THE FUTURE OF ENTREPRENEURSHIP IN DENTISTRY

Matthew Mahoney

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Dr. Robert Duvic

McCombs School of Business

Supervising Professor

Dr. David Frank, D.M.D.

Walden Dental

Second Reader

ABSTRACT

Author: Matthew Mahoney

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Supervising Professors: Dr. Robert Duvic, Dr. David Frank, D.M.D.

Dentistry is an ever-evolving profession, but in recent years the industry has changed more rapidly than it ever has before. This thesis addresses some of the current trends in dentistry, including the advent of mobile dental programs to confront the needs of at-risk communities, the rising cost of dental school and the implications of the high costs for graduating dentists, the economics of opening a dental practice, and the ever-changing landscape of the insurance industry as it relates to dentistry.

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Chapter I: Mobile Dentistry

In this chapter I will be addressing mobile dentistry as it relates to public health dentistry. I will explore several socially disadvantaged groups and underserved communities in regards to access to dental care. I will show how mobile dentistry helps mitigate, but not solve, their struggles in regards to oral health. The underserved groups I will be addressing include: underserved children, rural communities, the elderly, and people with disabilities. I will be using the St. David's Mobile Dental Program as a case study to illustrate how one of the better mobile dental programs operates, and I will address some potential solutions to the lack of dental care provided to disadvantaged youth. Additionally, I will show how mobile dentistry can be used by businesses to reduce the number of work hours lost receiving dental care.

Chapter 1, Section 1:

Addressing Oral Health Risks Among American Youth

A major health concern that is addressed by mobile dentistry is dental disease among children. There are vast disparities in both access and use of dental care in the US as well as dietary discrepancies contributing to dental disease. To mitigate the risks involved in dental care among youth, school screenings and mobile care have been increasing in prevalence over the last century, and especially in the last decade. Attempts to address the needs of youth should pay dividends going forward as oral health literacy increases across the American population overall. By instilling healthy oral care habits in youth, we should see greatly reduced instances of oral disease over time as the youth populations age.

Background of School based Dental Care and Mobile Dental Programs

The idea of a comprehensive dental health program for youth is not a new one, but implementing a more uniform system addressing the needs of youth nationwide has still not become a reality over a century after the first attempt at a dental health program for children was started. The first school dental health program in the U.S. was established in 1914 for grades one through five. The profession of dental hygiene had just begun, and the intent of the program was to get dental hygienists involved in restorative dental for children. The program utilized dentists to focus on restorative care, while hygienists focused on preventive care. Despite the relatively primitive dental care at the time, the study showed a 33.9% disparity over a five-year period between cavities on permanent teeth for the students who received dental care versus a control group.

Since its inception in 1914, school based dental care has become prolific, but not uniform across the U.S. Many programs involve dental buses which come directly to schools and have operating rooms inside the buses, while others use portable equipment to set up mobile offices in the schools. Four of the most common school dental service models are:

1. Dental screening programs at school which link students to dentists in the community for continued care.
2. Dental sealant programs administered through the school at specific grades for children.
3. Dental preventive services administered through school such as fluoride and prophy.
4. More intensive preventive and restorative treatment administered at or through schools.

Case Study: The St. David's Mobile Dental Program

An example of the use of a mobile dental bus system is the St. David's Mobile Dental service. St. David's Mobile Dental service is based in Austin and is used as a model for many mobile dentistry programs around the country. The reason for the success of the St. David's Mobile Dental Program is due to the unique operational model of the St. David's foundation. The foundation funds community dental programs as well as their direct dental service via dental vans to create a broad base dental care infrastructure in the Austin area. The mobile program, founded in 1996, uses 9 dental vans to provide care to high needs elementary schools in six Central Texas school districts. The vans are equipped with two dental exam rooms, digital x-rays, and computers. The vans travel around Central Texas and in the Texas Valley to provide dental screenings, sealants, and specific care to students. Additionally, when school is not in session the vans are used to serve families and adults in safety net clinics. Mobile dentists are relatively few, so mobile dentists typically use intensive screening processes to focus on the most

underserved communities for their care. To address the needs of students, St. David's uses the following protocol. Each student is screened and administered an assessment form stating whether or not the student needs additional care. If a student needs care, a parent must sign consent and return the form, after which, the child will receive treatment. Because there are so many students who need treatment and so few mobile dental programs which administer to the needs of the schools, most programs are only able to provide full restorative service to Title I schools.

The amount of service provided by the St. David's mobile dental vans is impressive. The St. David's mobile dental van program has been in operation since 1998. Between 1998 and 2006, the program was able to provide 132,971 dental screenings and 38,634 dental treatments, most of which were sealants. During this period, the program went from one operational van to three, and the numbers indicated the rapid expansion in the volume and breadth of service they were able to provide. During the 1998-1999 school year, the single van provided 15,000 screenings, and during the 2004-2005 with three vans the program was able to provide 37,383 screenings. Additionally, the number of sealants provided during the first year was 2,449, while in the 2004-2005 school year 7,409 sealants were provided. The economy of scale on the dental vans indicates that for each additional van the program is able to help nearly 100% more patients. According to 2016 data, the average cost per patient receiving treatment was $886, which is funded by government grants and donor organizations. The total cost of the services administered by the vans in 2016 was $11.6 million, all of which was provided free of charge.

The program also evolved in the types of care it provided. Upon its inception, the mobile program primarily focused on preventive care through the administration of sealants at schools. It soon became apparent that there was a great need for restorative services among school

children, so the program switched focus and in 2000 97% of the services provided were restorative (most of which were fillings). After two decades of continued care and patient management, the program now dedicates most of its services to preventive care once again. 69% of the services provided in 2016 were preventive in nature.

To handle complex cases which cannot be fully addressed via the mobile vans, the St. David's Foundation has partnered with over 40 pediatric dentists and specialists in central Texas who treat complex care referrals. Initially, the funding from the foundation covered the entire cost of care, but as the program has grown this became less feasible, and the foundation now covers 50% of the service costs. Additionally, a case manager from the foundation accompanies children to their appointments and can provide transportation as needed.

In an effort to create more brick and mortar dental infrastructure for low income families, the foundation additionally provides millions of dollars in funding for a number of programs in central Texas. The alleviated number of cases being addressed by the dental vans in Austin has allowed the care to be increased to the Texas valley and other low income and rural areas in Texas.

Despite the growing amount of aid being provided by mobile dental efforts such as those by the St. David's Foundation, the approach is not entirely sustainable for most of the U.S. at present. These programs lack the needed funding to provide care on the scale necessary to curb the problems associated with access to dental hygiene, and the goal of the mobile programs is generally not to provide a dental home with their mobile services for patients. The programs intend to help children and families establish dental homes in their communities and to bring oral health awareness to communities. The ultimate goal of St. David's program specifically is to help fund and facilitate the construction of dental infrastructure that will be a more permanent

source of care to the communities that the vans currently operate in. By achieving this oral health initiative, the need for the services of the dental vans would be greatly reduced in the communities currently being served, as their current patients are linked with more permanent dental care. The diminished burden in the communities currently being served would allow the vans to expand service to other communities in need across Texas and potentially beyond with increased funding.

