medicaid eligible children now.
  - Among the provisions of health reform legislation is an emphasis on accountability and delivering care that produces the most health at the lowest cost. Public oral health programs are increasingly including dental quality measures in service delivery programs.[14] It is likely that this emphasis on lowering costs and improving quality will continue and spread to non-public aspects of oral health delivery.
- Expansion of the Community Health Center System
  - The federally funded community health center system has expanded significantly in the last decade. It is expected that this expansion will continue and accelerate in the future. The National Association of Community Health Centers has reported that Affordable Care Act (ACA) allocated $11 Billion in new funding for the Health Centers program over five years.[15] With the expansion of the number and role of community health centers will come an expansion in community health center dental clinics. As indicated earlier, this increase will be reflected in Alaska, but it is unclear how the expansion of dental program will be staffed.
- The Institute of Medicine reports
  - The Institute of Medicine (IOM), a branch of the prestigious National Academy of Sciences has been commissioned to produce two reports about oral health in America.[16,17] The report on "An Oral Health Initiative" has been released.[18] This

12. American College of Physicians. Chronic Disease Management: What Will It Take To Improve Care for Chronic Illness? http://www.acponline.org/clinical_information/journals_publications/ecp/augsep98/cdm.htm. Accessed December 26, 2010.
13. The Children's Dental Health Project. Summary of Oral Health Provisions in Health Care Reform. May 2010. http://www.cdhp.org.php5-4.websitetestlink.com/system/files/Health%20Care%20Reform%20Toolbox.pdf. Accessed December 26, 2010.
14. California Managed Risk Medical Insurance Board. FINAL 2008 Dental Quality Report, Healthy Families Program, April 2010. Available at http://www.mrmib.ca.gov/mrmib/HFP/2008_Dental_Quality_Report.pdf. Accessed December 26, 2010.
15. Kaiser Commission on Medicaid and the Uninsured. Community Health Centers: Opportunities and Challenges of Health Reform , August 2010. http://www.kff.org/uninsured/upload/8098.pdf. Accessed December 26, 2010.
16. The Institute of Medicine. An Oral Health Initiative. http://iom.edu/Activities/HealthServices/OralHealthInitiative.aspx. Accessed December 26, 2010.
17. The Institute of Medicine. Oral Health Access to Services. http://iom.edu/Activities/HealthServices/OralHealthAccess.aspx. Accessed December 26, 2010.
18. The Institute of Medicine. Advancing Oral Health in America. http://iom.edu/Reports/2011/Advancing-Oral-Health-in-America.aspx. Accessed April 28, 2011.

report and the forthcoming report on "Oral Health Access to Services" will be major reports on the status of oral health in the US and contain recommendations in multiple areas. These reports will examine strategies for improving oral health of the population and specifically about addressing oral health access issues. These reports represent the first time the IOM has addressed these subjects and are likely to attract widespread attention.

- New workforce models
  - A number of states have implemented or are considering regulatory reform resulting in expanded roles for current allied dental personnel. Among these are:
    - Direct access hygiene where in 36 states dental hygienists are able to provide patient care in community settings without being under the supervision of a dentist.[19]
    - Expanded roles of allied dental personnel. In California dental hygienists and assistants working in community sites are collaborating with dentists in dental offices and clinics using telehealth technologies and placing Interim Therapeutic Restorations.[20]
    - In a number of other states dental hygienists are placing dental restorations.[21]
  - Some organizations and states are promoting or adding new members of the dental team.[22] These include:
    - The introduction of Dental Health Aide Therapists (DHAT) in the federal tribal system in Alaska.
    - The introduction of the dental therapists in Minnesota who are able to work in dental health professional shortage areas or serve low-income and underserved patients.[23] While Minnesota refers to these providers as dental therapists, their training and practice varies significantly from the DHAT model in Alaska and dental therapists in other countries. A major distinction is the requirements for training. A bachelors or graduate level work is required in Minnesota, while Alaska DHAT are trained in two years post high school.
    - Multiple states are working on legislation to introduce dental therapists or new therapist-like members of the dental team.
- Use of Telehealth technologies
  - Telehealth technologies have developed to the point where it is possible now to foster collaboration between health professionals such as dentists and allied dental

