

RESEARCH REPORT

Experiences with and Outcomes of Oral Health Care

Perspectives from Nationally Representative Data

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Introduction

Only 43% of the United States population [had a dental visit in 2021](#). Individuals identifying as Black or Hispanic had the lowest rates of dental visits (32% and 29%, respectively), while those identifying as white had the highest rate (51%). Approximately one in five people with an annual income at or below the federal poverty level (FPL) had a dental visit (26%) in 2021, while more than half (55%) of those at 400% or more of the FPL did. Barriers to oral health care access relate to [cost of care](#), [lack of adequate insurance coverage](#), [discrimination](#), and [geographic factors](#), to name just a few. Understanding individuals' perceptions of the oral health care system and their unique experiences navigating the system's challenges are critical first steps to addressing these disparities. The nationally representative, annual State of Oral Health Equity in America (SOHEA) survey asks adult respondents about their experiences with and attitudes toward oral health care. This report presents findings on the concept of value-based care

Barriers to oral health care access relate to cost of care, lack of adequate insurance coverage, discrimination, and geographic factors, to name just a few.

and on key components of an effective and person-centered approach to oral health: medical-dental integration,¹ minimally invasive care,² teledentistry,³ and patient experiences within the oral health care setting.

1 [Medical-dental integration](#) involves integration of medical, dental, and sometimes behavioral care to provide whole-person care for each patient. Medical-dental integration increases access to oral and overall health care, improves patient experiences in the health care setting, and reduces costs.

2 [Minimally invasive care](#) involves techniques such as counseling about oral hygiene habits and the application of topical, noninvasive substances that arrest the caries process without requiring anesthesia or drilling. The goal of minimally invasive care is to prevent and heal dental caries lesions through interventions that do not involve removing any tooth structure.

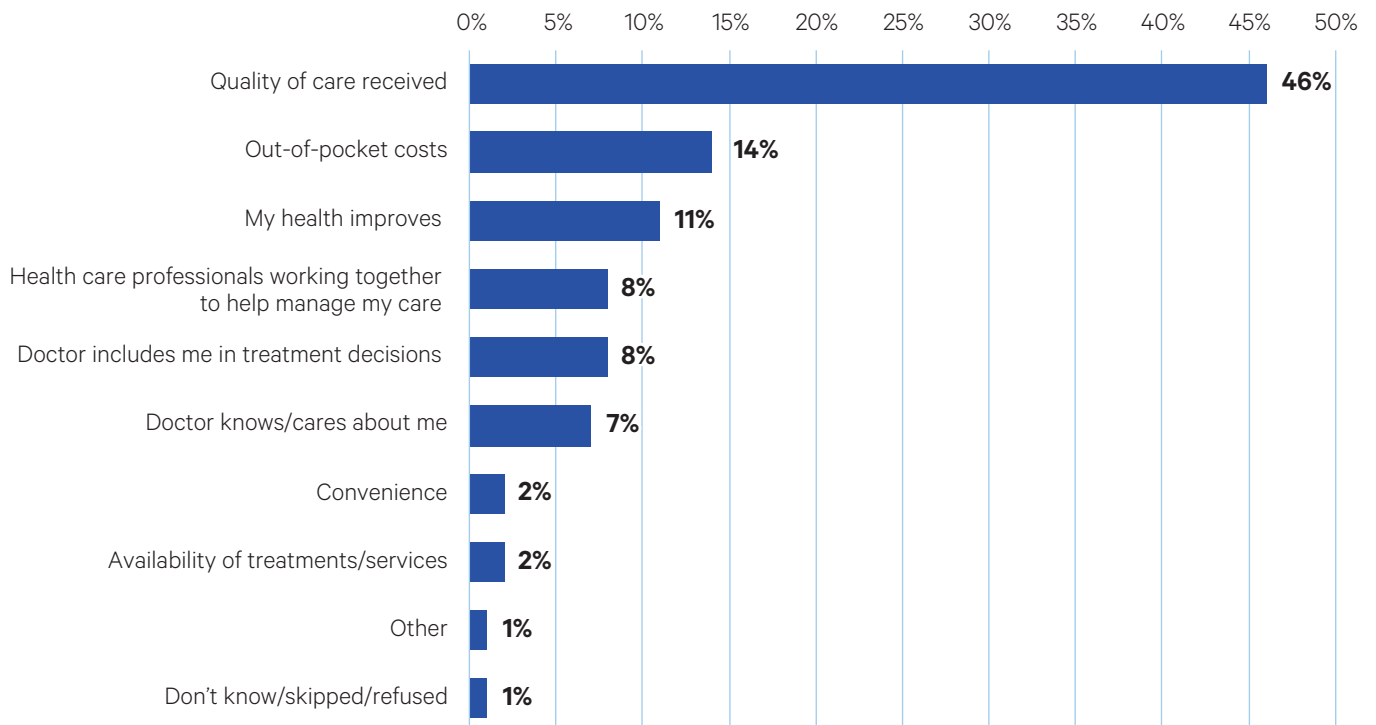
3 [Teledentistry](#) refers to the use of telehealth systems and methodologies that virtually connect individuals with oral health providers. These systems may involve real-time, synchronous discussions between providers and patients using telephone or video technology or asynchronous methods by which photos, videos, or other information is sent to the oral health provider to assist in treatment planning.

