Inflection Point

The impact of COVID-19 on the practice of dentistry

The Guardian Life Insurance Company of America
New York, NY

guardianlife.com
Introduction

In March 2020, the COVID-19 pandemic forced many dental offices to close for several months for everything but emergency care.

As a result, and due to increased costs around PPE and other safety equipment, much of 2020 was a challenging time for many dental practices.

Nearly 9 in 10 dentists experienced increased operating costs and reduced revenue due to the pandemic

**Negative effects of COVID-19 on dental practices**

<table>
<thead>
<tr>
<th>% of dentists who agree</th>
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<tbody>
<tr>
<td>Increased operating costs</td>
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<tr>
<td>Reduced revenue</td>
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<tr>
<td>Reduction in visits</td>
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<tr>
<td>Loss of patients</td>
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<td>Reduction in staff</td>
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However, dentistry has been in a similar place before. The HIV and AIDS crisis in the 1980s was the inception of many of the safety practices we take for granted in dentistry today.¹ It forced the dental profession to take even greater precautions around infection control, including instrument sterilization.

As a result, the solutions developed in the early days of the AIDS crisis ushered in a new era of enhanced infection control that, ultimately, improved how dentistry is practiced.

As was the case during the AIDS crisis, COVID has propelled dentistry into a new era of more advanced dental safety

Dentists faced the same challenges in the 1980s as they did during the COVID-19 pandemic, namely patient fears around their exposure to infection at the dentist, coupled with the additional costs of PPE and new equipment. In the 1980s, they invested in heat sterilization tools, while in 2020 it was new air purifying technology, as well as new machines for cleaning teeth and techniques to minimize aerosols.

In addition to new safety practices, COVID-19 also drove patients’ preference for an increasingly digital dental experience. For example, patients want more digital options when it comes to communications.

<table>
<thead>
<tr>
<th>Typically use</th>
<th>Preferred</th>
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<tbody>
<tr>
<td>Text</td>
<td>8%</td>
</tr>
<tr>
<td>Online/chat/email</td>
<td>16%</td>
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<tr>
<td>App</td>
<td>6%</td>
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</table>

By understanding consumer attitudes and behaviors toward oral health care during the pandemic and determining which are likely to last, dentists can prepare themselves to better address the needs and concerns of patients during the pandemic and beyond.
US adults’ oral health is rebounding from pandemic lows. 3.5x as many adults have visited the dentist as of April 2021 than in the summer of 2020.
Dental visits and self-reported oral health are recovering from early pandemic levels

In 2020, dental office closures due to the pandemic negatively impacted access to care. However, dental visit rates have rebounded in 2021. In the summer of 2020, only one in five US adults said they’d visited the dentist for themselves or their child during the pandemic. As of April 2021, 68% had done so for themselves, and 76% had brought their child.

Notably, even though dental practices were forced to close during the early phase of the pandemic — giving patients less opportunity to use their dental benefits — nearly a third (30%) of patients with dental insurance said the pandemic caused them to value their dental benefits more. Only 3% said it made them value their benefits less.

In 2020, dental office closures due to the pandemic negatively impacted access to care. However, dental visit rates have rebounded in 2021. In the summer of 2020, only one in five US adults said they’d visited the dentist for themselves or their child during the pandemic.² As of April 2021, 68% had done so for themselves, and 76% had brought their child.

In fact, dental visits in early 2021 have exceeded pre-pandemic levels, likely because of “catch-up” visits due to missed appointments during 2020. Of patients who went to the dentist during COVID-19, 72% have gone at least twice.

Most (82%) dental appointments during COVID were for preventive care (exams and cleanings); fewer adult appointments were for procedures such as fillings (19%), crowns (72%), and extractions or extraction follow-ups (12%).

Only 24% of US adults said they’ve skipped the dentist entirely so far during COVID-19, and 25% said they’ve avoided dental visits for their child. Consequently, self-reported oral health has recovered to nearly pre-pandemic levels.

