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What 2017 Holds for Technology in Dentistry

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A report highlighting demographic change and its influence on dental trends in the future

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Dentistry in the United States has been a very popular field that is constantly undergoing transformation and advancement as time goes on. As the population continues to grow, many factors such as diversity and age are taken into account with the rise of dental healthcare. The demographics of those who receive dental care are changing; dental care is more accessible to a wider range of people and patient care is exponentially increasing as well. Dental work and procedures are also changing alongside changes in health care administration policies. Additionally, the industry is expanding with the current shift of increasing number of dental care providers and the rising number of students enrolled into dental school. With a shift in care administrators as well as consumers, there is also a shift in policies that dental care providers have to take into account. Providers can use the rise of technology to gauge smoother dental care in this era, including using "teledentistry" to our advantage. This paper will highlight demographic trends of consumers as well as practitioners, and integrate the rise of technology with what the future of the field of dentistry holds.

Patient demographics in the United States

As the years have progressed, there have been changes to the dynamics of our very own population. Today, we are undergoing a transition in age structure of the elderly population which will impact dental care severely. According to the statistics from the United States Census Bureau, by 2030 all of the Baby Boomers (born 1946-1964) will have moved into the ranks of the older population. This will result in a massive shift in the age structure of the elderly ages 65 and over, from 13 percent of the population

aged 65 and older in 2010 to 19 percent in 2030.[1] Because the elderly population is a

very clear demographic of patients, further analysis will show what this means for dental

trends.

The Baby Boomers are different from other elderly populations in that they are

more likely to take care of their teeth and remain active consumers of dental care:

annual check-ups, fillings, and receiving dentures all fall into this category. Dental clinics

nowadays administer care to elderly patients more often as their schedules are more

flexible and dental work is still important to them. Upon research, it is noted that

payments for dental care will increasingly be made out-of-pocket, since Baby Boomers

will be less likely to have dental coverage because Medicare does not cover most

dental services.[2]

The generations to follow the Baby Boomers - such as the Generation X'ers

(born 1965-1980) and the Millennials (born 1981-2000) will not have as much need for

severe dental care as those before them. Statistics have shown that these two

generations combined have reduced dental disease due to a variety of factors. This

may be particularly due to the fact that these generations are more technologically

savvy and have grown up with the rise of the Internet, causing them to seek lower costs

for care. It is more common for people of these two generations to use mediums such

as Google reviews to search for the best dentist in the area, act upon word of mouth, or

even utilize different social media outlets to search for the best dental care administer in

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[1] Vincent, Grayson K., and Victoria A. Velkoff. "THE NEXT FOUR DECADES The Older Population in the United States: 2010 to 2050." *Census.gov* (2010).

[2] Diringer, J., K. Phipps, and B. Carsel. "Critical trends affecting the future of dentistry: assessing the shifting landscape. Prepared for American Dental Association." (2013).

the area. In addition to being more careful about care, these generations will have

higher rates of dental coverage than the older populations - due to employer supplied

insurance. The companies that they work for are interested in covering their dental

insurance either partially or fully. For example, in the state of Michigan as an employee

of Ford Motor Company, a large portion of your dental care is covered through Delta

Dental. As a member of this network, Delta Dental dentists cannot bill the consumer

extra, which means more money remains in the consumer's pocket. Employees only

have to pay coinsurance when receiving care from network dentists and there are no

hidden fees. Through Delta Dental, almost all of diagnostic and preventative care as

well as basic services are 100% covered (see fig. 1).

Delta Dental of Michigan
UAW-Ford Hourly
Traditional Dental Plan

Dental Benefit Highlights Delta Dental PPO (Point-of-Service) *Coverage effective January 1, 2015*	Network Dentists		Nonparticipating Dentist
	Delta Dental PPO Dentist	Delta Dental Premier Dentist	
	Plan Pays	Plan Pays	Plan Pays*(see example below)
Diagnostic & Preventive			
Diagnostic and Preventive Services - exams, cleanings including periodontal maintenance , fluoride, and space maintainers	100%	100%	100%*
Emergency Palliative Treatment - to temporarily relieve pain	100%	100%	100%*
Brush Biopsy - to detect oral cancer	100%	100%	100%*
Basic Services			
Radiographs - X-rays	100%	90%	90%*
Minor Restorative Services - fillings and crown repair	100%	90%	90%*
Endodontic Services - root canals	100%	90%	90%*
Periodontic Services - to treat gum disease	100%	90%	90%*
Extractions – simple and surgical removal of teeth	100%	90%	90%*
Other Basic Services - misc. services	100%	90%	90%*
Relines and Repairs - to bridges, implants, and dentures	100%	90%	90%*
Occlusal Guards/Adjustments - bite guards and occlusal adjustments	90%	90%	90%*
Other Oral Surgery - dental surgery	90%	90%	90%*
Major Restorative Services - crowns	90%	90%	90%*