19. American Dental Hygienists Association. Direct Access States. http://www.adha.org/governmental_affairs/downloads/direct_access.pdf. Accessed December 26, 2010.
20. Pacific Center for Special Care. University of the Pacific School of Dentistry. The Virtual Dental Home Demonstration Project. http://www.dental.pacific.edu/Community_Involvement/Pacific_Center_for_Special_Care_(PCSC)/Projects/Virtual_Dental_Home_Demonstration_Project.html. Accessed December 26, 2010.
21. American Dental Hygienists Association. Dental Hygienists Restorative Duties By State. http://www.adha.org/governmental_affairs/downloads/restorative_chart.pdf. Accessed December 26, 2010.
22. The PEW Center on the States. Help Wanted: A Policy Maker's Guide to New Dental Providers. 2009
23. W.K. Kellog Foundation. Training New Dental Health Providers in the U.S. Published December 2009. Updated June 2010. http://www.wkkf.org/knowledge-center/resources/2010/Training-New-Dental-Health-Providers-in-the-U-S-Full-Report.aspx. Accessed December 26, 2010.

personnel who can work in geographically distant locations while collaborating on care for underserved patients.
    - In California the California Center for Connected Health Policy has developed "Model Telehealth Legislation" which could serve to stimulate adoption of telehealth legislation and practice in other states.[24]
- The Health Home Model
    - There is increasing recognition of the value of a health home model which includes case management, health promotion and prevention.[25],[26] These models are leading to increased emphasis on integrating oral health activities with general health and social service systems and in delivering oral health services in locations where underserved populations live and receive general health and social services.

Stakeholder Recommendations

The following is a summary of recommendations made in previous reports, and by stakeholders along with commentaries about the feasibility of various recommendations.

1. Improve data collection and availability about several aspects of oral health in Alaska including:
    - Regular and accurate reporting about the use of dental benefits in the state Medicaid program including:
        - the number of eligible individuals by age, disability, Native and non-Native, and location,
        - the number of eligible individuals receiving services by age, disability, Native and non-Native, and location,
        - the number of providers serving eligible individuals by patient categories (age, disability, Native and non-Native, and location) and extent of provider participation,
        - the availability of safety net providers and services including:
            - the number of community health centers and service provided to eligible individuals by age, disability, Native and non-Native, and location, and
            - the number of providers, chairs, patients seen and procedures performed by age, disability, Native and non-Native, and location.

    Comment: It is clear from data and discussions with stakeholders that there are significant access and oral health problems among certain portion of the non-Native population in Alaska. Among those with significant access and oral health problems are children and adults with disabilities, frail elders, low income children and adults and people living in remote areas. However, given the lack of detailed data described above, it is difficult to be

24. The California Center for Connected Health Policy. Telehealth Model Statute. http://www.connectedhealthca.org/what-is-telehealth/telehealth-model-statute. Accessed December 26, 2010
25. The Comminwealth Fund. Can Patient-Centered Medical Homes Transform Health Care Delivery? March 27, 2009. http://www.commonwealthfund.org/Content/From-the-President/2009/Can-Patient-Centered-Medical-Homes-Transform-Health-Care-Delivery.aspx. Accessed December 26, 2010.
26. Health Affairs. Patient-Centered Medical Homes. September 14, 2010. http://www.healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_25.pdf. Accessed December 26, 2010.

precise about extent of the problem and the availability of services. Having the data described above will also make it easier to more precisely monitor the status of the problems and available services over time.

Establishing the data collection and reporting systems needed to provide the data listed above will require advocacy for resources needed to make standard reports on these subjects available at regular intervals.