Self-reported oral health
% rating excellent/very good (4–5 on 5-point scale)

<table>
<thead>
<tr>
<th>December 2019</th>
<th>May 2020</th>
<th>April 2021</th>
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</thead>
<tbody>
<tr>
<td>51%</td>
<td>43%</td>
<td>49%</td>
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COVID-19 also influenced employers’ attitudes toward dental benefits. Eleven percent said they made changes to dental coverage during COVID. Of the 23% of employers who said they’re planning changes to dental benefits, 44% plan to add coverage, while 26% plan to decrease or eliminate coverage.

This increase in employer-sponsored dental insurance will likely increase demand for dentists who are part of an insurance network. Currently, 88% of patients said the last dentist they visited was in their plan network.

Nearly 9 in 10 patients visit an in-network dentist

This demonstrates value to being a member of a network, particularly for dentists looking to grow their practices after the pandemic.
The pandemic propelled dental safety to a higher level

COVID-19 proved to be a turning point in more advanced dental safety, in much the same way the HIV/AIDS crisis ushered in a new era of safety procedures in the 1980s.

More than 8 in 10 dentists adopted new safety processes and procedures during the pandemic

From additional PPE for staff to equipment that minimized aerosols, these additional safety protocols required investment, which many practices struggled to afford amid lower patient volumes.

Some dental insurance carriers helped offset these costs. This financial support was greatly valued by many practices during 2020.

Dental insurance carrier support for dentists during the pandemic

% of dentists who are aware vs. interested

Though patient confidence has increased significantly since 2020 around visiting the dentist, of people who’ve avoided dental appointments during COVID, most cite vaccination and staff PPE as requirements before returning.

What patients would need to feel comfortable returning to the dentist

Top mentions

<table>
<thead>
<tr>
<th>Requirement</th>
<th>% of Patients</th>
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<tbody>
<tr>
<td>Personally receiving vaccination against COVID-19</td>
<td>58%</td>
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<tr>
<td>Dentist and staff are wearing PPE</td>
<td>54%</td>
</tr>
<tr>
<td>Limited number of patients in office at a time</td>
<td>46%</td>
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<tr>
<td>Reduction in number of COVID-19 cases</td>
<td>43%</td>
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</table>

Notably, most dental practices have instituted the safety measures named above. This points to a need for dental offices to communicate more frequently and thoroughly with their patients, which is also in line with patient preferences.

1 in 4 patients say they want better communication from their dentist’s office on patient safety precautions

Ultimately, COVID-19 is propelling enhanced infection control procedures in the dental office to a more sophisticated level. Despite the additional costs, the new infection control protocols dentists adopted will improve long-term safety outcomes for both dentists and patients alike.
Teledentistry increased as patients sought alternatives to in-person care during COVID

Dental office closures during the pandemic prompted more practices to implement teledentistry than had done so in the past.

Thirty percent of US dental practices now offer teledentistry

30% of US adults report having used teledentistry, up from 20% in 2020.⁴

Critically, teledentistry has helped reduce visits to emergency departments during the pandemic, lowering patients’ risk of exposure to the virus as well as unnecessary medical expenses, especially since most emergency departments aren’t equipped to treat dental problems.⁵

Primarily, dentists conducted teledentistry appointments via telephone (80%), while 67% met with patients on video chat, and 41% said their patients sent photos.

How dentists use teledentistry % of dentists who agree

Emergencies 74%  Patient traveling 70%  Consults for future dental work 62%

Of dentists who don’t currently offer teledentistry, nearly half (45%) cited concern around reimbursement. Otherwise, 43% said there was no need to offer it as their practices remained open throughout the pandemic.

Just under half (47%) of dentists say they’ll continue offering teledentistry post-COVID.
Nearly three quarters (73%) of dentists under the age of 40 believe dental tech advancements have the potential to deliver more precise treatment.
Dentists recognize technology’s potential, but many lack immediate plans to innovate

In addition to teledentistry, many dental practices are adopting technology. Nearly half (48%) of dentists rate their practices highly in terms of using technology. However, this percentage increases for group practices.

Nearly 6 in 10 group practices (59%) rate their tech adoption “high” vs. only 1 in 4 solo practices.

Most dentists recognize the potential for technology to improve patient care. More than half (56%) believe technology can help deliver more precise treatment — though this rises to 73% for younger dentists — and improve their visual view (53%). More than half (52%) also see value in technology helping differentiate their practice.