Value and Value-Based Care in Oral Health Care

Value-based care (VBC) is a health care model that [emphasizes and incentivizes the quality of patient health outcomes](#). Value-based care prioritizes quality of patient health care (including preventive care) and outcomes over fee-for-service models, in which reimbursements favor volume over quality of care. More SOHEA respondents believe their oral health provider makes treatment decisions based on what is best for their care (78%) than on what is most profitable for the provider (22%). Respondents are more likely to say that their oral health provider makes decisions based on what is most profitable if they live in urban areas; have not had a dental visit in at least a year; had an oral health symptom in the past year; or do not have a regular source of dental care (i.e., a dental home). See [Appendix A1](#).

Similarly, when respondents were asked what they associate most with value when thinking about their overall health care, the answers were more likely to involve quality of care (46%) than out-of-pocket costs (14%) or health improvement (11%). Adults are more likely to associate quality of care with value if they earn \$30,000 or more annually (compared to \$30,000 or less) or have at least some college education (compared to those with less than a high school education). Those aged 60 or older (compared to those aged 18–29), those who did not have a dental visit in at least a year (compared to those with a dental visit in the last year), and those who do not have a usual source of dental care (compared to those with a dental home) are less likely to associate quality of care with value ([Appendix A2](#)).

Which do you associate most with value when thinking about your overall health care?