Fig. 1. Delta Dental of Michigan UAW-Ford hourly *Traditional Dental Plan.* From deltadental.com

Interestingly enough, it is predicted that children born in the year 2000 and later

will have less dental disease than the years before them and will not have as much

need for restorative dental services. In terms of payment, the generation before them

(their parents) will have covered them onto their dental insurance plan which

guarantees their ability to periodically visit the dentist will full or partial coverage. Other

coverage also comes from government assisted programs such as Medicaid and

Children's Health Insurance Programs as well as the pediatric dental benefit in the

Affordable Care Act (Diringer).

Because trends show that children born in the year 2000 and later will have even

less dental disease - perhaps due to care administered at home and better eating habits

- they will have less dental coverage when they reach adulthood. The benefit is that

they might not need as much restorative care due to upward trends in their dental health
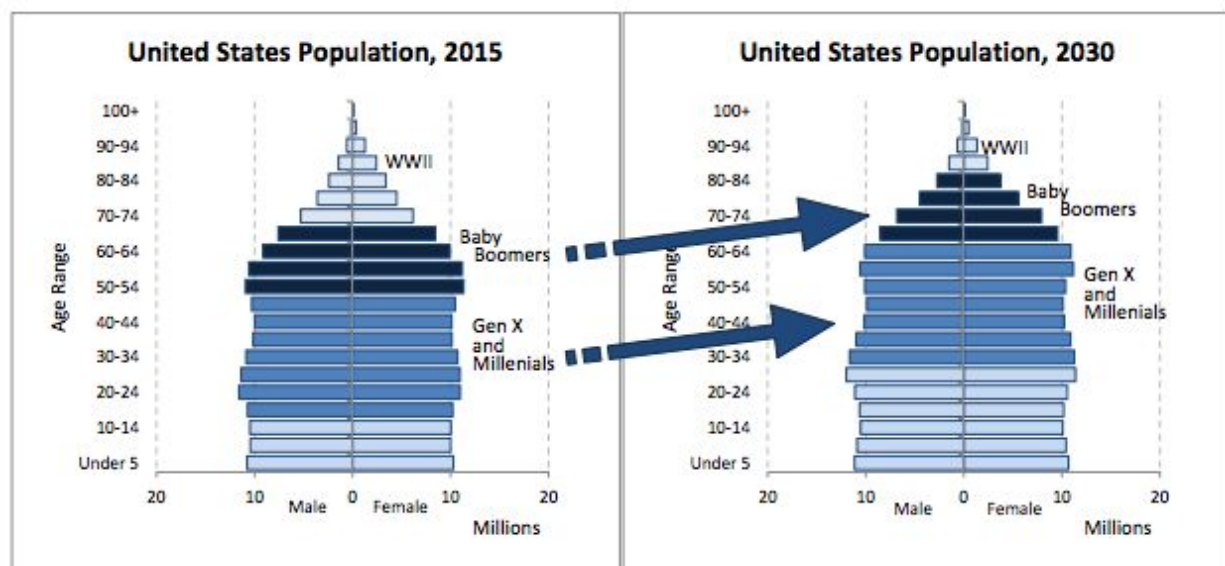
compared to previous generations.

Fig. 2. Projections of the Population by Age and Sex for the United States: 2015 to 2060. Source: U.S. Census Bureau.

In addition to analyzing the trans-generational trends that may impact dentistry in the years to come, another factor that may impact dentistry is the shift in ethnic makeup of the United States population. This shift may impact the nature of dental consumers drastically and this information can be used to assess the trends of which racial groups are more susceptible to receiving care in the years to come. Younger aged groups - particularly members of the Millennial generation - are increasingly more diverse whereas the elder generations will continue to be predominantly white. According to the United States census, in the years to come, minorities will most likely surpass the predominant white demographic.