Still, nearly half of dentists have no immediate plans to invest in new technology.

52% of dentists say they’re likely or very likely to adopt new technology.

More than 8 in 10 dentists (82%) cited cost as the primary barrier to adopting new technology; specifically, 56% said investing in new equipment was too expensive. Half also expressed concerns around training their staff.

When it comes to patient preferences around dental innovation, alternative filling materials (41%), teeth whitening (39%), smart toothbrushes (36%), and 3D printing techniques (36%) capture the most interest. Dentists who decide to adopt new technology may wish to consider their patients’ top needs and interests when deciding in which technology to invest.

Gap between awareness and adoption of dental innovations

% of dentists who are aware vs. offer/recommend procedures

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<tr>
<th>Procedure</th>
<th>Aware</th>
<th>Offer/recommend</th>
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<tbody>
<tr>
<td>Soft tissue laser dentistry</td>
<td>89%</td>
<td>42%</td>
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<tr>
<td>3D/cone beam imaging (CBCT)</td>
<td>89%</td>
<td>47%</td>
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<tr>
<td>At home, DIY orthodontics</td>
<td>88%</td>
<td>43%</td>
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<tr>
<td>Guided implant surgery</td>
<td>80%</td>
<td>31%</td>
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These reservations may explain why, overall, many more dentists are aware of various technologies and innovations than have adopted or recommended them to patients.

Inflection Point: The impact of COVID-19 on the practice of dentistry
COVID-19 widened the gap between who typically receives preventive dental care and who doesn’t.
Communities with less access to dental care and benefits have worse oral health

Even before COVID-19, less than half of adults (45%) reported going to the dentist for the ADA-recommended twice-annual exams. However, this rate is even lower among several demographic groups.

### % of adults who visit the dentist twice per year

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<tbody>
<tr>
<td>Full-time workers</td>
<td>46%</td>
<td>41%</td>
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<td>47%</td>
<td>35%</td>
<td>43%</td>
<td>37%</td>
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<tr>
<td>Part-time workers</td>
<td>41%</td>
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<td>Unemployed</td>
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<tr>
<td>Household income $75K–$99K</td>
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<tr>
<td>Household income &lt;$25K</td>
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<tr>
<td>White Americans</td>
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<td>Black Americans</td>
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<tr>
<td>Urban Americans</td>
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<tr>
<td>Rural Americans</td>
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Even accounting for the significant numbers of canceled appointments during the beginning of the pandemic, there was still a sharp difference in access to dental care between those with dental coverage and those without.

Seventy-four percent of adults with dental coverage have visited the dentist during the pandemic compared to 50% of those without insurance. However, the gap is even greater when it came to access to preventive care during the pandemic.

Nearly 7 in 10 adults with dental insurance received routine care or a cleaning during the pandemic, compared to just under half (45%) of adults without dental coverage through their or their spouse’s employer.

### Dental insurance rates among employees

% of US adults who have dental coverage through an employer:

- **41%** White Americans vs. **28%** Black Americans
- **62%** HH income $150K+ vs. **4%** HH income <$25K
- **67%** Full-time workers vs. **27%** Part-time workers
- **57%** Urban vs. **29%** Rural

Unfortunately, some overlap exists between groups that are less likely to have dental coverage and who are more likely to report fair or poor oral health.

Black Americans and individuals with household income <$25K are 2x as likely to rate their oral health fair or poor than White Americans and individuals who earn between $50K–$74K.

By focusing on strengthening outreach to patients who are less likely to have insurance or visit the dentist regularly — particularly Black Americans, those from low income households, part-time workers, and those in rural communities — dentists can contribute to reducing inequality and improving Americans’ overall oral health.
The rise of corporate dentistry has corresponded with a rise in dental student loans and a changed dental landscape.
Dental practices are evolving with the rise of corporate dentistry and patient demand for digital engagement

The landscape of the dental industry in 2021 is very different than it was decades ago. Average dental school debt rose to $292,169 in 2019,⁶ up from approximately $40,000 in the early 1980s.⁷ Coupled with high debt and the risks and responsibilities of owning a practice, the challenges practices faced especially during the early days of COVID-19 are driving more dentists to join larger business units, like dental service organizations (DSOs).⁸ Ten percent of dentists are currently affiliated with a DSO,⁹ but that number is projected to climb to 75–85% over the next ten years.¹⁰

**Nearly 1 in 10 dentists are affiliated with a DSO**

Not only is the DSO business model appealing to many dentists, patients also appreciate many of the business practices more common among DSOs than solo or group practices. For example, DSOs are more likely to adopt digital communications options. Just over three quarters (77%) of adults have used some form of technology either for themselves or their children to communicate with their dental offices. Furthermore, young patients express a strong desire to communicate digitally with their dental offices.