2. Improve reimbursement levels and structure for providing care to underserved populations.
   - Raise Medicaid dental fees. Although Alaska's Medicaid dental fees are considerably higher than Medicaid fees in many other states, some stakeholders felt that more dentists would be willing to accept people with Medicaid into their practices if the fees were increased. There are studies that have demonstrated that fee increases, when coupled with reduction in administrative burden in Medicaid program, can increase dentist participation.
   - Reduce administrative burden in reimbursement programs. In addition to streamlining administrative requirements in Medicaid reducing administrative requirements in private dental benefit programs may also increase dentist participation. "Direct reimbursement" models allow employers to pay dentists directly for services without the intervention of a third party fiscal intermediary.

   Comment: Most of the underserved people who are the subjects of this report are covered under the Alaska Medicaid program or do not have any third party coverage. Improvements in provider participation in Medicaid could have a significant impact on improvement in access for these individuals. Experience in other states has shown that this would be especially true if coupled with administrative reform to streamline paperwork requirements of providers.[27]

3. Increase the number of dentists practicing in Alaska and treating currently underserved populations by recruiting and retaining additional dentists through a variety of mechanisms. These include:
   - Expand loan forgiveness programs. The SHARP program is one example of a loan forgiveness program that is placing a small number of dentists in federally designated health professional shortage areas (HPSAs) in exchange for the repayment of qualifying educational loans.
   - Expand support for the WICHE program. As indicated above, there are currently a small number of Alaska residents using the WICHE program to attend dental school. However, the current structure which provides only loan repayment is not likely to attract larger numbers of students in the future. Previous attempts to increase funding for this program and provide direct tuition support have not been successful. In addition there is concern that students supported by Alaska under the WICHE program do not return to Alaska. Currently it is not mandatory that they do so.
   - Purchase slots in dental schools. As with the support for the WICHE program, the benefit would depend on the number of slots purchased and the financial arrangements

27. California Health Care Foundation. Managing California's Medicaid Dental Program: Lessons from Other States, July 2009.

with students for repayment of the support. Since direct purchase of slots in dental schools would be more expensive than support of out-of-state tuition in the WICHE program, any additional state funds would be better used to support the WICHE program.

- Expand student rotations to Alaska sites. Offering to partner with dental school in other states to establish student rotations to Alaska could serve to introduce more dental students to Alaska. Some students who participate in rotations may end up wanting to stay and practice in Alaska. Community Health Centers are good sites to host dental student rotations. In fact there are a number of dental schools that are increasing the time that their students spend rotating to community health centers. Some of the newer dental schools in the US are being created with a plan to have students spend major portions of their time in community health centers as a part of their educational experiences. It is not clear, however, what the impact will be if dental student rotations are increased. Most students who grow up in the continental US would likely return to their home states to practice. In addition, in order to host dental student rotations, a health center dental department needs to be large enough to have unused dental chairs for the students to use and enough staff dentists willing and able to act as faculty for the students. There are not very many large health center dental departments in Alaska capable of hosting dental students at this time.
- Create additional general dentistry residency positions in Alaska Health Centers. Dental residencies are optional postgraduate experiences in dentistry. Although two states (Delaware and New York) require at least one year of postgraduate training to obtain a dental license in that state, most states do not have that requirement. It is more likely that a newly graduated dentist who spends a year doing a residency program in Alaska will end up staying in Alaska, than it is for a dental student doing a shorter rotation to stay. As with hosting dental student rotations, a health center dental department needs to be large enough to have unused dental chairs for the residents to use and enough staff dentists willing and able to act as faculty for the residents. Again, there are not very many large health center dental departments in Alaska capable of hosting dental students at this time. However, there are a few large health center dental clinics that could support residents and there are several hospitals that could establish dental residency programs within the hospital. Residencies should include instruction in and experiences with working with special needs patients.
- Create additional dental specialty residency positions in Alaska Health Centers. Accessing dental specialty care in underserved areas is especially difficult due to a lack of adequate numbers of dental specialists in the State. Most specialists are located in Anchorage and to access them patients must travel, often at their own expense. If fact it is difficult for access specialty services for many Alaska residents even if they are willing to travel to the Anchorage area.
- Use volunteer dentists. There are several projects that use volunteer health providers. It might be possible to develop a pool of retired or semi-retired dentists do volunteer to work at community clinics serving underserved populations. Alaska also has a “donated dental services” program where dentists volunteer to see a few patients at low or no cost each year in their practices. However, it is recognized that care delivered by volunteers can be costly because of the extra effort it takes to supervise and integrate these services into existing healthcare systems, particularly when travel and lodging is not paid by the volunteers. It is also understood that the services provided by volunteers is often

sporadic and does not typically provide continuity of care nor allow for meaningful preventive behavior management interventions which have been shown to be the most successful interventions in preventing future disease.