In particular, two major ethnic shifts to focus on are the rise of Asian-Americans and Hispanics in the United States today. The Hispanic population is expected to grow faster than any other ethnic group and more than double, from 53.3 million in 2012 to 128.8 million in 2060 (Vincent). Because of this, there is a higher demand for Spanish-speaking dentists in predominantly Hispanic areas. The Hispanic Dental Association highlights that about six in 10 Hispanics feel that having Spanish-speaking dentists and hygienists in their community would help them in achieving a higher standard and regard for oral health. Alongside the Hispanic population, the Asian-American population has exponentially grown over the years as well. Asian Americans have been declared as the largest group of newly arriving immigrants since at least 2009. As of 2014, the Pew Research Center declared that the Asian-American population grew to 19.4 million people and international migration accounted for about

61% of the total change in the Asian-American population from 2012 to 2013.[3] More technologically savvy, independent and more affluent than other U.S. adults, research shows a rise in people of this demographic having more frequent dental care due to stable dual family incomes.

Regardless of age and ethnic backup, one additional factor that should be taken into account with the change in dental trends is the fluctuation in mentality of the typical American. Currently, there is a shift amongst the American population from wanting to be seen as "patients" to viewing themselves more as healthcare "consumers." The consumer mentality varies heavily in the needs met, behavioral approach, as well as expectations for primary dental care administrators. As mentioned before, with the rise of technology, individuals of the Generation X and Millennial generation are putting themselves first and making more well-rounded and informed decisions, harboring more of an individual mindset rather than a collective mindset. Consumers of this kind are searching for insurance that guarantees the best quality and price, with grounds rooted in state of the art technology. Older consumers, however, prefer a more personal experience with their dentist and are usually unwilling to change care administrators based on convenience. Nevertheless, because dental care is not covered fully for Baby Boomers, they are more price-conscious as they transition into the elderly population with more out-of-pocket costs for their care. In a way, both generations overlap in the same mentality of comfort but for differing reasons.

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[3]Brown, Anna. "US Hispanic and Asian Populations Growing, but for Different Reasons." *Pew Research Center* (2014)

<u>Provider demographic in the United States</u>

Currently, active dentists in the workforce are aging, with 37% of dentists over 55 years of age and 37% of dentists between 45-55 years of age. The Health Policy Institute released information on the average age of retirement trends for dentists and they found that in 2001, the average age of retirement was 64.7 and by 2015, the average age of retirement would reach 68.8 (see fig. 3). Although, as the economy improves it is predicted that more dentists will retire earlier and need to be replaced by new dental care practitioners, who are younger as well.
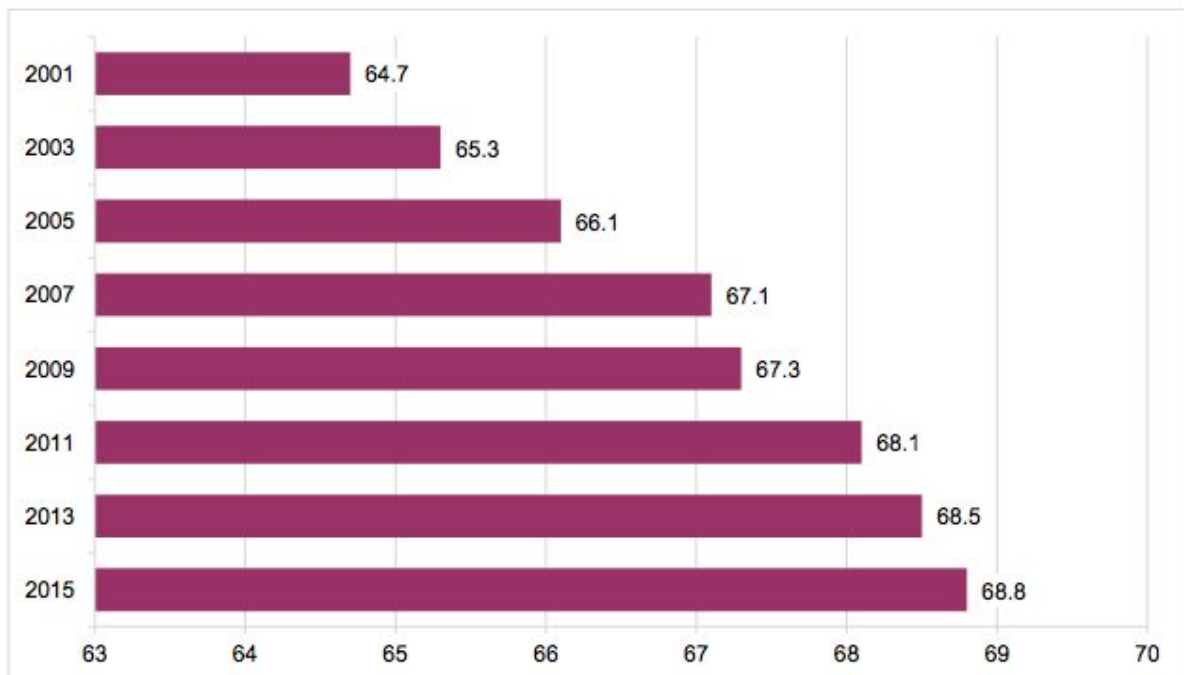

Fig. 3. Dentists' Average Age at Retirement, 2001-2015. Source: ADA Health Policy Institute analysis of ADA masterfile.