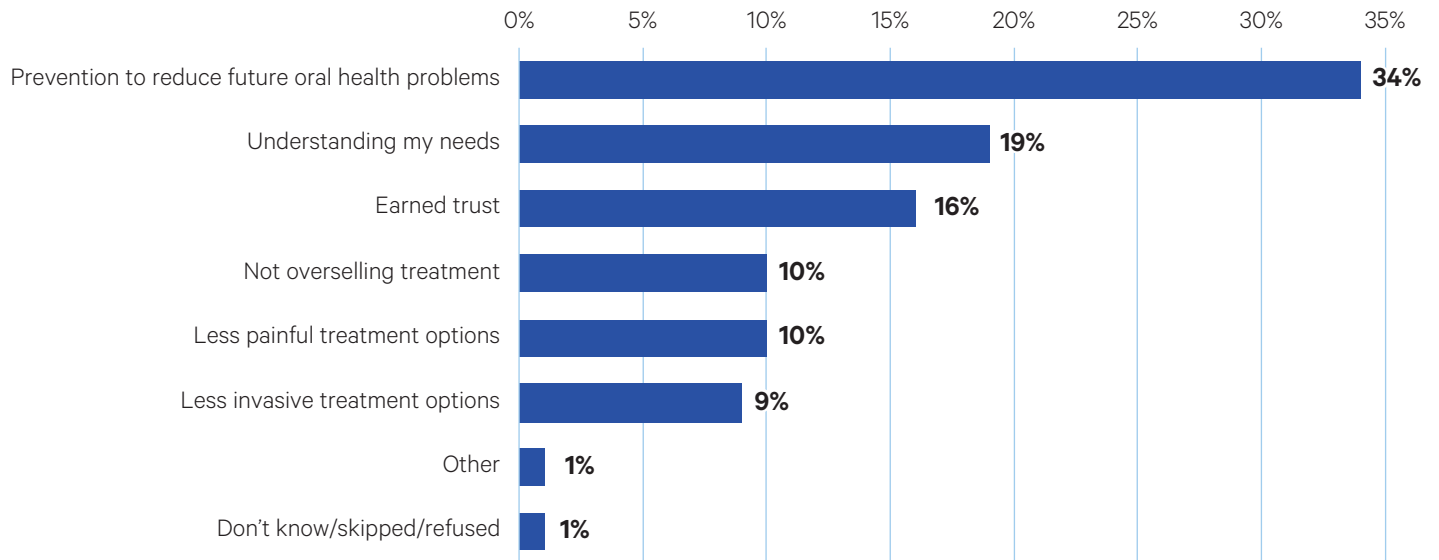


Adults emphasized a desire for prevention-focused, person-centered care from an oral health provider. One-third of adults say that, when receiving oral health care, preventing future oral health problems is most important (34%), followed by the oral health provider understanding their needs (19%) and earning their trust (16%).

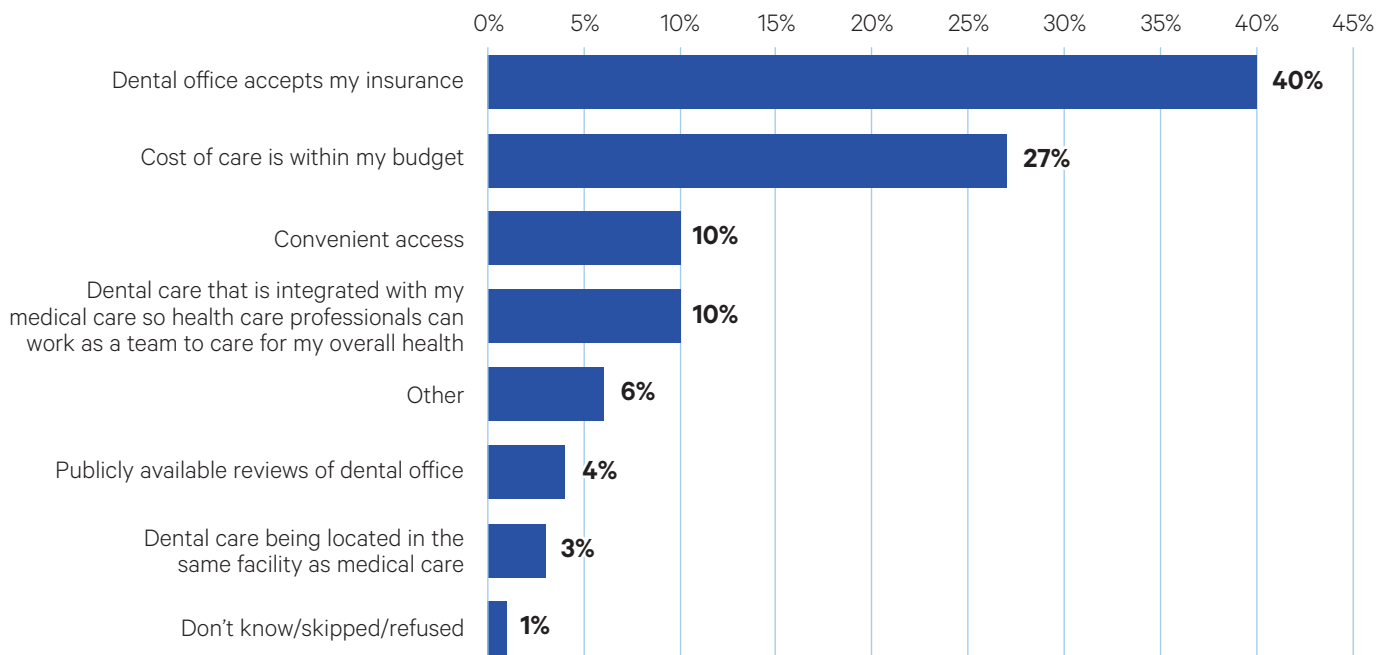
Meanwhile, adults are still concerned about cost when choosing where to seek oral health care. Forty percent of adults say that whether a dental office accepts their insurance

is the most important factor when choosing where to receive dental care, followed by whether the cost of care falls within their budget (27%). Adults are more likely to say that whether the dental office accepts their insurance is the most important factor in choosing where to receive care if they earn \$30,000–\$60,000 annually. They are less likely to say the same if they are 60 years old or older; identify as Black or Asian (as opposed to white); do not have dental insurance; or have a bachelor’s degree ([Appendix A3](#)).