Comment: The efforts described above to recruit and retain dentists in the workforce in Alaska are all laudable and important to pursue. As indicated, some are more likely to be successful than others. However, it is unlikely that the sum of these efforts will be enough to increase the number of dentists to a level that would significantly address oral health disparities for underserved populations in Alaska. This is in part because the need is large, but to a greater extent because the barriers to access and oral health for many underserved people are not related to the number of dentists. Many currently underserved groups can't or won't go to dental offices or clinics or can't afford to pay for treatment unless it is provided in a subsidized care system. Some people can't take time off of work to bring themselves or their children to offices or clinics that are only open during their working hours. For other groups there are mobility, medical, language or cultural barriers to receiving care in an office-based delivery system. Improving oral health for some populations may require different kinds of delivery systems in order to be successful.

4. Expand dental services in community sites.
   - Expand community health center dental departments. The Alaska Primary Care Association is working on an Alaska Access plan. They are encouraging members to apply for expansion grants. The focus in expansion will be on expanding dental, behavioral health, and mental health services. There are several non-tribal health centers that may expand using this mechanism. However, at the present time no strategy has been developed to find dental staff for these expanded sites.
   - Use unused education clinic chairs. A United Way project is under consideration that would use the dental chairs at the University of Alaska education clinic at times when school is not in session. These chairs could be used by volunteer dentists. Unfortunately these chairs are only available at certain times of the year so this will be an intermittent service delivery system.
   - Use underutilized community health center facilities to provide additional dental services. Some community health centers do not use their dental chairs full time. In some cases this is because they do not have full time staff to provide services in those chairs. These dental chairs could be used for:
     - intermittent clinics for health center or private dentists,
     - sites for community-based delivery of services provided by allied dental or general health personnel, or
     - sites for intermittent access to specialists.

   Comment: As stated above, there are several mechanisms that can be used to increase available dental chairs in community clinic or educational clinic sites. These chairs can be used by volunteer dentists or dentists rotating between clinics. However, it might be necessary to develop alternate delivery models to effectively use these chairs as it is not likely that there will be enough dentists to fully staff them.

5. Increase the number of dentists and dental hygienists treating people with special health care needs.

- Train dentists and hygienists to treat people with special health care needs. Most dentists and dental hygienists have had inadequate training to provide dental care for people with complex medical, physical, and psychological conditions. Many people with these conditions could be treated fairly easily if oral health professionals understood more about these conditions and were more comfortable with evaluation and treatment techniques. One strategy to address this issue is to provide continuing education experiences for dentists and dental hygienists in this area. Training can be provided in in-person courses and using distance education technologies.
- Provide incentives for dentists and dental hygienists to participate in training programs about treatment of people with special health care needs. Educational experiences on this topic are often poorly attended. Some states have developed financial incentives to encourage dentists and dental hygienists to participate. In some states dentist who have completed certified training receive additional fees or can bill for additional procedures or time from their state Medicaid program when serving certain designated groups of patients. These programs have resulted in more providers taking the training and being willing to accept these patients in their practices.

Comment: While training is not the only barrier to dentists accepting people with special health care needs into their practices, it is one of the important factors. Training and incentive systems to address this barrier can make a difference in dentist's willingness to accept patients with these conditions.