Because older dentists need to retire at some point, the turnover is more efficient due to the number of current students enrolled into dental school. The dentist workforce is increasing as dental schools continue to graduate more students annually, and more

foreign-trained dentists are getting licensed in the United States more frequently as well

(see fig. 4). Due to the influx of newer dentists, post-graduation plans usually revolve

around entering private practice directly and working solo. This denotes the idea of

having one dental care administrator working in one specific dental office. Once again,

this increase in dentists also increases the demand for them in a particular area in

hopes of creating a dent in the private sector.

	U.S. Dental School Graduates	Foreign-trained Dentists	Relicensed Dentists	Dentists Returned from Retirement	Total
Age under 35	22,919	571	0	1	23,491
Age 35 - 44	3,586	1,078	286	12	4,962
Age 45 - 54	274	458	437	42	1,211
Age 55 - 64	17	182	378	88	665
Age 65 - 74	1	62	133	75	271
Age 75 - 84	0	9	27	28	64
Age 85 - 99	0	2	3	3	8
Total	26,797	2,362	1,264	249	30,672

Fig. 4. Historical Dentist Inflows, 2005-2015. Source: ADA Health Policy Institute analysis of ADA masterfile. Notes: Dentists counted toward inflow totals when they were on record with both a degree in dentistry and a license to practice.

Because the number of dentists are increasing, there is an inconsistency in

sufficient consumers that can constantly meet the demand of these newer trained

dentists (specifically focusing on public coverage). A recent Association of State and

Territorial Dental Directors survey found that in 25 of the 39 states that responded to the

survey, fewer than one half of dentists treated any Medicaid recipients in the previous

year. This means that although the amount of dentists each year are growing, the

patient or consumer profile does not seem to reflect that. More patients are expected to

pay for dental coverage out-of-pocket, to keep up with the altering procedures that new

dentists are being trained for. All in all, there is substantial evidence declaring the ratio

of dentists per population. Statistics from the American Dental Association state that the

number of dentists per 100,000 population in the United States was 60.9 in 2015 and

varied across states. The District of Columbia (89.9), New Jersey (81.5) and Alaska

(80.8) had the highest ratios in the nation (see fig. 5).
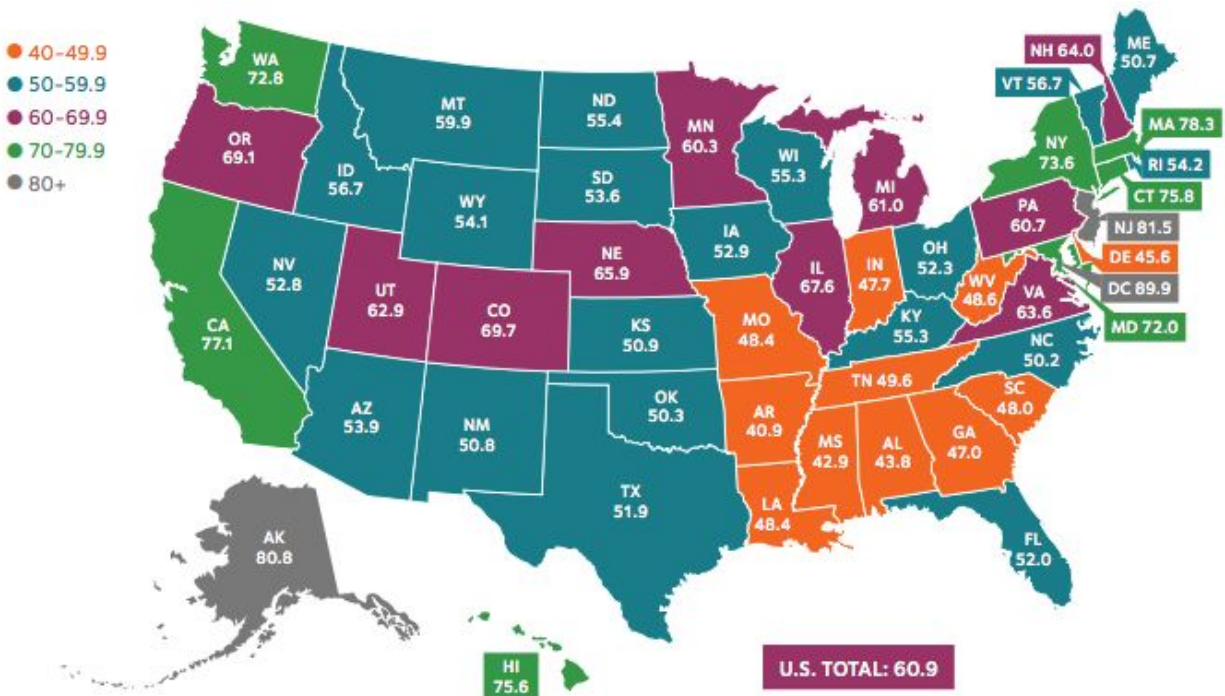