What is most important to you when you think about receiving dental care from an oral health provider?

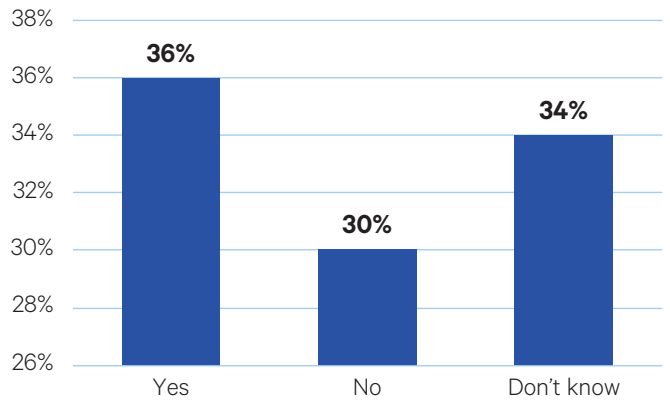


What is most important to you when you think about choosing where to receive dental care?



Finally, payment for value-based models of care in oral health is still new for many adult health care consumers who were surveyed. Adults are split on whether they think insurance companies should financially reward oral health providers for good patient health outcomes. Approximately one-third agree with this reimbursement plan (36%), one-third disagree (30%), and one-third are uncertain (34%). Adults are more likely to say that insurance companies should not reward oral health providers for their patients' health if they are female (compared to male); do not have dental insurance; earn \$30,000 or more annually; have a high school education; or do not have a dental home. Adults identifying as Black, Hispanic, or Asian are less likely to say that oral health providers should not be financially rewarded for their patients' health ([Appendix A4](#)).

Do you think oral health providers should be financially rewarded by insurance companies for how healthy their patients are?