Funding of mobile programs comes from a variety of sources, with many programs utilizing grants and philanthropy as a main component for the funding for their services. Other programs studied were for profit. Programs that were funded from grants and community support generally expressed that they felt relatively secure in their ability to continue providing services due to the nature of their grants. The grant-funded programs expressed that their grant writers, for the most part, had indicated willingness to continue the dental projects because of the amount of money devoted to the purchase of the vans and essential equipment, as well as the long term community benefits of increased oral health. Government funded programs, which were predominantly dependent on Medicaid and Medicare funding, expressed a much higher level of concern about the long-term sustainability of their services due to the idiosyncrasies and potential for reductions in government funding. State and federal budget processes for dental medicaid and medicare benefits change with every election cycle and every newly made budget, such that the amount of funding received can fluctuate greatly over time.

While grant-funded programs expressed confidence in their ability to continue their services, many grant providers require that the program become financially self-sustaining over time. The "lucky" nonprofit programs, like the St. David's Foundation program receive direct and fully funded support year after year and have support for infrastructure in the community as

well. The foundation expressed commitment to be a service provider via the mobile program, but also expressed commitment to creating a larger based infrastructure for oral health in the Austin area and beyond. To do this, the foundation allocated funding for community providers in the Austin area along with the mobile program in an effort to create sustainable access to dental care for underserved communities. This allows the providers to be fully engaged with their mission of providing oral health to the community. Many programs, however, are less fortunate and have to spend time and energy to sourcing funds year after year.

Chapter 1, Section 2: Rural Dentistry

The Barriers to Receiving Care

To truly understand the problem with oral health in rural areas, it is necessary to understand the problems associated with oral health that these communities face. Among these problems are geographic isolation, lack of adequate transportation, higher rates of poverty, a larger geriatric population, difficulty finding providers who will treat medicaid patients, a lack of dental insurance, provider shortages, and a lack of fluoridated water. In this section I will look into several of these factors, and I will show how a mobile dental care system can be used to mitigate a number of the problems facing rural communities.

Geographic Isolation from Dental Offices

Rural communities often have little to no access to dental care because of their location, and many patients do not make the commitment to commute to a city just for dental care. In 2017, 55.7% of adults 18-65 living outside of a Metropolitan Statistical Area had been to a dentist in the past year as compared to 65.2% of people living within a Metropolitan Statistical Area. There are far fewer providers in rural areas, as many dentists prefer to practice in urban or suburban areas due to the benefits and convenience of life in the city. Although rural dentists often have higher salaries than urban dentists, it is harder to maintain a client base in rural areas, and there is often less opportunity for practice growth. This leads many dentists to not open practices in rural areas, thus leaving rural communities without access to care. Given the difficulties for rural community members in getting to the dentist, it is no mystery as to why there are lower rates of dental visits in these communities.

A Lack of Access to Public Transportation

A lack of public transportation is a major barrier to many rural community members in receiving dental care. Without public transportation, many poor rural community members are unable to make it to the dentist because they have no ability to get to the office. This is compounded by the fact that the poverty rate is much higher in rural areas than it is in urban areas, so there are more members of rural communities who would rely on public transportation, but do not have access.

Lower Rates of Insurance Coverage

A lack of insurance is yet another hurdle facing rural communities. Only 60% of rural community members were insured by a private company. This is far less than the 72% of urban community members with private insurance. This is due, in large part, to employers in rural areas not offering insurance to their employees. Many members of rural communities have salaries which are too high to be covered by Medicaid or CHIP, but have salaries which are too low to be able to comfortably purchase a private insurance plan. This is a major barrier for rural community members in regards to receiving dental care, because they are unwilling or unable to pay full price for dental care, unwilling or unable to buy private insurance on their own, and they are not covered by their employer or by the government. Dental care is expensive, and cost is a major factor in the lack of treatment in rural areas.

Many Dentists In Rural Areas Do Not Accept Public Insurance

Even in rural communities where people are covered by public insurance such as CHIP and Medicaid, many people do not have a provider nearby who accepts public insurance. As will be discussed later in this thesis, low reimbursement rates cause many dentists to not accept Medicaid or Children's Health Insurance Program (CHIP) patients. Approximately two-thirds of dentists in the U.S. do not serve any publicly insured patients, which is especially problematic for members of rural communities who have limited options as far as providers. This problem of insurance is compounded by the geographic isolation of rural communities. In an urban center there are a plethora of dentists who accept public insurance, so if your nearest provider doesn't accept public insurance, no big deal, just drive down the road and you can generally find a provider who accepts your government insurance. In a rural community, this can be much more troublesome. If a dentist in a rural community does not accept Medicaid or CHIP, the next nearest provider who does accept public insurance could be 100+ miles away. For rural communities, which have higher rates of poverty, geographic isolation in relation to providers can be a big problem, especially because many of the same people who are using public insurance also don't have a means of transportation to travel long distances to see providers who accept public insurance.

A Lack of Fluoridated Water Put Rural Communities at Higher Risk

In addition to geographic isolation in relation to dental providers, rural communities suffer from a number of other inadequacies which put people in rural communities at higher risk of oral health disease than those who live in urban areas. One of these inadequacies is that many

rural areas do not have access to fluoridated water, which is imperative for cavity prevention. The biggest reason for the lack of fluoridated water is that it costs more in rural areas.

Nearly all urban centers in the United States use fluoridated water supplies, which significantly decreases the prevalence of cavities, but many rural communities find fluoridated water supplies to be cost prohibitive. Fluoridated water is proven to reduce cavities by 25% and increases the strength and overall health of teeth considerably. According to the CDC, fluoridated water is the most cost effective and efficient method of preventing cavities in children. Rural communities have fluoridated water approximately 11% less frequently than urban areas. Data from the CDC shows that the per capita annual costs of fluoridated water were between $0.11 and $24.38, while the per capita benefits of fluoridated water were between $5.49 and $93.19. This data provides a strong argument for fluoridating drinking water in rural communities, even if the cost is high relative to urban centers. The preventative benefits of fluoridation in the long run will most likely outweigh the costs of fluoridation. With so many rural communities suffering from increased rates of cavities, it is imperative to provide these communities with fluoridated water.

Lower Health Literacy and At-Risk Behaviors in Regard to Oral Disease In Rural Communities

Health literacy is lower in rural areas than in urban centers, which has a negative impact on the prevalence of oral health diseases. In addition to lower rates of oral health literacy, rural community members show higher rates of at-risk behaviors in regard to oral disease.

Higher Sugar Intake

Studies show that rural community members consume more sugar-sweetened beverages and fast food than urban community members, which lead to more incidences of cavities. To understand why higher sugar intake is correlated to higher rates of dental disease such as cavities, I have provided a short explanation of sugar's relationship to cavities. Exactly how sugar causes oral disease is unknown to many members of the public.

Bacteria are always present in the mouth, but some groups of bacteria are beneficial for oral health and others are harmful. Several groups of bacteria produce acid in the mouth when the bacteria encounter and process sugar. The acid produced during the bacteria's digestion of the sugar demineralizes tooth enamel and causes the formation of plaque, a film which coats the teeth. It is not the sugar, but the plaque caused by sugar, which causes cavities. As plaque builds on the teeth, it eats away at the enamel on the outside of the teeth, which results in holes in the teeth's surface.

Higher Rates of Tobacco Use

Tobacco products are also much more common in rural communities than in urban centers. In rural communities, 27.7% of adults smoke cigarettes versus 20.3% of adults in urban areas. Additionally, 13.8% of adults in rural communities use smokeless tobacco versus 5.9% of adults in urban areas.

