

The Impact of COVID-19 on the Dental Care Sector

Insights from Data for the Week of February 15th

New Research Reveals Impact of COVID-19 on Dental Hygienists



American
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Critical Issues Facing the Dental Hygiene Profession

COVID-19 Prevalence and Related Practices among Dental Hygienists in the United States

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Abstract

Purpose: Throughout the COVID-19 pandemic, health care professionals have been challenged to provide appropriate preventive and therapeutic measures while using precautions to minimize disease transmission. The purpose of this study was to estimate the prevalence of COVID-19 among United States (US) dental hygienists, describe infection prevention and control procedures and any associated trends in mental health.

Methods: Registered dental hygienists (RDHs) licensed in the US were invited to participate in a 30-question web-based survey. COVID-19 infection items included probable and confirmed results, COVID-19 related symptoms experienced in the last month, and level of concern about COVID-19 transmission to patients and themselves. The validated Patient Health Questionnaire 4 screened respondents for depression or anxiety. Personal protective equipment (PPE) use when treating patients was assessed. The research protocol and survey were approved by the American Dental Association IRB and registered at clinicaltrials.gov (NCT04542915). Kruskal-Wallis and χ^2 tests were used to test for associations between PPE use, PPE supply, mental health symptoms, and concern about COVID-19 transmission.

Results: As of October 8, 2020, a total of 4,776 dental hygienists from all 50 states and Puerto Rico participated in the study. Respondents reported elevated symptoms of anxiety and depression. Of the respondents, 3.1% (n=149) had ever tested positive or been diagnosed with COVID-19. The majority of respondents (99.1%; n=3,328) who practiced dental hygiene reported their primary dental practice had enhanced infection prevention or control efforts in response to the pandemic. PPE use was significantly associated with years of experience as a dental hygienist, level of concern about COVID-19, and level of PPE supplies available (p -values<0.01), but not type of dental practice (p -value 0.1).

Conclusion: As of October 2020, the estimated prevalence rate of dental hygienists in the US having had COVID-19 was low. There is a need for further support for dental hygienists' use of PPE and mental health.

Keywords: SARS-CoV-2, COVID-19, occupational health, infection control, personal protective equipment, dental hygienists

This manuscript supports the NDHRA priority area **Professional development: Occupational health** (Determination and assessment of risks).

Submitted for publication: 12/17/20; accepted 1/8/21.

Introduction

On February 11, 2020, the *Coronaviridae* Study Group of the International Committee on Taxonomy of Viruses reported the first cases of COVID-19 in the United States (US) resulting in nearly 308,000 deaths.²

Critical Issues Facing the Dental Hygiene Profession

Employment Patterns of Dental Hygienists in the United States During the COVID-19 Pandemic

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Abstract

Purpose: The COVID-19 pandemic has led to drops in patient volume and staffing in dental practices in the United States (US). This study aimed to provide insights on dental hygienists' employment patterns as well as their attitudes toward working as dental hygienists during a pandemic.

Methods: Licensed dental hygienists were invited to participate in a web-based 30-question survey between September 29 and October 8, 2020. Employment questions included current and pre-pandemic work status, reasons for not currently working as a dental hygienist, and estimated levels of personal protective equipment (PPE) in the primary work location. All statistical analysis was conducted in Qualtrics Core XM; cross tabulation was used to examine dental hygienist working patterns and attitudes by age, practice PPE supply, and other factors.

Results: The COVID-19 pandemic has led to an estimated 8% reduction in dental hygienist employment. The majority (59.1%, n=205) of this reduction is voluntary, with the main reason being general concerns over COVID-19 (48.3%, n=100). Other reasons include issues surrounding childcare and concerns over safety measures in the workplace. Dental hygienists aged 65 and older were most likely to have left the workforce voluntarily. More than half of respondents reported that their work locations had more than a two-week supply of most PPE items, although about 10% did not know supply levels. Dental hygienists working in settings with lower supplies of PPE were more concerned with COVID-19 transmission risk to themselves or to patients.

Conclusion: COVID-19 has led to a reduction in the dental hygienist workforce that is likely to persist until the pandemic passes. The dental hygienist labor market has tightened and employers may continue to experience difficulties in filling vacant dental hygienist positions until the pandemic subsides. There is also likely to be a longer term, yet smaller, impact on dental hygiene employment levels.

Keywords: COVID-19, employment patterns, dental hygienists, pandemic, dental hygiene workforce

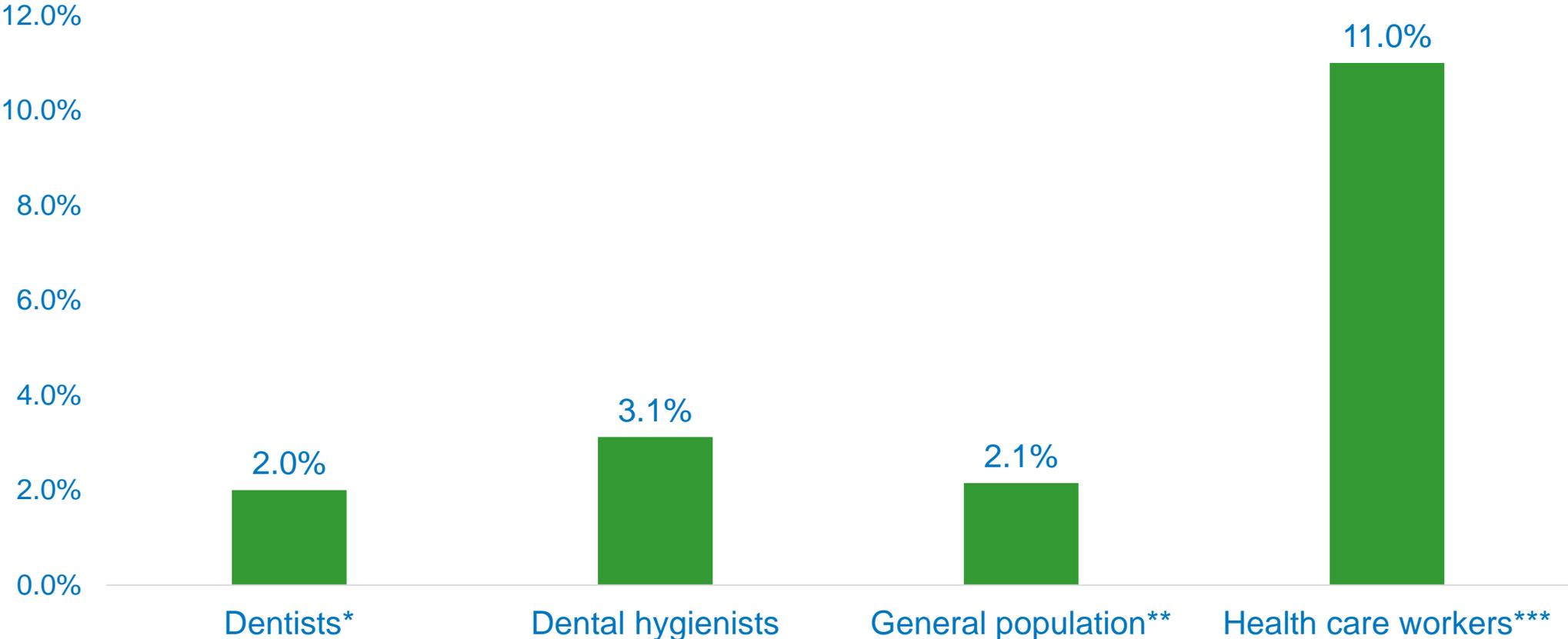
This manuscript supports the NDHRA priority area **Professional development: Occupational health** (Determination and assessment of risks).