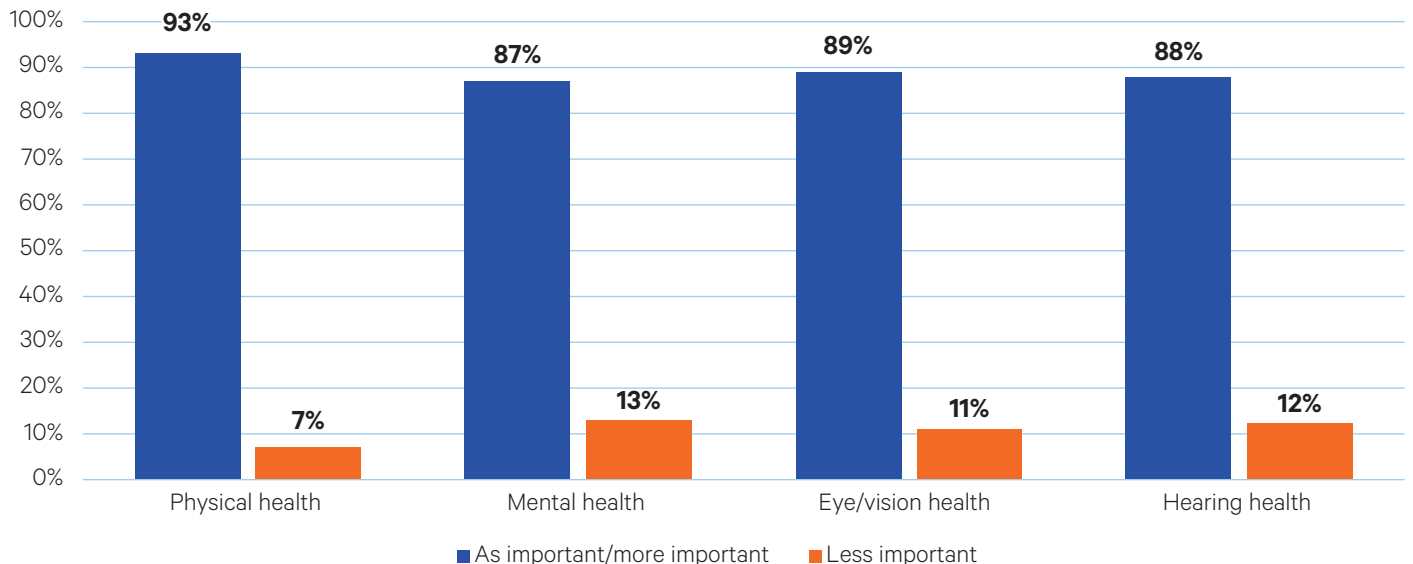
Medical-Dental Integration

The [integration of medical and dental care](#) increases access to oral and overall health care, improves patient experiences in the health care setting, and reduces costs. Comprehensive health care involves integration of medical, dental, and behavioral care to provide whole-person care for each patient. This can involve [medical and dental care colocated in the same clinic](#), integrated electronic health records (EHRs) that allow medical and dental providers to access each other's clinical notes for their shared patients, and bidirectional referrals between medical and dental providers to ensure comprehensive care for their patients. As [oral health is inextricably linked to overall health](#), oral health

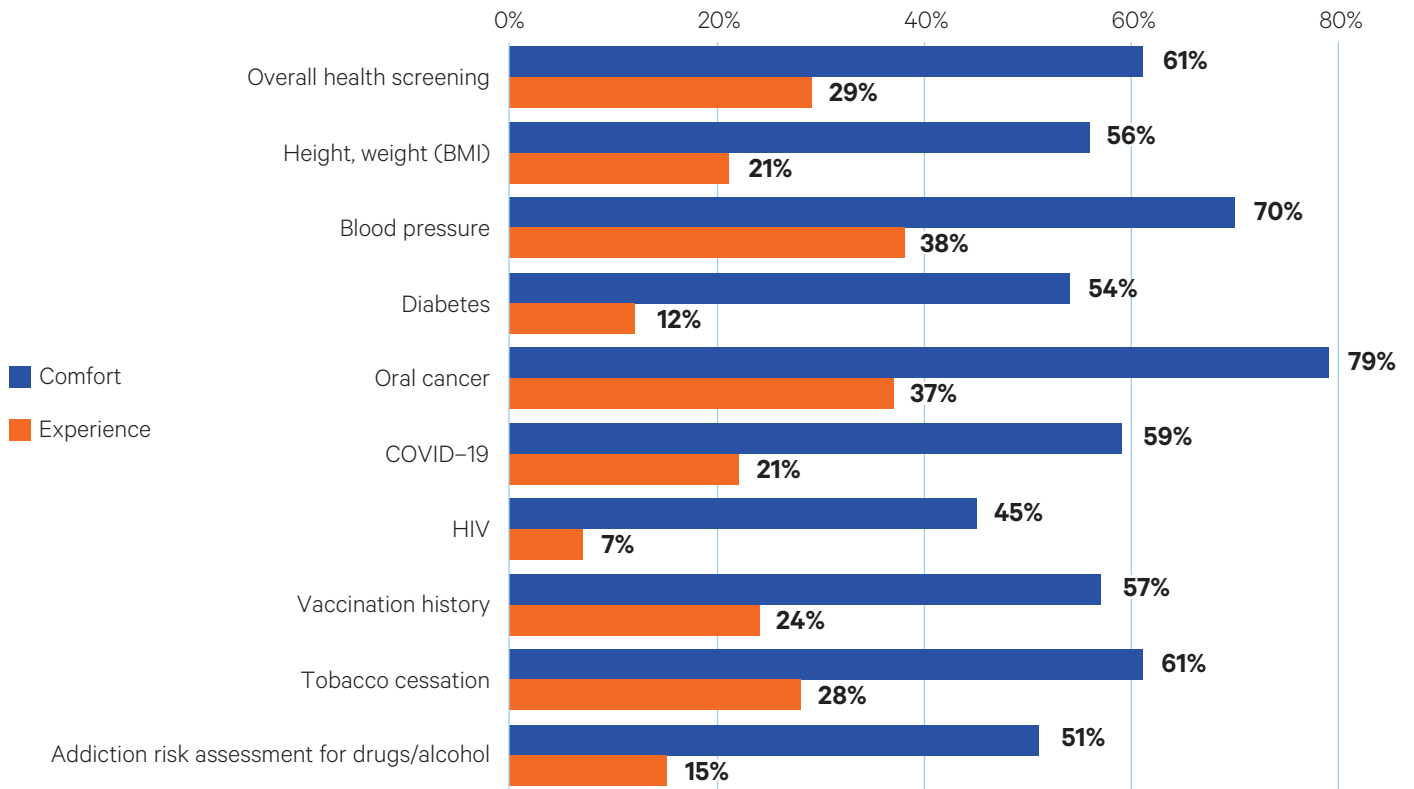
care should be provided as a part of comprehensive health care, whether the physical practice settings are colocated or separate.