6. Develop and support community-based prevention or treatment efforts
   - Deliver services in locations where people receive educational, general health, or social services. For certain groups of people, especially those underserved people that are in group settings, oral health delivery systems are more likely to be successful if services are brought to locations where the people are rather than expecting them to come to dental offices or clinics.
   - Use mobile vans or equipment to bring services to community locations. Mobile vans or mobile equipment can bring traditional, dentist delivered services, or services delivered by allied dental personnel to schools, day treatment programs, nursing homes, or other locations where underserved populations are located. However, it is understood that mobile vans would have limited impact in much of Alaska which is without road access, much of which is within the Tribal Health System. Mobile equipment is already heavily utilized by the Tribal Health System, with a long history of success, but that system recognizes that having providers based in the community with permanent facilities is preferable for improving access.
   - Partner with agencies that are already in contact with underserved populations. Many underserved people are in contact with education, general health or social service systems. In some cases these systems can facilitate oral health personnel having access to the people in locations where they are receiving other services. Some examples of people or agencies that can serve in this role include:
     - Indian Health Service and tribal providers,
     - School nurses,
     - School-based health centers,
     - WIC agencies, or
     - Head Start Centers.

- Develop intensive school, Head Start, or WIC-based prevention programs. There are many examples of effective school, Head Start or WIC-based prevention programs including those in place in the Tribal delivery systems in Alaska. The model for an extensive ECC initiative has been developed by the IHS and could be expanded to non-Tribal systems. In many states school-based sealant and prevention programs are staffed by dental hygienists and dental assistants.
- Involve general health and social service providers. Other states have successful programs to encourage physicians, nurses or even social workers to incorporate oral health activities into their professional encounters with patients. These involve performing an oral health risk assessment, providing counseling and applying Fluoride Varnish.
- Use case management. There are many programs in other states that have successfully used case management systems to facilitate patients getting the services they need. United Way is developing a program to add a patient care coordinator to an Anchorage project access to work on connecting patients with providers. Some case management programs involve screenings and referral to dental offices. Others coordinate a range of services, some delivered in the community and some in dental offices or clinics.
- Use personnel working at the top of their profession. Community-based services can be delivered most economically with personnel working at the top of their profession. In some cases this means having oral health professionals, such as dental hygienists or dental assistants perform preventive and minor therapeutic procedures in the community setting and referring more complex procedures to dental offices or clinics. In several states dental hygienists are placing Interim Therapeutic Restorations in community locations to stop the progression of decay for populations
- Expand and support new dental workforce provider training and practice models, including DHAT. Alaska has the only two year post high school dental therapist training program in the U.S. By the end of the initial grant funded pilot project, as many as 30 DHATs will have been trained and be working in tribal programs across the State. Initial evaluation of DHAT practice and program implementation suggests that DHAT are providing safe, appropriate and culturally competent care. Over 35,000 AI/AN people will be able to receive continuity of care from DHAT in areas where only sporadic/itinerant care was previously available. To date, DHAT training has been largely funded by grant dollars. As those grants come to an end, the future of the program is uncertain; meaning the possibility of phasing it out may become necessary. It may be necessary for the State of Alaska to support and encourage the continued existence of this program. Sustaining the DHAT program will allow it to continue to train providers to live and work in underserved AI/AN communities, as well as function as a model for expanded workforce development in other areas.
- Involve dentists as directors and participants in community-based systems. While it is not feasible or economically viable to have dentists participating in day-to-day activities in community-based programs, dentists can have an important role in designing and directing these programs.
- Develop telehealth systems to facilitate collaboration. Telehealth systems are available that can create working relationships between members of an oral health delivery system team working in geographically separated locations. These systems can allow dentists to

participate in services delivered in community settings without needing to be physically present in these locations.

Comment: All of the mechanisms described above are in place to various degrees in other states and in some parts of Alaska. Delivering these preventive services in community locations is far more likely to be effective for populations that do not regularly visit dental offices or clinics than trying to get them to go to dental offices. In addition delivering limited treatment services in these locations is also far more likely to be successful for certain populations compared to trying to get them into dental offices.

Consultant Recommendations

While all of the approaches listed above have merit and should be pursued to the extent possible, the consultant believes certain approaches are likely to produce greater increases in oral health at lower costs than others. The following are recommendations the consultant believes should receive the highest priority.