Mobile Dental Care Addressing the Needs of Rural Communities

To address the needs of rural communities, a multi-faceted approach must be taken which attempts to boost oral healthcare awareness as well as provide restorative and preventive care.

Mobile dental care may be a good first step in bringing attention to the needs of rural communities. Mobile dentists can provide restorative care and can lay down a foundation of attention to the many health concerns which exist at elevated rates in rural communities, however, significant time and resources must be funneled into rural community's dental infrastructure to truly address the oral health concerns present.

While most Americans live in Urban or Suburban areas, most of the United States is rural. 97% of the counties in the United States are rural counties, and roughly 60 million people, or almost 20% of the total population in the United States exist in rural areas. While mobile dentistry should not be the end-all-be-all solution for addressing oral healthcare in these areas, it is a good first step, and could prove to be very profitable as well. The mobile dental system could service these underserved communities with ease, and due to the high number of individuals at risk in these communities, it could be a great first step in addressing the needs of these communities. While there have been some forays into mobile dentistry in recent years, there is not a strong push overall for addressing the needs of rural communities, as most efforts in mobile dentistry have been focused on addressing the needs of other at-risk communities such as impoverished children and the geriatric community. I contend that the next step in mobile dentistry is to address the needs of rural communities, which are, as discussed in length throughout this section, at extremely high risk in terms of oral disease. Giving rural community members access to a provider who comes directly to them also has the potential to mitigate some of the at-risk behaviors which are all too common in rural areas. Additionally, seeing a dentist on a regular basis could vastly improve health literacy for rural community members who suffer from a lack of access to healthcare.

Chapter 1, Section 3: Geriatric Dentistry

Among the patients who benefit from mobile dentistry are elderly adults who are circumstantially unable to access traditional dental care. These patients are often in nursing homes or hospitals. They are often immobile or require special care from family members or nurses, and, as such, would have difficulty traveling to a typical dental office. The geriatric community is a socially disadvantaged group in America, and they often receive less than adequate care due to their age and their elderly status. Nurses and other caregivers often prioritize other health services which seem more critical for their elderly patients, and dental care is often neglected to the extent that many geriatric patients do not even have their teeth brushed or flossed on a regular basis.

Disease starts in the mouth, and many oral conditions can proliferate into far more severe conditions. For example, gingivitis, tooth decay, and gum recession are typically linked to a lack of oral health attention, but new studies have indicated that oral health neglection is also linked to heart disease and Alzheimer's, amongst others. Older adults with 20 or more teeth have a significantly lower mortality rate than those with 19 or fewer teeth. Nutritional deficits linked to lack of dental care are rampant amongst the elderly, and significant oral bacteria has been linked to aspiration pneumonia in nursing homes. Oral health should be addressed systematically along with the other medical care provided in geriatric facilities and hospitals. To this end, mobile dentistry provides a platform for addressing these concerns. By taking a dual approach, utilizing both restorative and preventative practices, mobile dentists have become increasingly more prominent in addressing the oral health concerns and holistic health concerns of geriatric and other medically disadvantaged populations. By integrating into the holistic care of these

populations, mobile dentists are helping show how preventative medicine can drastically decrease the prevalence and risk factors of disease throughout the body.

An important point to denote is that while age related problems and medication make oral health conditions much more complicated, age is not synonymous with disease, and thus is not and should not be considered pathologic. Aging is a natural and inevitable physiological process which occurs over time to everyone.

Geriatric Dentistry as a Dental Specialty

In addition to the advent of mobile dentistry addressing the needs of the geriatric community, there has been a growing push among dentists to recognize geriatric dentistry as a dental specialty. In the same way that pediatric dentists specialize in the needs of children and youth, geriatric dentists specialize in the care of the elderly.

The world's population is aging, demographically speaking. The proportion of people over the age of 65 has grown rapidly in recent years as health care improves and the baby boomers reach old age, and this trend is expected to continue into the future. In just ten years, life expectancy at birth has increased from 67.2 years in 2000-2005 to 70.8 years in 2010-2015. By 2045-2050, the average life expectancy at birth worldwide is expected to reach 77 years. The number of people over 60 worldwide is also expected to double by 2050. These numbers are staggering, and to address the needs of the elderly many dentists are pushing for a more robust and specialized approach to geriatric dentistry.

The worldwide demographics of the growing number of elderly people are mirrored heavily in the United States. The number of people over the age of 65 in the United States is roughly forty-eight million, and that number is projected to increase to nearly eighty million

people by 2050. There are nearly two million Americans who live in nursing homes, and more than ten million Americans who require long term support services to help them through their daily activities. Additionally, over fifty-four million Americans have one or more disabilities. With the numbers of people unable to get care due to circumstances steadily increasing, it is important to build infrastructure that sustainably meets the needs of this disadvantaged community.

Age related dental problems have become a major focus point in modern dentistry. Due to the success of dental care over the last century, gum disease and cavities at young ages are seen at reduced rates, and these trends are causing the elderly to retain more natural teeth than ever before. A study in Australia showed that in 1979, 60% of Australians over the age of 65 had no natural teeth. By 1989, just ten years later, only 44% of Australians over the age of 65 had no natural teeth. By 2013, only 19% of Australians over the age of 65 had no natural teeth, and this statistic continues to decline over time.

While these trends are positive and show the success and improvement of our dental care systems, they present problems for dentists who in the past had relied primarily on implants and dentures for the care of the elderly. Nowadays, many individuals are able to retain their natural teeth well into old age, but simply as a product of age, the retained teeth are at increased risk of developing and accumulating oral diseases that are more extensive and severe. Despite the specificities of treating the elderly and the growing population, the geriatric community is underrepresented and underserved in dentistry.

Geriatric dentistry is soon to become a recognized specialty with the American Dental Association, but at this time is not recognized. Training for dentists in geriatric care is limited, and few dental schools offer geriatric dentistry as a specialty. Postdoctoral training in geriatric

care consists of 12-36 months of specialized training, but only six institutions in the U.S. were currently accepting fellows into their programs.

Worldwide, geriatrics are wildly underserved, even in developed countries. In Australia, geriatric dentistry falls under the "Special Needs Dentistry" specialty and is recognized by the Dental Board of Australia. No other country specifically recognizes geriatric dentistry as a specialty, despite the presence of some geriatric training programs. For example, the United Kingdom has thirteen recognized specialties, but geriatrics is not one of them. Due to a strong push by the dental community to recognize the widespread under representation of dentists specializing in geriatric care, a geriatric specialty will probably become more widely recognized in the near future.

One of the main benefits of performing mobile dentistry at geriatric facilities is that after individuals in a nursing home receive care, these individuals are under supervision by nursing home staff. If an 80-year-old has a tooth extracted, he or she has a lot more oversight in postoperative care than an individual who does not live in a nursing home. The nursing home staff will properly provide the postoperative medication, and the controlled environment gives the contracting dentist peace of mind that their patron will receive good care post operation. While a lot of mobile care is provided on a contractual basis, it is good to know that in geriatric facilities there won't be any abuse of medication.

Geriatric dental care provided in a mobile capacity is relatively new, but there are several programs in Texas which provide service to nursing homes. An Austin based operation called Dental & Health Management Solutions was started in 2007 and has been growing to serve nursing homes in the Central Texas region.