Submitted for publication: 12/17/20; accepted 1/8/21.

Introduction

The COVID-19 pandemic is having a major effect on dental hygiene employment levels in various settings, including private practices, dropped by more than

COVID-19 Prevalence as of October 2020



- *Unpublished data from ADA survey of dentists, October 2, 2020
- **Centers for Disease Control and Prevention, Available at: <https://covid.cdc.gov/covid-data-tracker/#datatracker-home>
- ***Gómez-Ochoa et al., COVID-19 in Health-Care Workers: A Living Systematic Review and Meta-Analysis of Prevalence, Risk Factors, Clinical Characteristics, and Outcomes, *American Journal of Epidemiology*, Volume 190, Issue 1, January 2021, Pages 161–175, <https://doi.org/10.1093/aje/kwaa191>

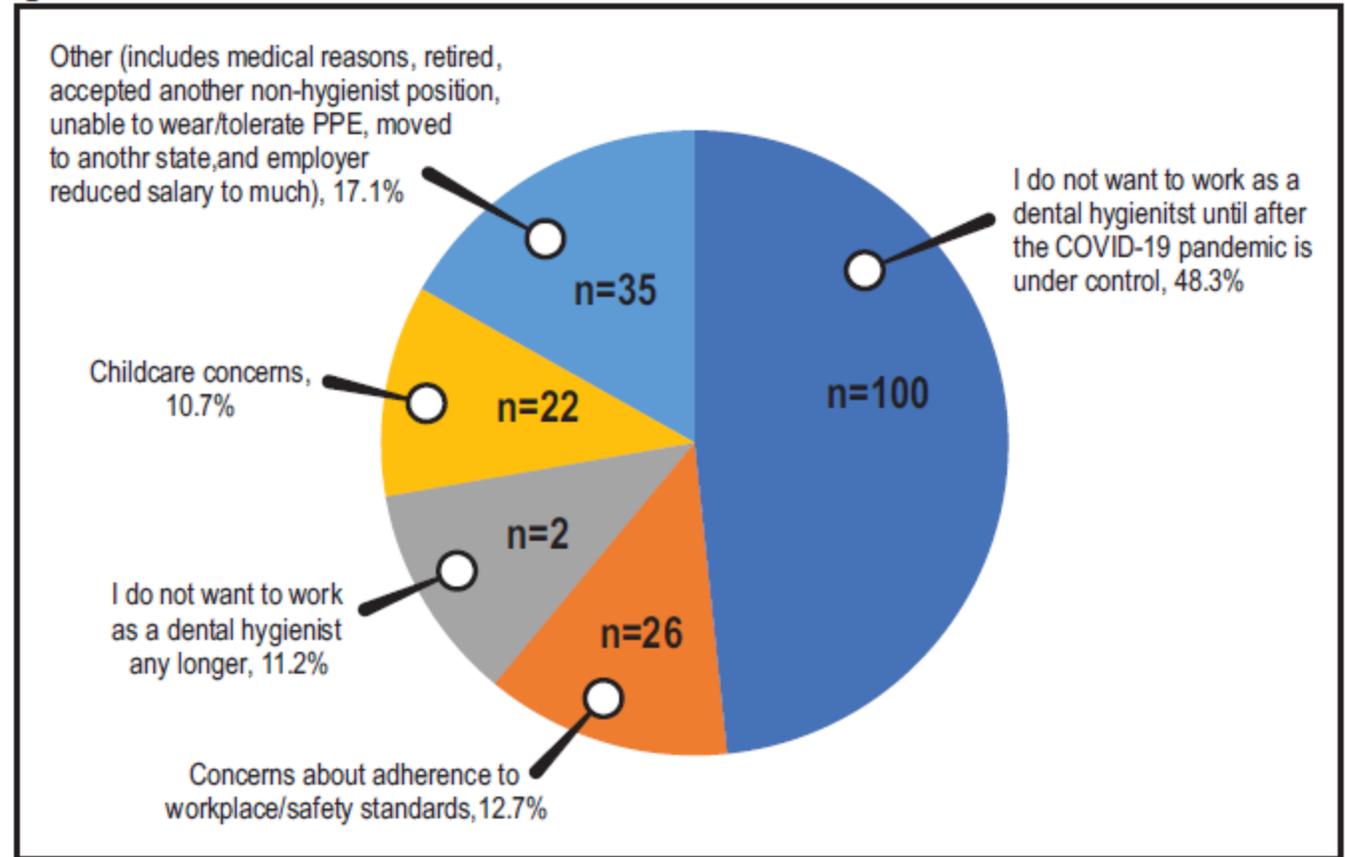
Results

8% of dental hygienists have left the workforce during the pandemic.

Among those leaving their position, 59% did so voluntarily while 41% were furloughed or laid off or permanently let go.

Those leaving their position voluntarily did so for a variety of reasons.

Figure 1. Reasons cited for voluntarily leaving a dental hygiene position (n=205)



Today



1. *Update on the latest data on dental sector recovery from the week of February 15th.*
2. *'Question of the Week' data on the use of teledentistry, prevalence of certain oral conditions, and Medicaid disenrollment.*
3. *The latest consumer sentiment data related to dental visits and COVID-19 vaccines.*