1. Support existing, as well as develop new community-based systems which have appropriate supervisory and collaborative arrangements to safely provide competent oral healthcare to underserved populations. Some examples and characteristics of these systems are:
   - Support the existing Dental Health Aide Initiative which has been implemented in the Tribal Health System. This comprehensive system is based on successful programs in over 50 other countries. Initial evaluations suggest that it will be very successful in the Alaska Tribal Health System.
   - Develop a comprehensive community-based system with appropriate supervisory and collaborative arrangements. Many elements of a comprehensive community-based system were described in the previous section. This section will pull these elements together into a complete system.
   - Expand the collaborative practice law for dental hygienists. The current law and regulations are unlikely to result in much care being delivered to underserved populations. The law should be revised to remove the restriction on involving current practice sites. The fact that some services are being provided in a particular site should not preclude the ability for dental hygienists to increase services provided in that site. Dental hygienists should be allowed to gather electronic records (radiographs, photographs and charting) and upload these to internet web sites for review by dentists. Then, under general supervision (after instructions by a dentist who is not present at the treatment site) they should be allowed to provide preventive services including Fluoride Varnish and sealants, and to place Interim Therapeutic Restorations (ITRs).
   - Encourage community health centers to participate in community-based care. The community-based, collaborative system of care described here can use dentists in private practice or community health center dental clinics. However, since many of the patients who would benefit from these systems are unlikely to have resources to pay for care by private dentists, systems that involve community health centers may be most successful. Regulations governing billing by community health center dental departments should be revised to ensure their ability to bill for services performed by dental hygienists in the

community under general telehealth enabled supervision by dentists in the community health center.

- Start with pilot projects. The systems described here can be complex to set up, at least initially. It may be best to start with one or more pilot projects to develop these systems prior to larger implementation.
- Consider expanding the pool of dental hygienists trained to work in community collaborative systems. If the systems described here are successful, there may need to be additional dental hygienists trained to work in these systems. Earlier estimates concluded that there are adequate numbers of dental hygienists in Alaska for their current role, but this may change as new models of care are developed.

2. Improve the data collection and reporting capability of the Alaska Department of Health & Social Services. Produce and disseminate regular detailed reports about:
   - the eligibility for and use and results of public oral health programs categorized by age, disability, location, and Native vs. non-Native population,
   - provider participation in public oral health programs including provider type and location, and procedures performed by category of patients served,
   - the number and location of community health centers and the number of providers, chairs, and patients seen in community health centers by age, disability, and Native and non-Native populations, and
   - the number and types of oral health services provided in community health centers to eligible individuals by age, disability, Native and non-Native populations.

3. Enhance the ability of current dentists and allied dental personnel to work with complex patients and in distributed telehealth enabled teams.
   - Provide in-person and on-line didactic education programs and hands-on clinical education programs on:
     - providing treatment for people with a variety of special needs including those with developmental disabilities, complex medical problems, and frail elders,
     - working in distributed telehealth enabled teams, and
     - management of dental disease using chronic disease management models.

Summary

Many individuals and groups have been concerned for some time about the oral health status of certain populations in Alaska and the availability of services for those populations. There have been several reports and recommendations developed by these group. While there is a system in place to improve oral health for underserved Native populations using innovative oral health delivery methods, similar oral health problems exist in non-Native groups and parallel systems have not been developed.

This consultation, through meeting with stakeholder groups and a review of reports and oral health data, assembled a number of recommendations to address this situation. These recommendations are listed in this report along with comments by the consultant about their feasibility. In addition there are specific recommendations identified by the consultant as most

likely to produce increases in oral health at lower costs than other approaches. The recommendations can be grouped into the following categories:

- Improve data collection and reporting
- Address reimbursement levels and structure
- Recruit and retain additional dentists
- Expand locations where dental services can be provided
- Train dentists and hygienists to work with people with special health care needs
- Support existing, as well as develop new community-based, telehealth enabled, systems which have appropriate supervisory and collaborative arrangements to safely provide competent oral healthcare to underserved populations.

The next step in addressing the oral health disparities among the populations identified here is to convene groups to develop specific action items for reimbursement, legal, regulatory and educational reforms to create and implement the recommendations contained in this report.