While there isn't anywhere near comprehensive coverage, the trend to treat the geriatric community with more specificity is a growing trend in dentistry which will continue for years to come. I see mobile dentistry as a great first step in providing care to the underserved geriatric community, and mobile service seems to be a good fit for nursing home care.

While there have been efforts to turn a profit in this area, many companies are fearful to foray into this territory because of low reimbursements. Most geriatric patients are covered by Medicare supplemental plans, which have low reimbursement rates, and so many dentists are unwilling to take the economic risk of starting a dental operation specifically addressing the needs of the elderly. An operation which utilizes government grants as well as taking in revenue for services provided may be a more successful first step in addressing the needs of the geriatric community.

Chapter 1 Section 4:

Mobile Dentistry for Corporations

An increasingly popular trend for corporations across the U.S. is the use of mobile dental vans to address the oral hygiene needs of employees. The case for mobile dental care implementation by businesses was made by a study published in 2018. The study showed that an average of 320.8 million work hours are lost annually for dental care as a whole in the United States. 252.2 million work hours were lost in 2017 due to non-cosmetic visits to the dentist (cavities, crowns, etc.) in the United States, demonstrating the massive amount of time employees spend getting treatment for preventable care. Continuing the breakdown of the hours spent receiving treatment, 92.4 million hours of the total were for emergency care, 159.8 million hours for routine care, and 68.6 million hours for cosmetic care. Many of these workday hours could be taken back by corporations through the implementation of a mobile dental care system. Travel time would be saved entirely, and companies who implement a mobile dental care system can monitor their employees to make sure there are no abuses of work hours. While not all of the 320.8 million work hours could be taken back, many hours could. With a mobile dental program most routine checkups and cleanings could be performed at the business's office on a set schedule, and the companies would have the ability to monitor their employees dental care to mitigate the number of emergency visits needed. Many companies have chosen to set up rewards programs for good healthcare and hygiene practices, and a mobile dentistry approach could aid company's interests in their employees oral hygiene by giving employees the resources needed to maintain good hygiene in a convenient way for employees.

The 2018 study showed an unsurprising, yet important breakdown in who spent the most time receiving dental care. Individuals with poor oral health were more likely to lose one or

more hours in unplanned dental visits in comparison to individuals with good oral health. Additionally, not being able to afford dental care was correlated with more hours lost in unplanned dental visits, generally due to a lack of preventative care. Mobile dentistry at the office would mitigate the prevalence of both of these issues by uniformly addressing the needs of employees in a convenient way. Hispanics were shown to lose the least number of hours in comparison to other ethnicities in terms of hours lost to dental care. With a mobile care system there would be a fairly uniform number of hours lost by employees to dental care. While the mobile system is not widely used in the U.S. at the present time, it could be a good system for companies to have more oversight over their employees dental visits, and it could help companies reclaim unneeded hours lost to preventable dental treatment as well as travel time from the companies office to the dental office and back.

Mobile Dentistry Overview

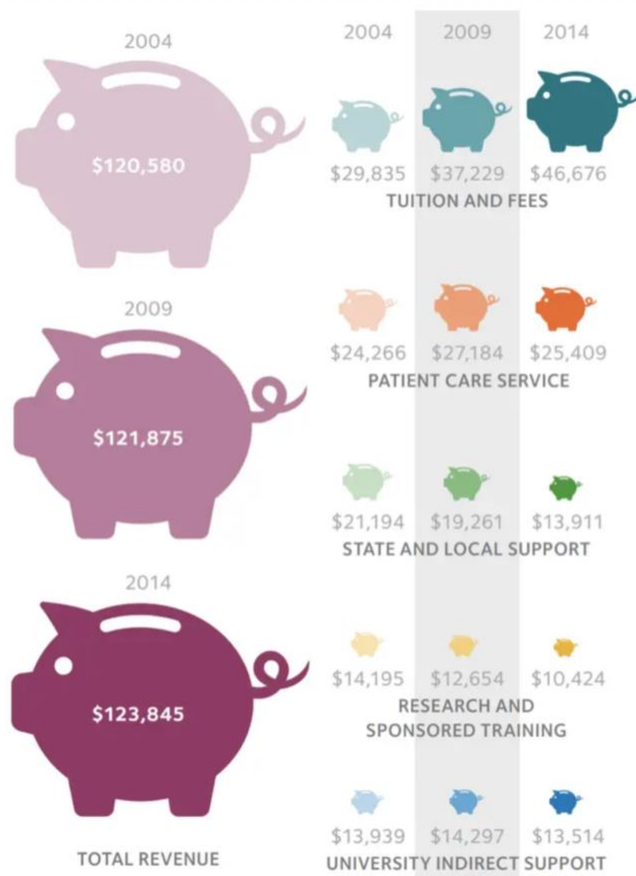
Mobile dentistry provides a promising new oral health outlook for many underserved communities. Mobile dentistry provides a first step in addressing the needs of these communities, and if paired with community based support, mobile dentistry could transform the landscape of dentistry as a whole. At present, there are not enough mobile dental programs in the U.S. to serve the many communities of underserved patients, but with increased funding from private companies and from the government many communities could have their needs addressed by a mobile dental program in the next few decades.

Chapter II: The Rising Cost of Dental School

The rising cost of higher education has been a societal problem over the last 20 years or so, and dental education is no exception. Over the past two decades there have been record numbers of student's borrowing money to pay for school nearly every year, and the overall cost of higher education has gone up every year without fail.

At four-year universities, the cost of education increased by 15%, with inflation adjusted, from the 2004-2005 school year to the 2009-2010 school year. Student debt is roughly $1.56 trillion in the United States, and this number climbs steadily with every coming year. Dental schools and dental students have not been immune to these trends, and since the early 1990s there has been concern regarding the rising student debt experienced by students graduating from dental school. Increased debt taken on by graduating dentists has affected career paths and ultimately access to dental care for the public in dramatic ways.

Dental schools often cite lack of state and federal funding for the great increases in the costs of school that we've seen in recent years. While it is true that state funding has declined significantly, this doesn't paint the full picture. The cost of tuition has gone up considerably, and while this is partially due to the lack of government funding, dental schools have increased their attendance costs and their profit margins to a greater extent than the lack of funding can be attributed for.

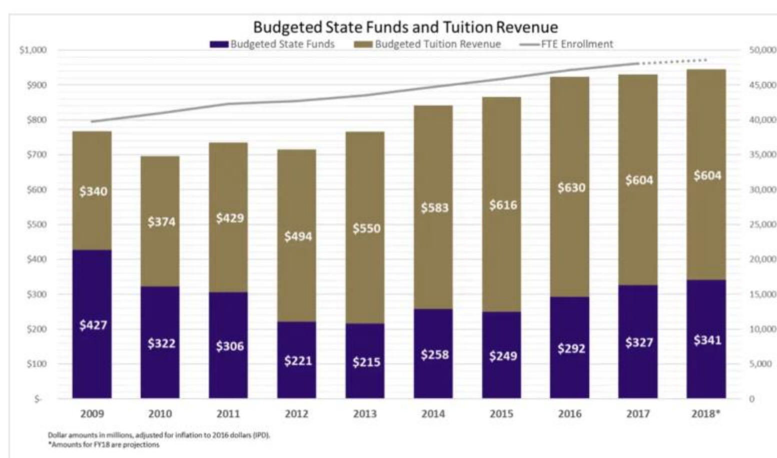


This graphic from the American Dental Association shows the profit margins of dental schools increasing overtime. There has been a significant decline in funding, but the increases in tuition and fees are consistently much greater than the funding declines.