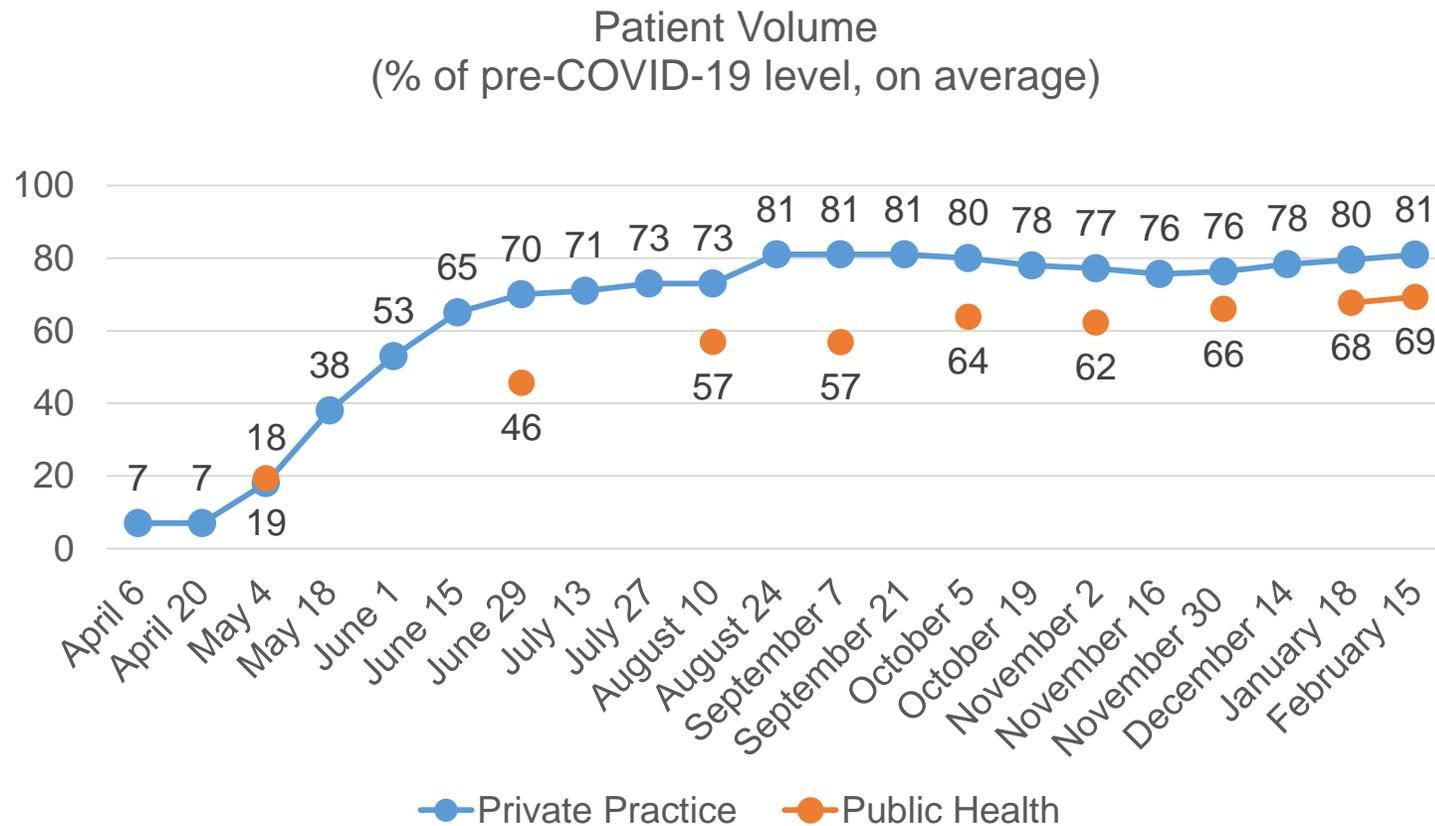
HPI Impact of COVID-19 Tracking Poll

- Poll of dentists beginning March 23, 2020. Administered on a biweekly basis throughout 2020 and on a monthly basis in 2021.
- Core measures: Status of your practice, volume of patients, PPE supply, financial sustainability.
- “Question(s) of the Week”.
- Nationally representative sample of about 2,500 dentists. State level data is available for many states.
- Links to reports and interactive data dashboard available at www.ada.org/hpi.

Core Questions

How does this week compare to what is typical in your practice, in terms of... *

Total Patient Volume

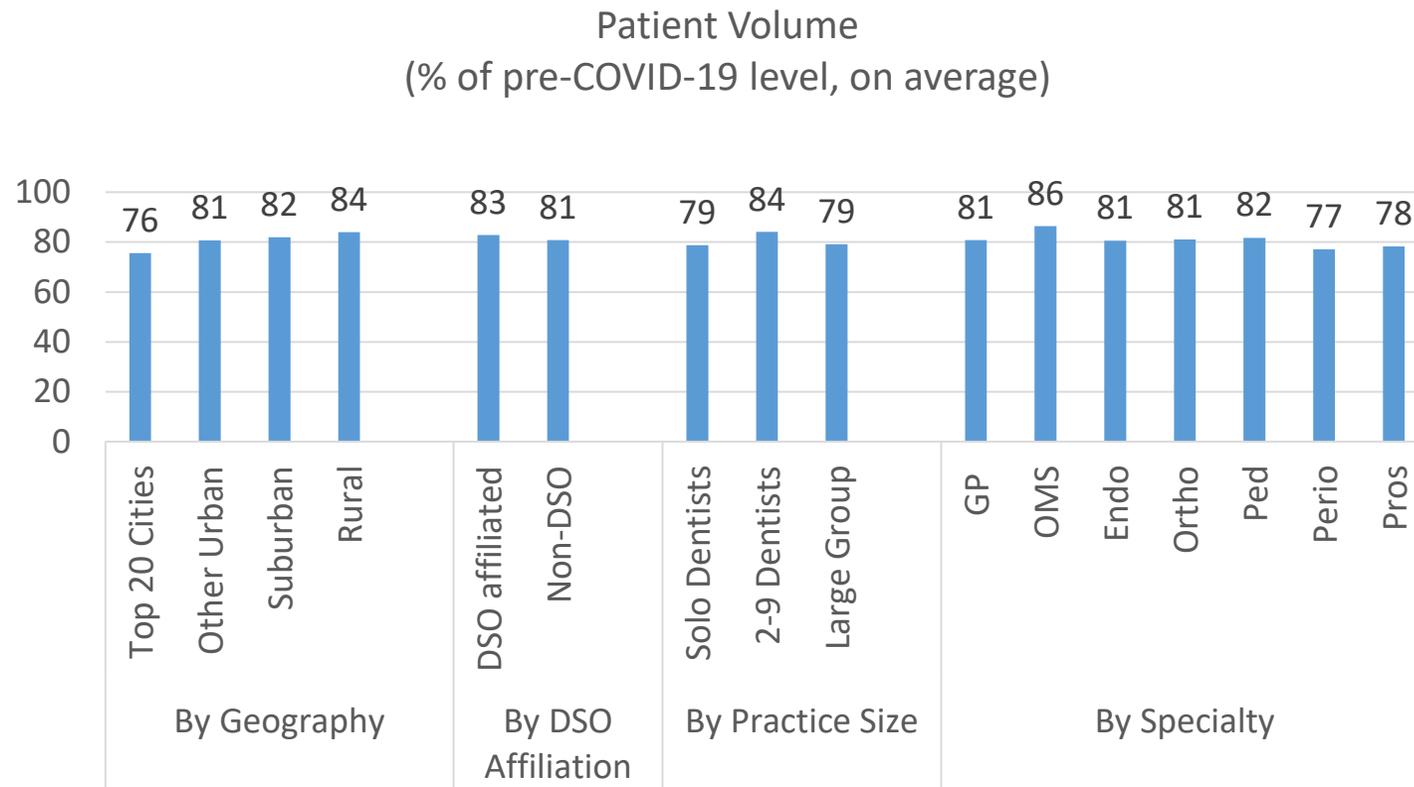


Insight: Patient volume in private practices was at 81% of pre-COVID-19 levels as of the week of February 15th, and volume in public health settings was at 69% of pre-COVID-19 levels. These represent slight increases over the past few months.