Fig. 5. Dentist-to-Population Ratios Vary Across States. Source: Health Policy Institute via American Dental Association. (2015)

Dental trends such as number of dentists in the workforce are changing but similar to the patient demographics, the dentist demographic has been shifting as well. In reality, changing demographics such as growing debt are influencing the lifestyle choices of prospective dentists. Recent research states that new dentists are more likely to be women, and with that comes an adoption of different practice patterns than that of male dentists. Out of the population of newly professionally active dentists who have just graduated dental school within the past ten years, 38 percent are women. Furthermore, 60 percent of dentists ages 44 or below are women.[4] For future prospects, this recent trend in dentists who are women be more beneficial to society at large. Women in the healthcare field tend to be more empathetic and more communicative than their male counterparts, according to a recent article published by Washington Post.[5] Women also tend to spend more time with patients which results in a greater healthcare provider-patient relationship. Although there are many factors that impact this, it is important to see that there is a push for more women to accept positions in dentistry as well.

Another hot topic when it comes to dental school is evidently the burden of student loan debt, as briefly mentioned above. The debt load of new dental school graduates has averaged to roughly $200,000 or more collectively over the years. Student debt is inevitably a barrier or a factor that impedes on students who want to pursue a career in dentistry. In fact, according to Annual ADEA Survey of Dental School Seniors, more than four of ten (41%) of dental school seniors say that educational debt

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[4] Wall TP. Dental Medicaid – 2012. Dental Health Policy Analysis Services. Chicago: American Dental Association Health Policy Resources Center. (2012).
[5] Johnson, Carolyn Y. "Women Really Are Better Doctors, Study Suggests." *Washington Post* (2016).

had a great influence on their professional choices after graduation.[6] It is no surprise

that debt is part of the equation when pursuing any professional school after graduation,

but it seems like dentists do carry an incredible amount of debt for a four-year

professional program. This is why many dental school graduates attempt to pursue

career paths in private practice, so that they can gain the exposure to eventually start

up their own practice in the future. Recent trends show that debt was the main reason

for these freshly graduated students to work solo, rather than joint or group practices

because they would rather pay off their debt as soon as they can. This may help

alleviate the burden of debt, and there are also postgraduate programs that dedicate a

portion of their pay to student loan forgiveness.

	Entering Debt			Entering Debt in 2016 Dollars	
Year	Average Entering Debt	Median Entering Debt		Average Entering Debt	Median Entering Debt
1996	$14,650	$8,000		$22,594	$12,338
1997	$19,823	$8,500		$29,723	$12,745
1998	$27,749	N/A		$40,879	N/A
1999	$21,589	$10,000		$31,263	$14,481
2000	$25,029	$12,000		$35,228	$16,890
2001	$28,413	$15,000		$38,666	$20,413
2002	$25,298	$15,000		$33,828	$20,058
2003	$33,207	$15,000		$43,449	$19,626
2004	$42,830	$20,000		$54,840	$25,608
2005	$44,382	$17,050		$55,167	$21,193
2006	$52,370	$20,000		$62,708	$23,948
2007	$52,481	$20,000		$61,257	$23,344
2008	$31,775	$16,000		$35,763	$18,008
2009	$35,281	$17,000		$39,162	$18,870
2010	$31,101	$20,000		$34,192	$21,987
2011	$35,670	$20,000		$38,443	$21,555
2012	$37,219	$20,000		$38,971	$20,941
2013	$45,397	$20,000		$46,755	$20,598
2014	$46,854	$24,000		$47,513	$24,338
2015	$34,866	$25,000		$35,101	$25,169
2016	$32,702	$25,000		$32,702	$25,000

Table 1. Average and median entering debt of graduating seniors with entering debt, 1996-2016.
Source: Journal of Dental Education, May 2017.