Many dental schools also cite the state's declining reimbursement of medicaid as a major reason that the cost of tuition is rising. Dental schools provide care to communities, and to make up for the loss in state reimbursement, they claim they must raise tuition rates to maintain their community care. As seen in the chart, however, the cost of patient care services being provided is a relatively small increase in comparison to tuition. Dental schools are allowing their profit margins to grow, and ultimately they are the biggest culprits in the rising costs of dental school.

Case Study 2: The University of Washington Dental School vs. The University of Alabama at Birmingham Dental School Management of Funds and Tuition Over the Past Decade

As noted in an article titled "Dental School Tuition Soars for No Good Reason" by *The Student Loan Planner*, dental schools cannot be lumped all into one group regarding increasing tuition costs. The article cites differences in the rise in cost of two dental schools, The University of Alabama at Birmingham and The University of Washington. The University of Washington made vast increases in the price of tuition which did not scale with the decrease in the level of funding the school received, while the University of Alabama at Birmingham did scale their tuition increases with the decrease in state funding.



This graphic from the University of Washington's website depicts the amount of state funding received by the University of Washington over a ten-year period. State funding drops off by a vast amount from 2009 to 2013, but rebounds some over 2013-2018. The amount of state funding lost was about 50% over 2009-2013, and surely the tuition would have to go up to recuperate some of the money lost from the state. It did. However, when state funding rose by $126 million by 2018, the costs of tuition were continuing to rise despite the rebound in state support.

The University of Alabama at Birmingham experienced similar, though slightly less severe cuts over the same time frame, but the cost of their tuition rates rose at a more modest rate, which scaled with the level of funding.

UAB STATE FUNDING

FROM THE EDUCATIONAL TRUST FUND

AS ENACTED FY 1967–1968 TO FY 2016–2017

Fiscal Year	UAB Request	ACHE Recommendation	Governor's Recommendation	Original Appropriation [1]
2016-17	$365,746,842	266,280,464	271,452,565	272,081,756
2015-16	$364,340,077	264,409,568	273,614,369	267,329,095
2014-15	$364,340,077	260,804,527	266,850,319	264,706,549 [14]
2013-14	365,285,853	266,401,351	263,327,361	262,936,603 [14]
2012-13	365,285,853	275,329,767	258,025,709	258,386,290 [14]
2011-12	358,941,736	288,042,665	267,016,678	268,566,258 [14]
2010-11	358,811,486	286,048,142	266,509,376	261,894,483 [14]
2009-10	362,923,548	359,594,984	282,032,631	282,968,361 [14,15]
2008-09	407,056,000	365,055,735	314,478,004	320,111,373 [14,15]
2007-08	370,836,760	359,524,170	351,310,338	353,961,485 [14]

While the state funding at the University of Alabama at Birmingham was cut by a relatively modest 28% between the 2007-2008 and 2012-2013 school year, their tuition scaled naturally with the budget cuts. It is also important to note that the University of Alabama at Birmingham did not experience as large of a rebound between 2013 and 2018 as the University of Washington.

Approx. Average Annual
In State Dental School Tuition

	2014	2018	% Total Change
Univ of Alabama-Birmingham	$24,000	$26,000	8%
University of Washington	$38,500	$61,000	58%
New York University	$67,000	$76,000	13%
Boston University	$67,000	$77,000	15%
University of the Pacific	$98,000	$113,000	15%

This data set on the rising cost of tuition was taken from the article “Dental School Tuition Soars for No Good Reason”. During the period from 2014 to 2018, state funding received by The University of Washington Dental School increased by $83 million, but their

tuition rates increased by 58%. This clearly represents a problem with tuition. The school received more money, but still increased their tuition rates by a massive amount. The University of Alabama at Birmingham Dental School also raised tuition rates despite a moderate increase in funding of roughly $14 million, but their tuition increases of 8% pales in comparison to the 58% increase at The University of Washington.

The chart also lists several private institutions which are not tied to federal or state funding in the same way that public schools are, and their tuition increases are relatively high given that they have no state funding to rely upon as a scapegoat for massive tuition increases.

The bottom line: state support has declined at many public schools over the last decade, but some schools are capitalizing upon this lack of funding to increase their revenue intakes. The University of Alabama at Birmingham has done a good job at keeping tuition relatively fairly priced despite the decreases in state funding, but other schools like The University of Washington have struggled to balance their budget despite huge tuition increases. The University of Washington had a $42 million budget deficit despite the tuition increases and large layoffs of school staff. The past administration failed to keep the finances in order, and future students will have to pay for their shortcomings for years to come.

The price of dental school must rise every year due to inflation, and inflation is generally 2-5% per year. However, over the last decade inflation has been historically low, so schools have little excuse for huge tuition increases in terms of inflation.

During the period from 2007-2012, the economy slowed-- “the Great Recession”. Prior to the recession, schools over hired and overextended themselves due to the relatively large funds they were receiving from the state. To save on funds over the course of the decade, schools should have made spending cuts and raised tuition rates slightly to compensate for the

lack of funding, but many schools failed to balance their budgets, raised tuition rates greatly, and took on large budget deficits.

Most dental school deans are looking to expand the reach of their programs. They bring in more researchers, greater clinical outreach, and more programs overall. Their pay and their job is to bring notoriety to their school, and they have little incentive to aid students' budgets, as the number of people applying to dental schools continues to rise every year, despite the tuition increases. Dental deans are often hoping to move up to a higher administrative position within the university systems, and their best bet as to how to achieve this goal is to create greater repute for their dental school. The bottom line: until there is greater incentive to keep tuition rates low, tuition rates will continue to rise.

Case Study 3: NYU Dental School Cost

The cost of NYU dental school is among the highest in the nation. While NYU's website cites the average cost as somewhere between $300,000 and $400,000, an article by *Student Loan Planner* has cited a figure of $673,000. According to the data in the article, this figure seems to be much closer to the truth. The figure incorporates $38,000 per year for living expenses, which are high in NYC. The cost of tuition is around $95,000 per year.

2019-2023	Year 1	Year 2	Year 3	Year 4
Living cost	$38,000	$38,000	$38,000	$38,000
Tuition & fees	$95,968	$95,078	$94,978	$94,978
Add 3% inflation	$0	$4,019	$8,159	$12,419
3% average origination fee	$4,019	$4,113	$4,234	$4,362
Accrued interest 7%	$9,659	$19,544	$29,270	$40,203
Total each year	**$147,646**	**$160,754**	**$175,090**	**$189,962**

According to the *Student Loan Planner*, the 3% average origination fee is due to "25% Stafford loans and 75% PLUS loans, since Stafford charges about 1% upfront fees and PLUS charges about 4% upfront." These figures are massive. An average associate dentist may make around $100,000 per year after taxes, so being close to $700,000 in debt after dental school is a seemingly insurmountable amount of debt. While most students won't pay for all of school out of pocket, many NYU grads are more than half a million dollars in debt upon graduating.