Adults understand the significance of oral health within the context of overall health and see the two as equal in importance. Most adults say that oral health is at least as important to the overall health of a person as physical health (93%), mental health (87%), eye/vision health (89%), and hearing health (88%).

Compared to the following types of personal health, how important is oral health to the overall health of a person?



Experience / Comfort with Health Screenings in the Dental Setting (Yes)



Screening for Systemic Health Conditions in the Oral Health Setting

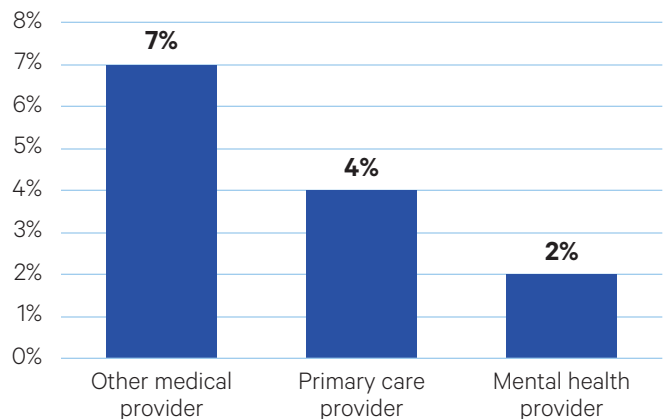
As evidence of adults' understanding of the links between oral and overall health, at least half of adults say they are comfortable with their oral health provider screening them for various systemic health conditions in the dental setting. Comfort with screenings in the dental setting ranged from 79% for oral cancer and 70% for blood pressure to 45% for HIV and 54% for diabetes. It may be that adults are less comfortable with HIV and diabetes screenings in the dental setting as these blood tests are somewhat more invasive than other types of health screenings.

Although many adults say they are comfortable with their oral health provider screening them for systemic health conditions, most say they have not experienced such screenings in the dental office. Just over one-third of adults say they have had their blood pressure taken (38%) and have been screened for oral cancer (37%) by their oral health provider. Only about 1 in 10 adults have been screened for diabetes (12%), and only 7% have been screened for HIV. Screening patients at risk for diabetes in the dental office can [identify previously undiagnosed disease](#), and screening for HIV can [increase access to testing in underserved communities](#).

Referrals from Oral Health Care Providers to Other Health Care Providers

Although adults are aware of the connection between oral and overall health, referrals between oral health providers and other types of health care providers rarely occur. Only 4% of adults say they have been referred to a primary care provider by their oral health provider. In comparison, 7% say they have received a referral to another health care professional. Only 2% say their oral health provider has referred them to a mental health provider.

Has your dentist ever referred you to any of the following?



Adults aged 45 years or older are more likely to say their oral health provider has not referred them to a *primary care provider*. Individuals are less likely to say their oral health provider has not referred them to a primary care provider if they identify as Black, Hispanic, or Asian, or if they had at least one oral health problem in the past year (compared to those who did not have an oral health problem in the past year; [Appendix B1](#)). Females and adults earning \$60,000 or more annually are more likely to say their oral health provider has not referred them to a *mental health provider*. Adults are less likely to report this type of referral if they identify as Black or Hispanic or if they had at least one oral health problem in the past year ([Appendix B2](#)). Adults are more likely to say their dentist did not refer them to *another type of medical provider* if they are female; identify as Hispanic; earn \$30,000 to \$60,000 annually; have a high school education or some college/associate's degree; or did not have a dental visit in the last year (compared to those with a dental visit in the last year; see [Appendix B3](#)). Adults are less likely to report that they were referred to another type of medical provider if they live in suburban or urban areas (compared to rural areas) and had at least one oral health problem in the past year.