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[6] Annual ADEA Survey of Dental School Seniors: 2016 Graduating Class.

Telemedicine in the Sphere of Dentistry

Keeping these aforementioned trends in mind, as costs for dental care increase and access to care is becoming more difficult for families of lower incomes or those who must pay out of pocket, there is a higher demand for dental procedures to become less expensive. Consumers nowadays want usually want access to everything on their fingertips. With the rise of the millennial generation, we see many changes in dentistry that many newer dentists are implementing compared to their predecessors. Generation X'ers and Millennials may be impacted by the rise of this technology because of its convenience and cost effectiveness. From the digitization to offices, touch-screen paperless networks, newer cameras and faster Internet connection, we see an upwards trend of dentistry becoming more flexible and this phenomenon called the "uberization"[7] of dental care is becoming more prominent. As mentioned earlier, it is more common for Millennials to switch their dentist every couple of months based on their own convenience: cost, location, reviews are all factors that impact this decision. Millennials are no longer loyal to their own family dentist and would rather search for a dentist that caters their needs. This is what is meant by the "uberization" of dentistry. Savvy patients are more likely to spend hours on the Web comparing reviews before even picking up the phone to schedule an appointment. Ultimately, we are witnessing a more demanding demographic of young individuals who expect more out of their dental practitioners; this includes challenging the idea of dentists scheduling weekend and

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[7] Hegar, Monica. "The Rise of Digital Dentistry: Has Dentistry Reached Its Uber Moment?"*Scientific American*, 19 Oct. 2016.

evening appointments, and soon enough, home visits with the advancement of telemedicine.

To reiterate, because these newer generations are more capable of working alongside newer inventions and technologies, a specific method called "teledentistry" may seem appealing to them. The mentality of having less work for the consumer stands in effect, and these dental procedures might as well favor them completely. As technological advances are made throughout these years, most of these newer dental procedures can be implemented through the use of telehealth - and there exists a greater preference for these advancements transgenerationally and across socioeconomic levels as well.

What is "telehealth" and "teledentistry?" Several terms have been used to describe the use of technologies to further expand a wider range of patient interaction specifically in geographically separated locations. This term, telehealth, brings this initiative together. These methods can possibly resolve the issue at hand of lower income families struggling to attain dental care for themselves and their families. This process is more efficient, convenient, and can be utilized within the comfort of the patient's own home. According to a piece published on NueMed, teledentisty can cause providers to increase access to dental care while decreasing costs for rural and low-income patients across the nation.[8] Undoubtedly, teledentistry does not seek to eliminate visits to the dentist for more complex procedures such as root canals or crowns, but rather this technology aims to increase access to care via decreasing

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[8] McCarthy, Kevin. "Telemedicine Strategies Reach the Field of Dentistry." *NueMD*, 4 Dec. 2015.

external costs such as transportation to those who may not have a stable means of transport. In addition to possible elimination of these costs, teledentistry may provide an earlier and faster diagnosis and further preventative care of oral diseases. One example of the effectiveness of this newer technology - published by Telehealth Technologies - is already taken on by our U.S. Army. In this system, the U.S. Army has the ability to transmit still color images over a modem to allow periodontists to view healing after periodontal surgery without the patient having to travel long distances.[9] Because it would be rather inconvenient to travel while on-duty, an up and coming solution to this problem is teledental care through the availability of periodontists "on call" per say. A virtual visit that can be attained by following a link onto a laptop in minutes could potentially save travelling miles away for an appointment, arranging childcare, and taking the day off of work. Just this instance alone can pave the way for what the future may hold. If results for the Army can be set in effect, access and implementation of care for rural and low-income areas is not an intangible and unattainable goal.