One of the worst aspects of the debt accumulated in dental school comes from the accrued interest growth while in school. At NYU the accrued interest was projected to be around

$100,000. This is $100,000 in student debt that isn't accounted for in any cost estimates given by schools around the country, and most students probably don't even realize until they're paying on the loans that they're actually going to have to tack on another $100,000 due to the accrued interest. Additionally, when planning for the *actual* cost of dental school, students aren't able to account for the specifics of future tuition increases. Thus, it is hard to gauge for most aspiring dental students just how much dental school is going to cost based on the low-ball estimates listed on most dental school's websites.

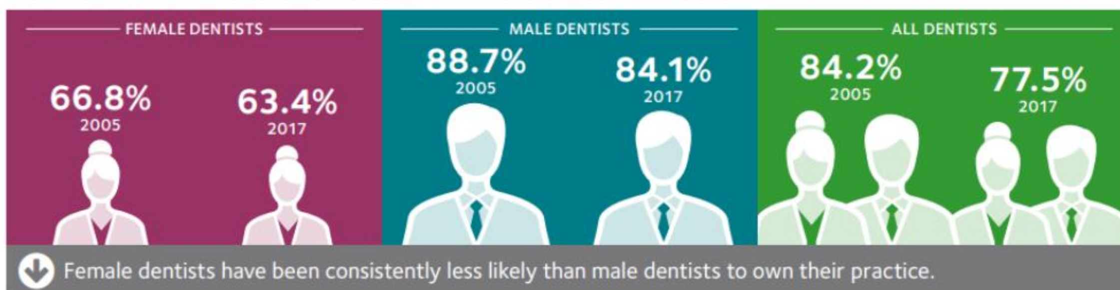
In the case of NYU, the cost of living is a large additional cost of school, as an apartment in New York City generally runs in the $2,000-$3,000 range. The cost of living in a place like New York City therefore can and will add $150,000 to $200,000 to the cost of getting an education. There are many places around the country where the cost of living is much cheaper, and one could save $100,000 or more by carefully selecting a dental school in a cheaper area of the country. Afterall, dental students are going to be spending the majority of their time in the library and at the clinic, so the dental school's location is of little importance to the actual quality of life the dental student will experience.

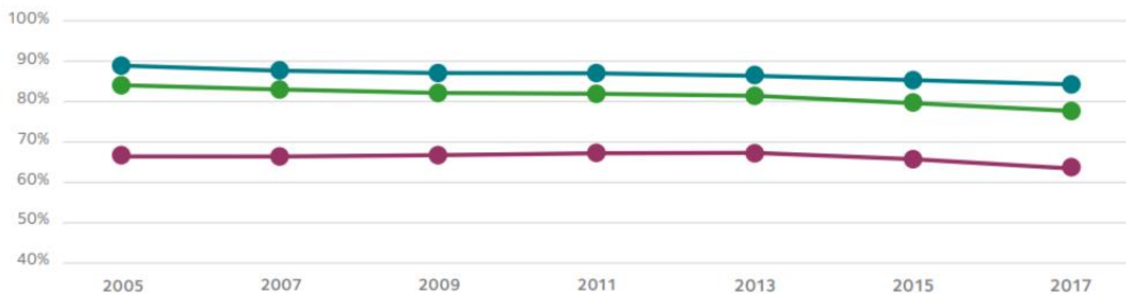
The bottom line: dental schools are often misleading when it comes to the discussion of total cost and loan repayment. Many schools will claim that a half million-dollar debt can be paid back in a relatively short period of time, say seven years, but that is often a far cry from the truth. Dental school is expensive, and loan forgiveness programs are often harder to get into than it seems, so prospective dental students should be discriminating and careful when planning for their financial futures.

Chapter III: The Decline of Private Practices in Dentistry

HPI Health Policy Institute
ADA American Dental Association®

Dentists' Practice Ownership is Declining





Source: ADA Health Policy Institute analysis of Distribution of Dentists survey and Survey of Dental Graduates. **Note:** Results are weighted to adjust for nonresponse bias.

The ownership of the private practice in dentistry used to be nearly ubiquitous, with 9 out of 10 dentists owning their own practice. With the changing landscape of insurance, loans, and the rising costs of practicing, many dentists are opting to work as associates at corporate offices. In 2005, the percentage of dentists who owned their own practice was 84.2%, but by 2017 that percentage had dropped to 77.5%. This number continues to decline as pressures on the industry continue to rise. The group most affected by these changes have been young dentists, with only 28.4% of dentists under 35 owning their own practice in 2017, a number which dropped from 44% only twelve years prior.

Why is private practice so popular and why is it slowly declining?

Solo private practice affords the practitioner the highest level of independence and autonomy available in dentistry. The solo practitioner is responsible for all aspects of the business. This can be overwhelming. The solo practitioner is responsible for property management, both clinical and administrative staff oversight, financial/legal/business responsibilities, and for providing clinical care to patients. Solo practitioners are on call 24/7 for their patients and they have little clinical support from other dentists to reference for complex cases. Juggling all these roles can be tough for the practitioner, especially since most practitioners only have clinical training.

Dentist's Payment

Dentists are in charge of setting their own rates for operations, cleanings, and general check-ups. In the past, most of the dentist's revenues came from direct payment, but dentists payment increasingly is coming from insurance payouts at lower and lower rates as dentists try

to maintain a strong client base while still making money. According to the ADA, seven out of ten patients pay via a dental plan, and 90% of dentists accept some form of dental plan. These percentages are expected to increase over time as insurance plans continue to put pressure on dentists. The trend for reimbursement per procedure will be reduced due to PPO and EPO plans.

Insurance in Dentistry

Insurance reimbursement is a tricky game for dentists. All dentists have a set amount of operating and overhead costs that they must account for, and dentists operate on the margins they set for their operations. The ideal situation for a dentist would be every patient paying out of pocket the exact cost of the operation, with no dental insurance plans involved. For most dentists, this is but a pipe dream.

There are two main types of dental insurance plans: traditional dental plans and direct reimbursement plans. The direct reimbursement plan is generally entirely funded by the employer and allows the employee to choose any dentist without choosing from a network, or predetermined set of dentists. In a direct reimbursement plan, the employee is reimbursed for all money spent on dental care, and this is not limited to specific treatments or operations. Some employers have you pay out of pocket and then they will reimburse you for any money spent, while others may pay the dentist directly. The direct reimbursement plan is generally preferred by dentists because the dentist is paid directly either by the client or by the client's employer.

In a traditional dental care plan, the dentist must be a participating dentist in the "network" of dentists participating in the payment program, and generally must be contracted by the insurance carrier. The network of dentists have generally agreed to discount their fees in order to attract a larger client base via the insurance company. Generally, these plans are dental

PPOs and HMOs. When choosing a dental insurance plan, the benefits to the patient are based on having a provider in the dental network. Choosing from a provider in the plan causes the insurance to be less expensive, but if you want a specific dentist not listed in the plan, it may end up being more expensive to pay for the out-of-network dentist and may not be worth buying the insurance at all.

PPOs

82% of today's dental plans are Preferred Provider Organization plans (PPOs). In a PPO, the insurer creates a network of providers for patients to choose from. Dentists in the network gain patients, but offer their services at a discounted rate. Patients are free to see dentists outside the network, but generally at a higher out-of-pocket cost. PPOs generally cover all in-network preventive care, but have co-payments for restorative care.

HMOs

8% of dental policies today are Health Maintenance Organizations (HMOs). HMOs also utilize a network of providers, and patients are generally required to pick a primary provider and stay in-network to get all the plan's benefits. Dentists are paid based on the number of patients on the HMO.