Core Questions

How does this week compare to what is typical in your practice, in terms of... *

Total Patient Volume

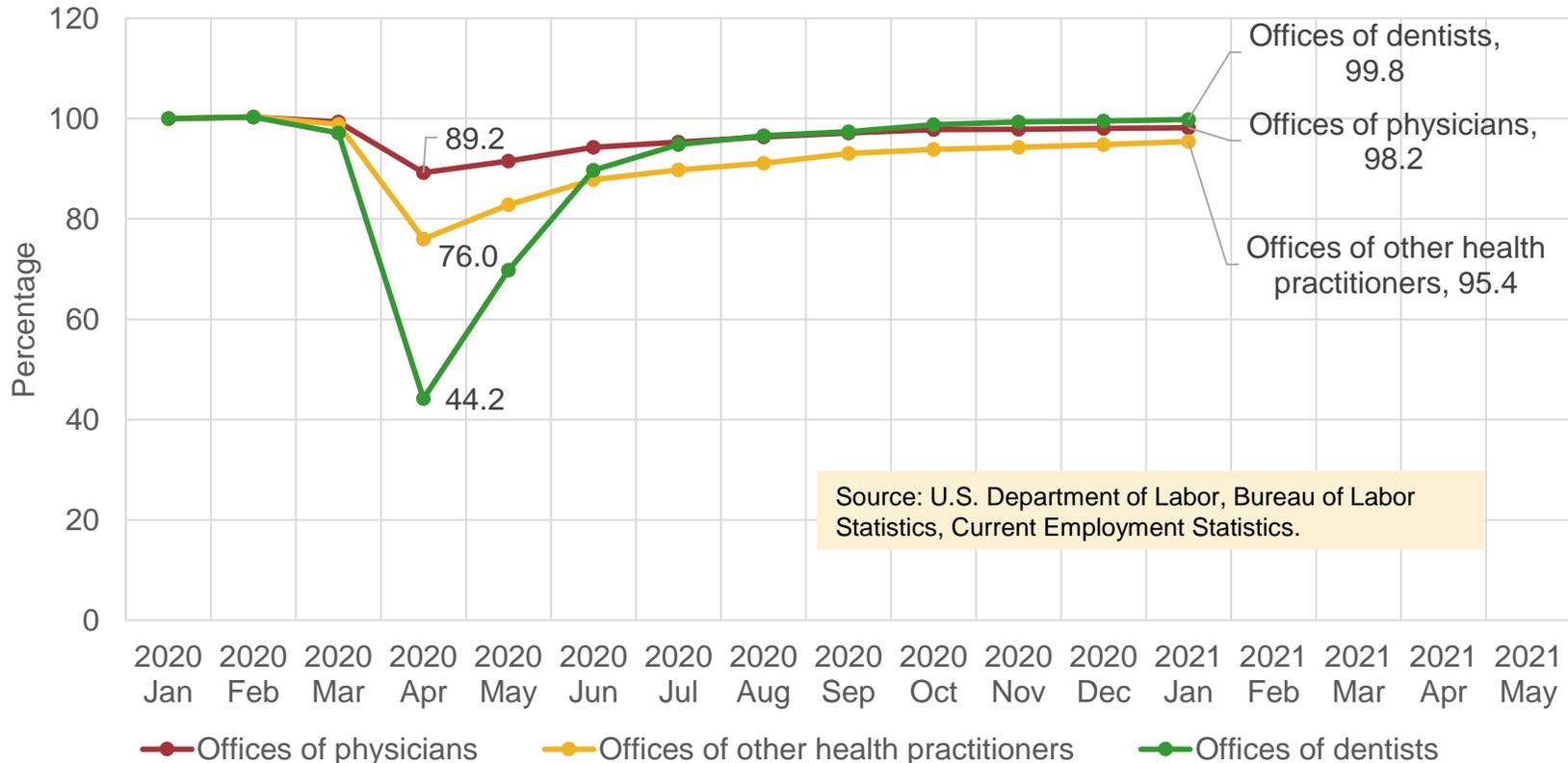


Insight: Patient volume varied to some extent by geography, DSO affiliation, practice size, and specialty.

The highest patient volumes as of the week of February 15th were reported by dentists practicing in rural areas, small group practices, and by oral surgeons.

BLS Employment in Dental Offices

Employment as a Percentage of January 2020 Employment, by Health Care Industry



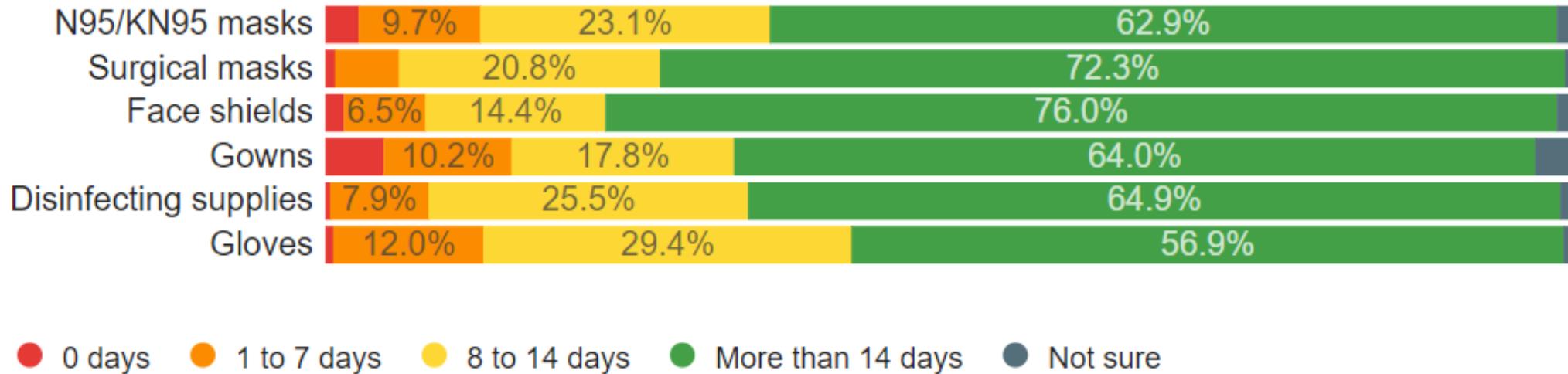
Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics.

Insight: According to BLS data, employment in dental offices is back up to nearly 100% of pre-COVID-19 levels as of the end of January.