Backpacking off of the idea that the scope of teledentistry can reach rural and low-income families, dentists today have developed a system to facilitate oral health care to people in need. Recent trends show that despite increased efforts to promote dental coverage, there is still a vast majority of children specifically who have not had access to dental care growing up. This could be for a variety of reasons; dental and oral health comes second to primary care in many rural households and may be neglected when external pressures already exist in their daily lives. There have been multiple

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[9] Rocca M.A., Kudryk V.L., et al, The Evolution of a Teledentistry System within the Department of Defense. Proc AMIA Symp 921-4, 1999.

studies conducted declaring that health status and socioeconomic background, income level, and lifestyle behaviors are directly correlated with one another. These factors are all representative and reflective of dental habits administered in the household and throughout a child's life. Children's caregivers play a strong role in deciding whether or not to bring their child to the dentist. According to the San Francisco Chronicle, nearly a quarter of all children in California have never visited a dentist by the time that they complete elementary school. Low-income and minority children have even less access, the newspaper reported (McCarthy). The statistics speak for themselves; if children are not meeting their oral health care needs from a young age, it leaves the door open for a majority of oral diseases in the future. Although this is not necessarily their own fault, they inadvertently perpetuate the problem and the cycle continues. This lack of quality care can stand in the way of living a healthy life and can invite terminal health problems down the road during the transition to adulthood.

Dentists have been working to promote education within both the public and private sphere to combat this very lack of awareness of oral hygiene. Not only is this a tremendous epidemic within the States but many countries across the world are also suffering from the lack of dental education. This is a problem that requires global attention and can be significantly reduced with the escalation of technology over the years. Specifically, several universities in Santiago, Chile have established inexpensive clinics throughout the city to provide dental services to low income communities at about a third of the cost of a private clinic. Although teledentistry is not as widespread in these regions there are neighboring countries that are beginning to use these

techniques to maximize their reach. Recently, in Puerto Rico, dentists are using webcams to follow up with patients after they have had a tooth removed or had other surgical procedures to make sure they are healing properly (Hegar). Although it is a small start, it is something. Especially in predominantly lower and middle income countries, it is refreshing to see that strides are still being made to alleviate the burden of going out and seeking dental care.

Dentists in the United States are also making progress to work towards a solution to eliminate this exact problem. With the development of teledentistry, it is easier and more convenient for the scope of treatment to reach a wider audience. On one instance, in rural New York a group of dentists created a startup dental program partnering with the Eastman Institute for Oral Health at the University of Rochester in hopes to provide care for children in the community via teledentistry. This group would use video consults to provide simple dental procedures such as screenings and specialty consults delivered to patients in their homes. For children, this proved to be especially beneficial because if both parents are busy working, this takes care of the obstacle of shifting around a very tight schedule to accommodate for dental care. Reports state that before this startup program, dentists would refer these children to providers in the area but they would rarely show up to their designated appointments. To be specific, less than 15 percent of children attended their dentist appointments but once teledentistry was implemented, that statistic spiked up to about 93 percent of children attending their appointments (McCarthy). Thanks to teledentistry, young children who were once

unable to seek out oral care are now being educated about the importance of oral

health and are implementing these routines into their daily lives.

In addition to the dental program started in rural New York, these efforts have

been taken even a step further with the launch of the California Dental Virtual Home

Project. This project is organized by the Pacific Center for Special Care at the University

of the Pacific Arthur A. Dugoni School of Dentistry, and utilizes teledentistry to make

decisions about the best course of treatment. Specifically aimed towards children in

schools and people with disabilities, this virtual dental home model uses a cloud-based

system called Denticon.[10] This software specifically contains every feature that a dentist

may require to effectively diagnose and treat oral disease as well as a component

dedicated to storing patient information onto a shared database. What is convenient

about this system is that Denticon can be accessed anywhere where there is a secure

Internet connection established.

Denticon provides dentists with records of a patient's periodontal chart (charts

aimed at targeting which teeth have risk factors linked with oral disease), as well as

harboring a system for tracking patient status to facilitate case management, and

storing high-quality radiographs and photographs. Figures 6 and 7 are screenshots

taken from the Denticon database displaying some of the information that this software

provides. It is equivalent to having a centralized hub of information which can be easily

accessed regarding a specific patient.

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[10] Glassman, Paul, Michael Helgeson, and J. Kattlove. "Using Telehealth Technologies to Improve Oral Health for Vulnerable and Underserved Populations." *J Calif Dent Assoc* 40.7 (2012): 579-585.

Fig. 6. Restorative chart and periodontal chart from the Denticon Electronic Dental Record.