However, solo and group practices lag behind DSOs in terms of offering digital communications options.

**DSO members lead in tech adoption for patient communications**

<table>
<thead>
<tr>
<th>% who offer online or mobile communications</th>
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<tbody>
<tr>
<td>Number of employees</td>
</tr>
<tr>
<td>Schedule appointments online</td>
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<tr>
<td>Send appointment reminders via mobile app</td>
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</table>

In addition to communicating procedure follow-up and appointment information, patients indicate they’d like to learn more about oral health.

**More than three quarters (77%) of adults say they’d like to receive information about oral health from their dental insurance company, but just over half (53%) have ever done so**

As dental practices emerge from the pandemic and determine next steps in an evolving dental landscape, it’s an ideal time to reassess strategies and goals around business models, patient engagement, and methods of communications.

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Inflection Point: The impact of COVID-19 on the practice of dentistry
Conclusion

The pandemic was a challenging period for dental practices. But like past periods of upheaval, the industry is poised not only to recover, but to do so stronger, with more advanced safety measures in place and a renewed focus on oral health as a key component of overall well-being.

To continue thriving in the future, practices must adjust to changing patient expectations around increased digital communications, the use of technology and other innovations in treatment, and educating patients on overall oral health. Practices must also be cognizant of where opportunities exist for more equitable access to dental care and help close gaps in oral health for traditionally underserved demographics.

Teledentistry & dental innovation

- **Teledentistry** increased during the pandemic, both in dental practices offering it and patients taking advantage of it. Though just about half of dental practices plan to discontinue it, many patients see situational value in teledentistry even beyond the pandemic.

- **Awareness of dental innovations is high, but adoption is low.** Dental practices should bear patient preferences in mind with regard to procedures and services when determining innovation strategy.

Patient communications

- **Patients want more options for digital communication** with their dental office, such as email, text, website, and mobile app options.

- **Proactive and regular communications about safety measures** bolster patient confidence in returning to the dentist amid the pandemic.

Improving access to dental care

- **Low-income adults, Black Americans, and those who live in rural communities** have lower rates of dental coverage and regular dental visits and, consequently, report poorer oral health.

- **Offering reduced cost services and looking for opportunities for outreach** to vulnerable populations may help reduce poor oral health outcomes associated with low access to preventive care.

Future of dental practices

- **More dentists are joining dental service organizations (DSOs)** to avoid the cost and business risks and responsibilities of owning their own practice.

- **Increased oral health communications** via multiple digital channels (e.g., mobile devices, email) improve patient understanding of oral health and its connection to overall well-being.

- **Joining a dental insurance network** will be increasingly important as more employers plan to add dental insurance, and since most dental patients choose an in-network dentist.
Methodology and sample characteristics

Impact of COVID-19 on oral health in America survey

This survey was fielded in April 2021 for Guardian by Zeldis Research, an independent market research firm located in Ewing, NJ.

Results are based on a national online survey of 1,000 individuals ranging in age from 24–70. The survey sample is nationally representative of US consumers. Data shown in this report have been collected in a way to reflect the actual proportion of individuals in the US by gender, race, ethnicity, household income, and age based on data from the Census Bureau. The margin of error is +/- 2.7% at the 95% confidence level.

Dental Benefits 2021 consumer trends survey

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Results are based on a national online survey of 1,200 individuals age 24 and older. The survey sample is nationally representative of US consumers. Data shown in this report have been collected in a way to reflect the actual proportion of individuals in the US by gender, race, ethnicity, household income, and age based on data from the Census Bureau. The margin of error is +/- 2.3% at the 95% confidence level.
References