<https://www.bls.gov/news.release/empsit.t17.htm>

Core Questions

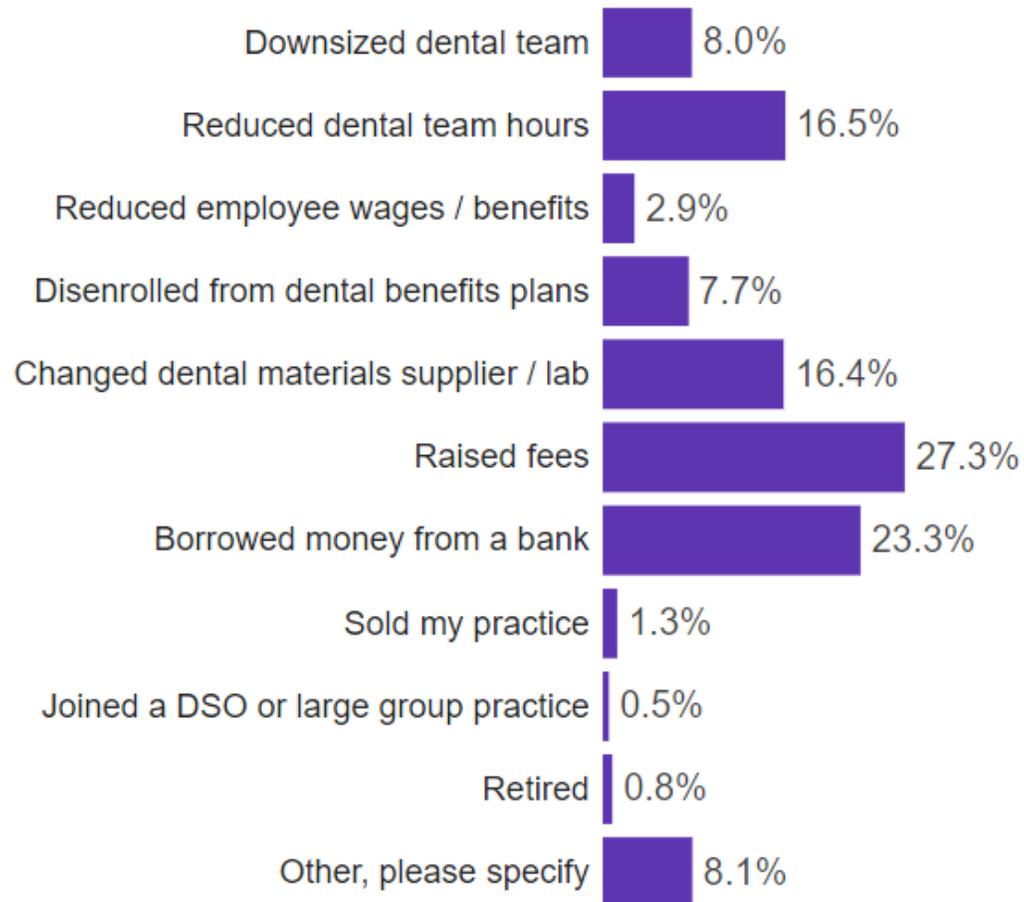
How many days' worth of the following PPE does your practice have at this time?



Insight: PPE availability in dental practices has been stable for several months. Gloves, N95/KN95s, disinfecting supplies, and gowns remain an issue for some.

Core Questions

In the last month, have you taken any of the following measures to maintain the financial sustainability of your dental practice?



Insight: The most common measure taken by dentists to maintain financial sustainability continued to be raising fees, which roughly 27% of dentists did in the past month.

Others borrowed from a bank, reduced their dental team hours, and changed their materials suppliers.

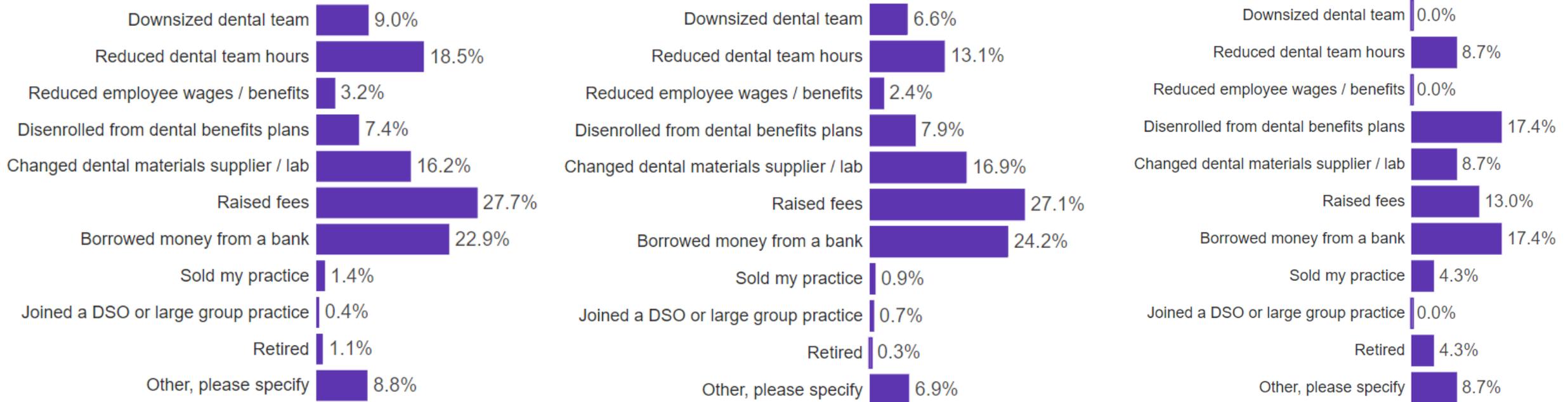
Core Questions

In the last month, have you taken any of the following measures to maintain the financial sustainability of your dental practice? BY PRACTICE SIZE

SOLO

2 TO 9 DENTISTS

LARGE GROUP (10+ DENTISTS)

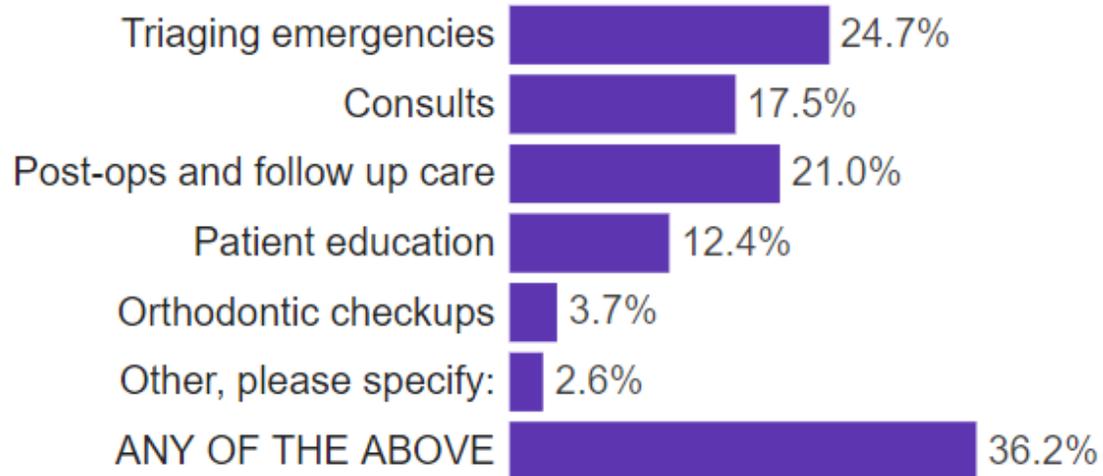


Insight: Dentists in large group practices have had to take fewer measures to maintain financial sustainability. They were more likely to disenroll from benefits plans, but less likely to raise fees or borrow from a bank.