Dental Indemnity Plans

6% of dental policies today are dental indemnity plans. These plans are like the direct reimbursement plan in that they don't require a dentist to be from the provider network. The plan

reimburses the dentist on a reimbursement schedule, but this causes the dentist to wait on payment for periods of time. Additionally, indemnity plans often do not cover the full cost of the dental work, and as such the dentist ends up waiting even longer on payment until the patient pays the portion not covered by the plan.

Dental Discount Plans

Another type of dental plan is the dental discount plan. The discount plan is not insurance, but the plan provides a discount on dental service when the patient agrees to see a network dentist. The plan does not pay for the dental care at all, the care is paid out of pocket by the patient, but at a discounted rate. Dental discount plans are generally less expensive for the patient than dental insurance and have no waiting period before use of the plan can begin.

Government Dental Insurance Programs

The two main government models of care which dentists accept are Medicaid and the Children's Health Insurance Program (CHIP). All states across the U.S. cover dental care for people on Medicaid and for children under the age of 21 through CHIP. Medicaid and CHIP are managed together and are paid for via two models. One model is the fee-for-service model. Through this model the state or a third-party administrator pays dentists based on a set fee schedule. To be in the provider network, dentists must be credentialed with Medicaid. The second model is the managed care model. In this model, each state contracts with managed care companies, which handle dental benefit administration. Generally these models are fee-for-service, but sometimes on a specified negotiated schedule instead of on the state fee schedule. Dentists must be credentialed to join the managed care network.

Tricare

Another government program is Tricare. Tricare is a program for people actively serving in the military and for their families. It looks and operates just like a regular PPO. United Concordia services and administers all of these benefits.

Dentist's Relationship to Insurance

Dentists payment on insurance plans is typically negotiated through the insurance company. Dentists set retail rates for services and procedures, and to be included in the insurance network to gain clients, the dentist generally agrees to reduce his or her rates by an amount, typically 20-25%. The insurance company lists participating dentists and their reduced rates to their clients, and the clients choose a dentist based on the rates negotiated by the insurance company. To receive payment, the dentists send their retail charge to the insurance company, and the insurance company pays the claim based on the negotiated rate that the dentist has agreed to. The dentist is responsible for collecting any deductible or coinsurance required by the plan of the patient, but the dentist is under contract to not bill the patient for any charge in excess of the negotiated fee.

The number of clients a dentist sees can be greatly expanded through the acceptance of dental insurance plans, but insurance can be a hassle that many dentists don't like to deal with. Accepting complex insurance plans often takes time and effort for the dentist, or financial resources if the dentist hires administrative staff to deal with insurance. It is nearly necessary for dentists to work with insurance companies if they want to be successful. According to the National Association of Dental Plans, 64% of the U.S. population has dental benefits. Of these

205 million Americans with dental benefits, the majority, roughly 155 million Americans have some form of commercial insurance. The other 50 million Americans with dental benefits receive coverage through some form of public program, such as Medicaid, Tricare, or Children's Health Insurance Program (CHIP).

Today, most dentists' revenues come from insurance reimbursement. There aren't many dentists whose practices are still based upon patients paying out of pocket for dental care. This means that most procedures and care that dentists provide is being offered at a discounted rate of 20-25% off retail price. The discount rates are also continuing to rise as insurance companies try to obtain better deals for their clients, and the decline in reimbursement could really hurt the profitability of dental offices. Insurance companies are notoriously hard to negotiate with for the solo practitioner, as the solo practitioner has relatively little leverage in the negotiations. There are many dentists and fewer insurance companies, so solo practitioners are stuck between a rock and a hard place, so to speak. The solo practitioner must accept insurance to gain or maintain patients, but they are consistently relegated into accepting smaller and smaller insurance reimbursements as the insurance industry gains more leverage.

Companies Specialized in Negotiating Insurance Reimbursements for Dentists

Businesses which act as a liaison between dentists and insurance companies are on the rise. These liaison businesses can leverage groups of dentists against the insurance companies to gain more competitive rates for their clients.

A dentist in Pennsylvania, Dr. Olenwine, was interviewed on her experience with a negotiation and optimization vendor, and she spoke very positively of the experience. "Using an insurance vendor reduced my time spent reviewing contracts, credentialing, reviewing fees, et

cetera," she said. "They took care of all those ancillary functions that were time-consuming and not profitable." By taking away a lot of the business minutia which is often time consuming and a headache for dentists, vendors allow dentists to focus on what should matter most: the patients and their clinical work.   Dr. Olenwine continued, "The reduction in the time that is needed to perform all the ancillary functions associated with being an insurance provider led to more patient and chair time," she said. "I was able to make informed decisions on the insurance programs that made sense for my practice. It allowed me additional time at the chair that is more productive than doing paperwork."

Another interview with a man named Nick Partridge involved Patridge pitching the use of his vendor company. Partridge owns a company called Five Lakes Professional Services, which is headquartered in Ohio. His company specializes in fee negotiation for dentists who seek higher reimbursement levels from third party payers. This is what he had to say in regard to why dentists should use a company like his to gain higher payments from insurance companies. "First, every business owner wants to realize as much of their professional fee as possible. Second, dentists invest significant resources — time and money — to manage the revenue cycle. As a result, there is a real cost to the provider to accept insurance. Next, as the number of Americans covered by a dental benefit continues to increase and more doctors go in-network, it puts pressure on margins. Most of the revenue becomes fixed in terms of contracted rates, but costs rise every year. Lastly, I think there has always been an underlying feeling amongst providers that insurance benefits somewhat dictate treatment and certainly affects patients' willingness to accept treatment." Partridge and others also argue that a major benefit for negotiating higher fees and insurance paybacks is the increased amount of time that dentists are able to use addressing the needs of their patients. Time spent trying to fight insurance companies

is time not spent with patients, and the last thing on dentists' minds when addressing patient problems is their margins. Increased margins and higher insurance payouts therefore give dentists more time to spend on staff training, continuing education, and case management. Higher margins for dentists also mean that dentists can use better materials and spend more time caring for each patient, rather than trying to pump out more products and services to patients rapidly to make up for lost revenue and time. At the end of the day, dentistry is a business, but it shouldn't feel like that to the patients who are receiving treatment.

Reductions in Insurance Reimbursements Negatively Impact Dentist's Salaries

The effect of insurance reimbursement on the average salary of dentists is notable. Not only are the insurance reimbursements going down over time, but they are making dental offices notably less profitable. A statistic that is stunning in its decline is the average salary for general dentists. According to the ADA, an average general dentist's salary in 2005 was $219,738, but in 2014 that number had declined to just $174,780. While the 2014 salary is still impressive, this is a decline of nearly 21% over a nine-year period, and these salaries don't even include the rise in inflation. The income level in 2014 is comparable to what dentists made in 1997 with adjustment for inflation. These numbers are in stark contrast with what people typically believe should happen to salaries over time. The common notion holds that over time, salaries should go up slightly every year. While these numbers are not entirely due to declining insurance compensation, it certainly does play a large part. Other factors for the declining salary of dentists include a lack of discretionary income for families, fewer adults visiting the dentist, and there are more and more dentists entering the profession every year while not as many dentists are retiring as there were in the past.