Once dentists have gone through a certain patient's records and have talked with the dental hygienists on-site, they then decide on the best course of treatment through preventative and restorative care. Most cases do not require the physical presence of a dentist, which eliminates the hypothetical time spent in the dental office because most of the diagnostics have been accounted for. In the case that a dentist does need to be present to administer the proper care for a patient, the patient is helped with creating an appointment made at a dental clinic and allied personnel usually can take care of means of transportation. Either way, these procedures have been performed beforehand and records are obtained through a centralized location which makes proper treatment the main focus and more effortless for the dentist as well as the patient.
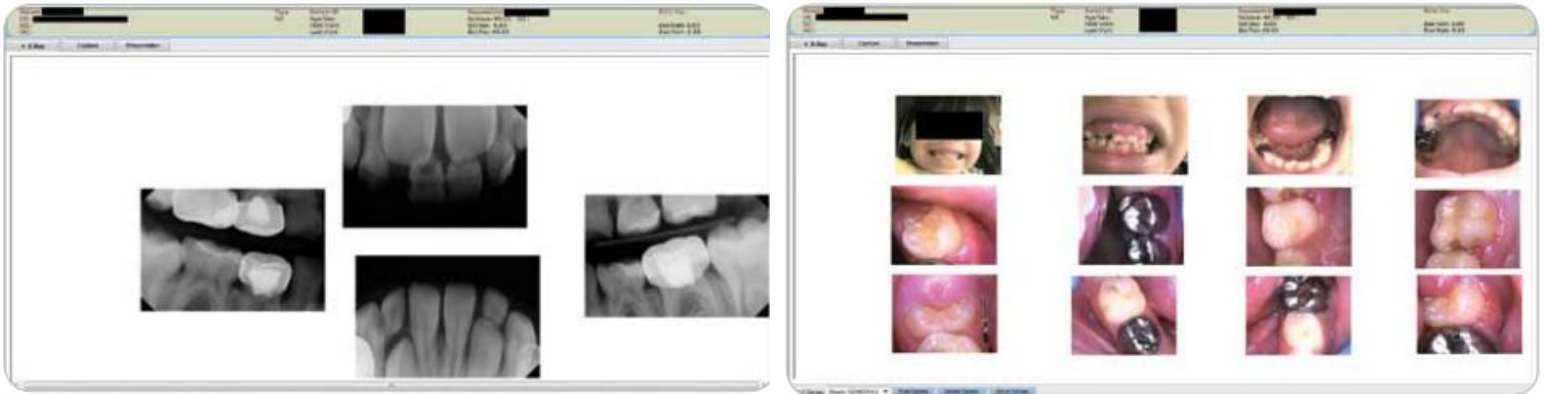
Fig. 7. Radiographs (left) and photographs (right) from the Denticon Electronic Dental Record.

Somewhat similar to the California Virtual Dental Home Project, in Minnesota

there is a company called Apple Tree Dental that operates through teledentistry as well.

This company began as a unique, nonprofit staff-model dental practice that expanded to

operate five dental access programs throughout the rural and urban areas of Minnesota.

Telehealth technologies are able to expand this specific dental clinic's scope of

influence by linking them with schools, group homes, assisted-living centers, and other

community sites. This technology could help eradicate barriers people face due to

physical, financial, and geographical factors by bringing them heightened access to

care. Dental hygienists under the Apple Tree model work under dentists hands-on to

administer examinations to those very people who may have had trouble obtaining

dental care. The collaborators at Apple Tree assigned specific dentists to work at a

distance to analyze these very examinations and assess the permanent teeth of high

risk children for sealant placement without the need of face-to-face appointments

(Glassman). The beauty of this process is that dentists are able to make decisions

about someone's oral health through mediums such as live videoconferencing, digital radiographs and the recording of high-resolution videos of the inside of one's mouth from the convenience of their clinic. With dentistry moving in this direction, dentists can work to administer what treatment and locations are best for most children and adults who require attention. For those patients who severely require a visit from a dentist but have no means to get there, treatment is provided by a dentist who will schedule time to visit them on-site with portable equipment. This mobility and convenience purely for the patient is what can create a lasting impact in the realm of dentistry.

In conclusion, this paper aimed to illustrate the changing field of dentistry and the promise that it holds for future patient care. As demographics, ideologies, and paradigms shift, so do the application and implementation of dental procedures. With the emergence of a generation that has grown alongside the rise of the Internet, skills are being crafted and developments are being made to centralize the concept of the consumer in dental care. Technology has long been a force of change for dentistry and innovations such as Denticon and Apple Tree Dental are paving the way for more of a "consumer first" reality. Perhaps in the near future, envisioning a dentist's office will have little to no resemblance to the image of the small private practices we are so accustomed to today. If this means bringing more smiles onto the faces of more people, then dentists worldwide will have increasingly have attained their goals. As Anne Morrow Lindbergh says, "The wave of the future is coming and there is no fighting it!"

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