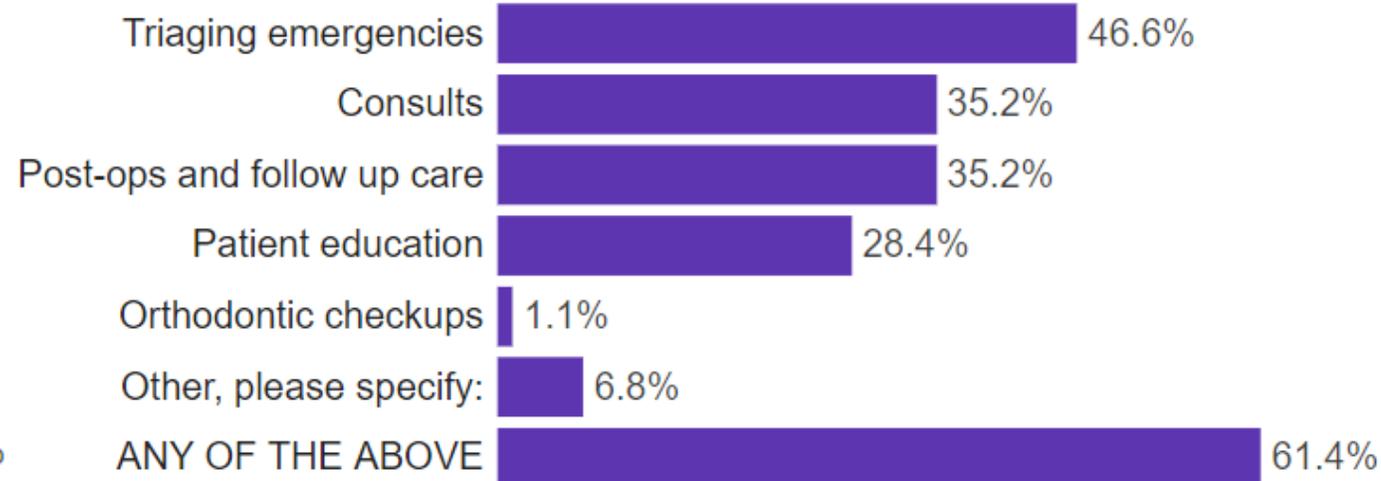
Questions of the Week

Is your practice using virtual technology/telecommunications to conduct any of the following?

Private practice dentists



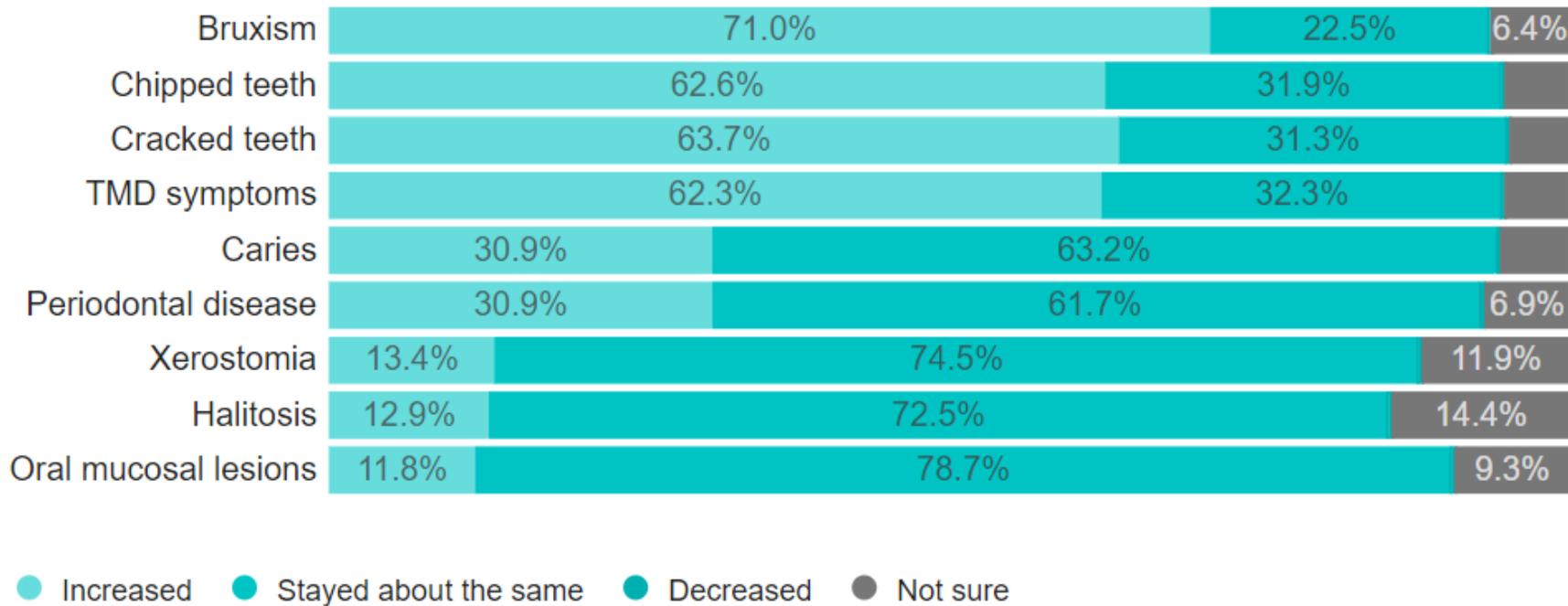
Public health dentists



Insight: Dentists are using virtual technology in various ways, especially in public health settings.

Questions of the Week

Compared to before the COVID-19 pandemic, how has the prevalence of the following conditions changed among patients in your dental practice?



Insight: Over 70% of dentists report an increased prevalence of bruxism in their practices since the onset of the COVID-19 pandemic.

The majority of dentists also indicate more chipped and cracked teeth and TMD symptoms than before the pandemic.

Questions of the Week

Prior to the beginning of the COVID-19 pandemic, was your dental practice an enrolled Medicaid provider?

All Respondents



BY PRACTICE SIZE



BY GEOGRAPHY

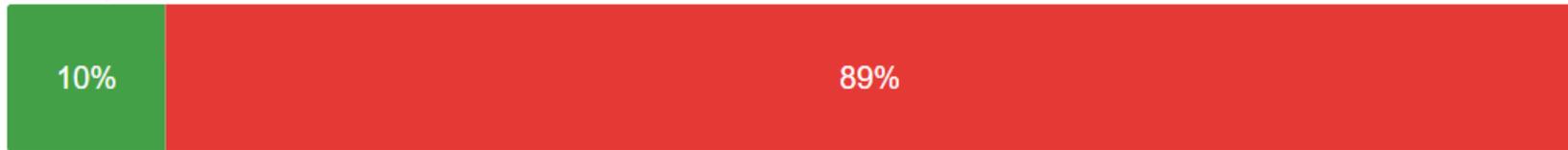


● Yes ● No ● Not sure

Questions of the Week

Has your practice disenrolled from Medicaid since the onset of the COVID-19 pandemic?

February 2021

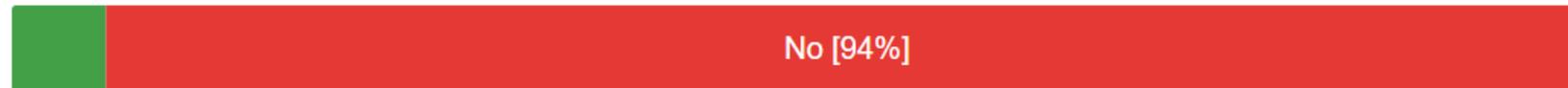


● Yes ● No ● Not sure

November 2020



August 2020



Insight: To date, COVID-19 has led to roughly 10% of Medicaid providers to disenroll from their states' program. This represents a small, gradual increase since August 2020.