To analyze these numbers further, the ADA also states that there was a 10.4% reduction in repayment rates by insurance between 2005 and 2014. This accounts for a large part of the reduction in salaries. Some areas of the country are affected more than others. In New York state, the decline in insurance repayments was 26.2%, while in other states the decline was less stark. Additionally, the ADA noted that there was a 77% correlation between a dentist's acceptance of insurance "in-network" groups and a decline in their salaries. However, due to the increase in the number of dentists and the decline in the number of people visiting the dentist, dentist's are forced to accept insurance repayment to maintain a strong client base.

Figure 1: Net benefits of reimbursement specialists

Service	Expense to practice	Annual revenue increase	Net benefit
PPO negotiation (flat fee)	$7,000	$21,500	$14,500
UCR fee schedule analysis	185	24,908	24,723
Coding analysis	1,500	21,750	20,250
Total	**$8,685**	**$68,158**	**$59,473**

Above is an analysis of the use of reimbursement specialists by the Journal of Dental Economics. Based on their analysis, a typical dental office could expect a $68,158 revenue increase per year by using a liaison service to obtain better reimbursement rates. This results in an income increase of $59,473 per year based on the typical fees of the liaison service. This increase in revenue is massive for dentists who typically make around $175,000 per year-- an income increase of nearly 35%. In addition to the substantial increase in revenue, dentists who use liaison services can better allocate their time to seeing more patients and taking more care-based measures. The trend to using liaison services seems to have backing and will foreseeably increase in popularity in the coming years.

To explain how these liaison services work, I will quote Harold Gornbein of Apex Reimbursement Specialists, who spoke with a representative from the Journal for Dental

Economics. "Let's take a $1 million practice that is 50% fee-for-service and 50% PPO and insurance. Of the 50% that has PPO participation, approximately half of the PPO networks will negotiate on rates. This results in $250,000 of reimbursement revenue that can be negotiated. PPO negotiations tend to result in 10% increase in reimbursement. The result is a $25,000 annual increase in revenue each year.

PPO negotiation companies typically give doctors the option of a flat fee charged per PPO schedule that they improve, or charge based on a shared revenue model. With either option, the doctor pays a fee only if revenue improves. Flat fee options can carry a fee of $1,400 per schedule improved, while a shared revenue option may carry a 38% fee for a 24-month period. To further quantify, with flat fee, if five PPO schedules are improved at $1,400 per schedule, the total fee is $7,000, increasing annual revenue by $25,000. Over a 24-month period, the doctor sees increased revenue of $50,000 minus a $7,000 fee, which results in a net gain of $43,000. With shared revenue, on the same $50,000 in increased revenue, the doctor pays a 38% fee equaling $19,000 and resulting in a net gain of $31,000."

While the numbers used by Harold Gornbein of Apex Reimbursement Specialists don't match up entirely to the typical dentist nor do they match up to the original numbers quoted by the Journal of Dental Economics, his company still commands higher income for clients, and has been utilized in a lucrative manner by many dentists and other medical professionals.

Figure 2: Investment growth when monthly net benefit invested over 10 years

		Growth of investment by year									
Monthly net benefit, invested	Interest rate, compounded daily	Year 1	2	3	4	5	6	7	8	9	10
$4,956	5%	$60,979	125,085	192,477	263,325	337,805	416,103	498,415	584,987	675,915	$771,547

Another table taken from the Journal of Dental Economics shows the projected income generated by one dentist over a 10-year period when reinvesting the money saved through reimbursement negotiation. While the numbers appear optimistic, the compound growth rate is below the average market growth rate, and the savings are massive.

Another interesting analysis by the same article in the Journal of Dental Economics shows that many practitioners are not critically looking at their UCR fee schedule, and are therefore not utilizing the schedule to pay them the dividends they're working for. A similar example is shown with the coding analysis of insurance payouts, and the article shows that many dentists are not coding the insurance reimbursements to receive the payouts. "By analyzing and updating a UCR fee schedule, practices tend to see a 5% increase in their fee-for-service revenue… 5% of $500,000 results in an additional $25,000 in annual revenue. As ADA codes evolve, many practices do not code procedures correctly. They may use a code that only carries a 60% reimbursement, while an alternate code might be reimbursed at 100%. A typical coding analysis can carry a $1,500 fee but a great return on investment. By having correct and efficient coding, a practice could see improved annual revenue."

Additionally, when the article examines the three changes together, they see a huge profit increase. "PPO negotiation (flat fee) has a fee of $7,000 and a net benefit of $43,000; UCR fee schedule analysis has a fee of $185 and a net benefit of $49,815; and coding analysis has a fee of $1,500 and a net benefit of $43,500." The article goes on to articulate all of the benefits added together "Over 24 months, this is a net benefit to a practice of $136,315, which comes to roughly $68,000 in additional revenue for a year…. PPO negotiations and UCR, and coding analyses are a source of increased revenue that is not the result of seeing more patients or doing more

procedures. This is simply applying efficiency and having a net increase on the same gross practice numbers, which in layman's terms means getting paid more for what you already do. The first part to implementing this type of service is to understand the market dynamics, while the second part involves understanding what these terms and their ROI truly mean to your practice." The argument is compelling. With just a few adjustments in how dentists receive payment from insurance companies, dentists can make huge gains in revenue and spend more time seeing patients. Simple code examination, using liaison companies to negotiate better deals from insurance companies, and UCR fee schedule analysis can give a struggling dentist a leg up. These initiatives will gain traction in the coming years as more dentists act against insurance companies.

Conclusion:

The dental industry is set to change in a variety of ways over the next several decades. Advances in public health dentistry are particularly promising as mobile dental care becomes more prominent. Mobile dental care, if funded properly, will allow millions of underserved communities across the U.S. to have access to dental care. Mobile care is the starting place for comprehensive care in rural communities and for underserved youth, not the end point. To be effective, mobile dental programs should be paired with community based dental infrastructure in order to maximize the amount of care underserved communities receive. Additionally, mobile dental services will allow millions of geriatric community members access to care who otherwise would be left untreated.

A major problem facing prospective future dentists is the rising cost of dental school. Over the past thirty years, dental school costs have gone up immensely due to mismanagement of state funding and attempts by dental schools to increase profit margins. Prospective dentists should be selective in their choice of dental school, as some programs are far worse offenders in fund mismanagement than others. Prospective dentists should be realistic in their loan payback plans, as many schools advertise overly optimistic payback plans on their websites. Stakeholders in dental school costs should hold the dental school dean's largely responsible for tuition increases because in many cases these price increases are for the benefit of the dean's themselves. Finally, prospective dental students should factor in all of the costs for dental school, including interest payments and cost of living. Cost of living is particularly important, as it can be a large factor in the cost of dental school.

Private practice dental offices have been declining over the past several decades, and will probably continue to decline in the future. Corporate dental offices are increasing in number as many dentists opt to become associates instead of practice owners. A decline in insurance reimbursements is a factor in the decline of private practices, as many dentists operating costs are rising while their revenues are decreasing. Private practice dentist salaries have been in sharp decline over the past two decades. Companies specializing in insurance reimbursement negotiation are becoming more prominent in recent years and will be more utilized by dentists in the coming years as more and more dentists try to regain lost revenue from insurance reimbursements.

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Biography

Matthew Mahoney was born in Austin, Texas on November 17, 1996. He graduated from Westwood High School in 2015. He enrolled in Plan II Honors program at the University of Texas at Austin in 2015, and graduated in 2020. He joined the Peace Corps and will be moving to Guatemala in September of 2020.