Insights from Consumer Polling



AMERICA STANDS AT AN INFLECTION POINT.

Consumers are now more concerned about the economy than the health crisis. What does that mean as our society attempts to go back to normal? We just completed the fourth wave of a twice-monthly tracking study that listens to the voice of the consumer.

Through surveys, in-depth interviews, social media analyses, and online dial tests, we address a variety of timely questions:

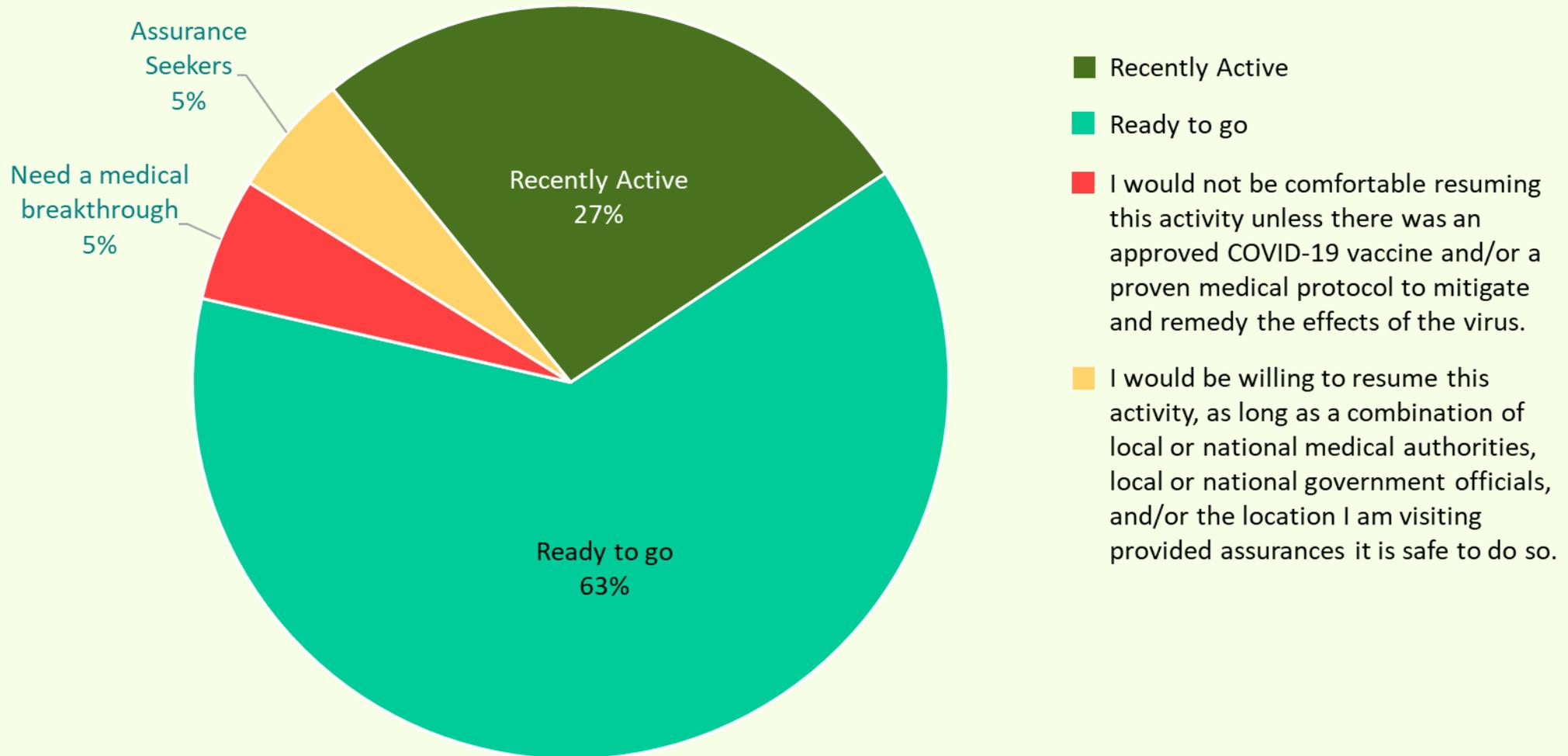
- **What's it going to take to bring consumers back?**
- **Where is the greatest pent-up demand?**
- **What will the new normal look like?**
- **How do employers and employees navigate a workplace return?**



We partnered with Engagious, a leading consumer research firm, to explore consumer sentiment toward visiting the dentist during the pandemic.

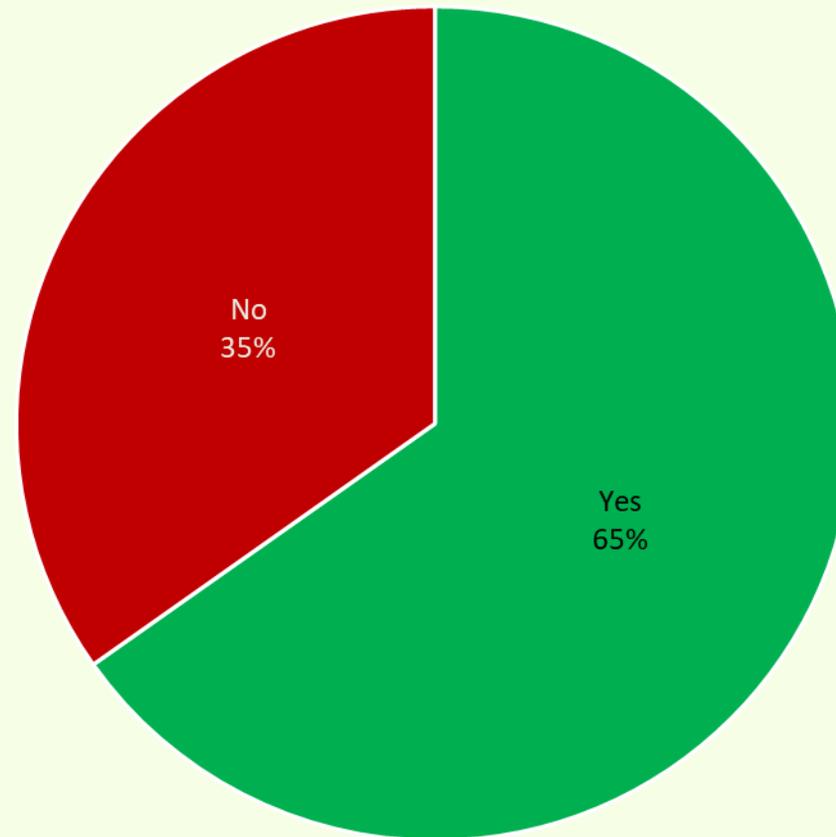
90% OF PATIENTS READY OR HAVE BEEN BACK TO DENTIST

Which of the following conditions is closest to your current point of view... Visit a dentist's office



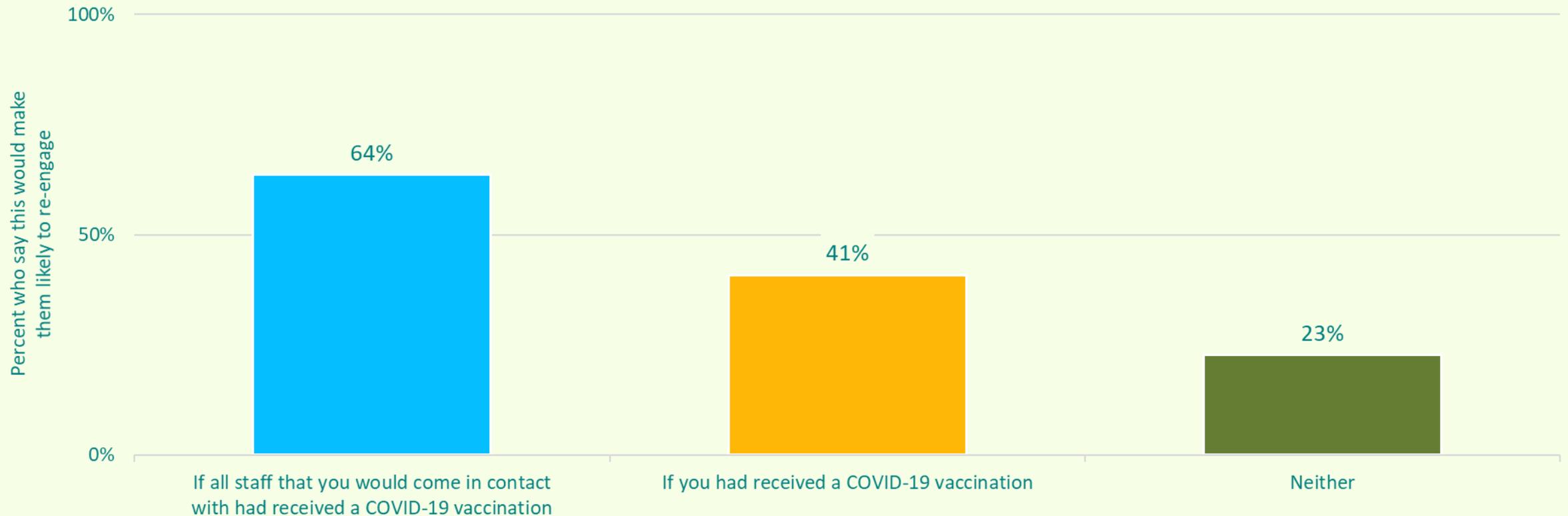
2/3 WOULD GET COVID VACCINE AT THE DENTIST

If you were already scheduled for a routine dental visit, would you be willing to get a COVID-19 vaccine while at the dentist's office?



HESITANT PATIENTS WOULD RETURN IF STAFF IS VACCINATED

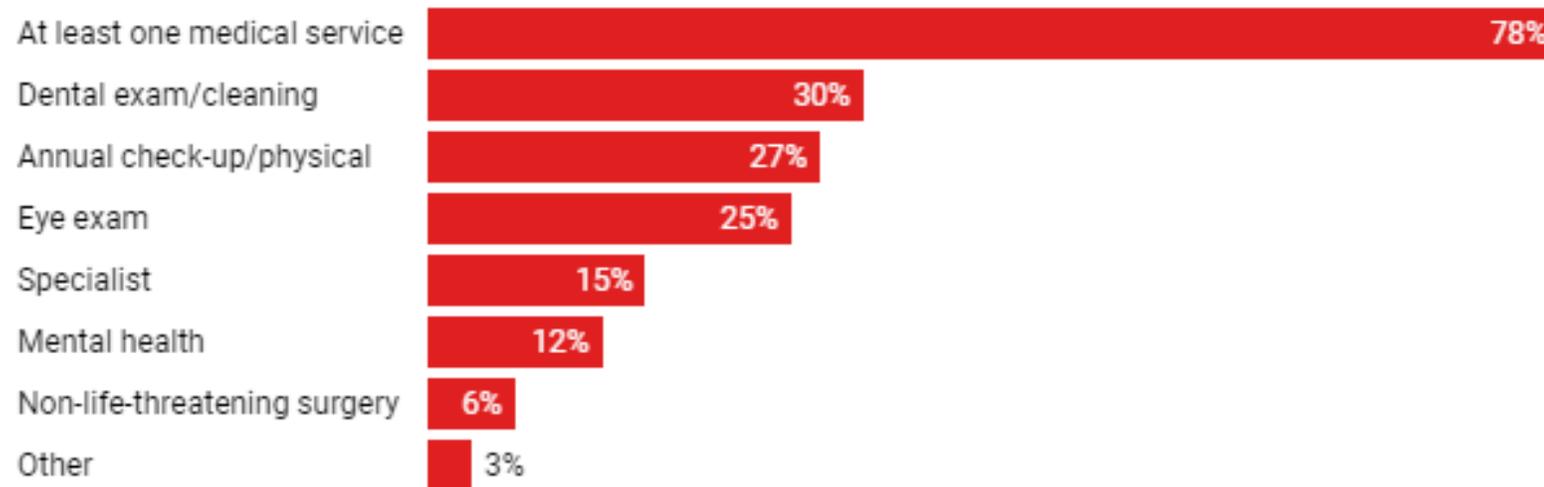
[Among those who are hesitant to visit a dentist:] Please indicate whether either or both of the following conditions would make you likely to immediately re-engage in visiting a dentist's office.



Consumer Insights from The Harris Poll and Time

Americans have been postponing all sorts of medical care due to the COVID-19 pandemic

Share of respondents in a Feb. 12-17 poll who report putting off the following during the past three months:



Insight: According to The Harris Poll, 80% of consumers have forgone health care services in the past few months. Routine dental visits were the most commonly delayed due to the pandemic.

Chart: Elijah Wolfson for TIME • Source: TIME/Harris Poll

TIME

<https://time.com/5941599/basic-health-care-postponed-covid-19/>

https://theharrispoll.com/wp-content/uploads/2021/02/TIME_Harris-Poll_Pandemic-Heath-and-Mental-Health_Data-Tables_February-2021.pdf

Key Take-Aways from the Week of February 15th

- **Recovery and Renewal:** As of the week of February 15th, patient volume was estimated at 81% of pre-COVID-19 levels on average. Staffing in dental offices was at 99% of pre-COVID-19 levels.
- **Financial Sustainability:** Over the past month, the most common measure taken by dentists to maintain financial sustainability was raising fees. Others responded to the financial challenges of practice ownership by taking out loans, reducing their dental team hours, and changing suppliers. Dentists in large group practices have had to take fewer measures to maintain financial sustainability compared to those practicing solo.
- **Teledentistry:** More than a third of dentists are practicing some form of teledentistry, most commonly to triage emergencies, do post-ops and follow-up care, and for consults.
- **Prevalence of Oral Health Conditions :** The vast majority of dentists indicate that the prevalence of stress-related oral health conditions among their respective patients has increased since the onset of the pandemic.
- **Medicaid Disenrollment:** Approximately 10% of dentists who were enrolled as Medicaid providers prior to the COVID-19 pandemic have since disenrolled.
- **Consumer Sentiment:** Consumer confidence in returning to the dental office hit a new maximum, with 90% who have already been back or are ready to go.
- **Looking Ahead:** We expect a slight increase in patient flow in the coming months.

Thank You!



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