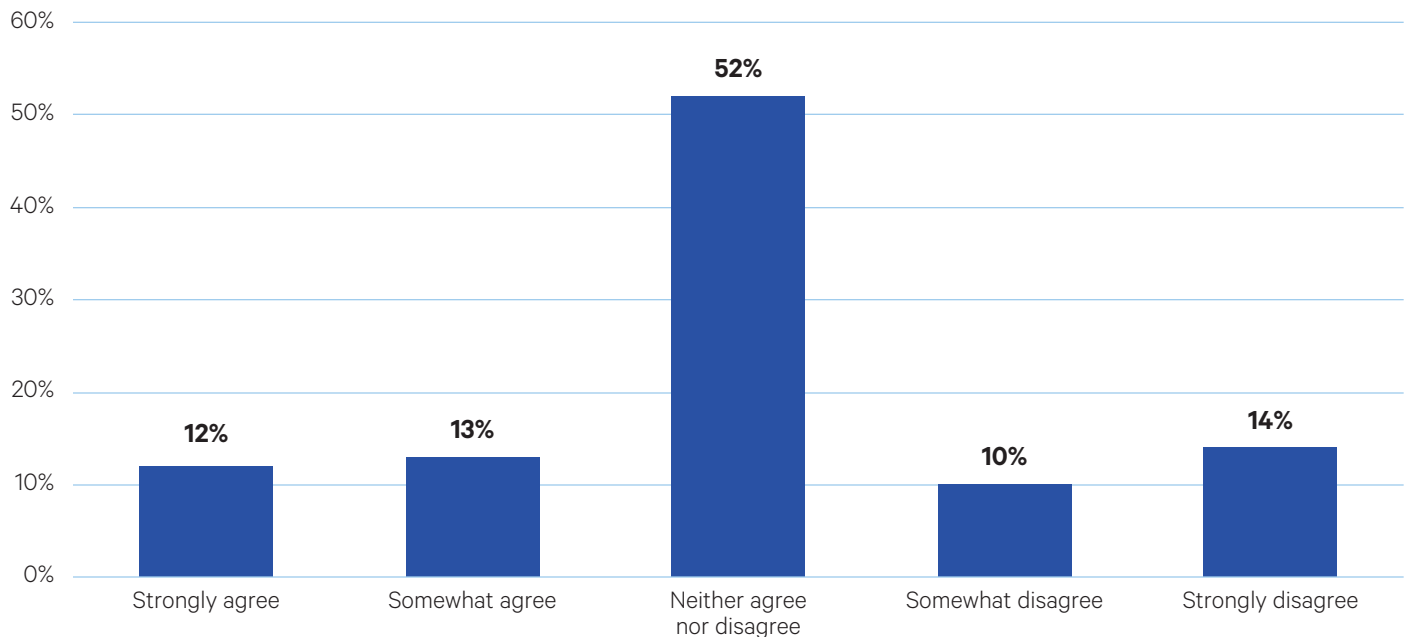
Adults have mixed feelings about whether they would be more likely to seek oral health care if their oral health provider and primary care physician were in the same office. While 25%

agree or strongly agree such colocation would improve their likelihood of receiving oral health care, and 24% disagree or strongly disagree with this statement, more than half neither agree nor disagree with this idea (52%).

When asked whether they agree with the statement, “*I would be more likely to seek dental care if my dentist and doctor were located in the same office,*” adults are less likely to agree if they are 60 years of age or older; female; earn \$30,000 or more annually; or have a high school education or more. Adults are more likely to agree with this idea if they identify their race/ethnicity as Black, Hispanic, Asian, or “other”; live in suburban or urban areas; have not seen a dentist in a year or more; or had at least one oral health problem in the last year ([Appendix B4](#)).

Although adults are mixed on whether their oral health care and overall health care should be co-located, most say they would prefer their medical and dental insurance to be provided through the same insurance company (70%). Adults are less likely to prefer these two types of insurance to be provided through the same company if they identify their race/ethnicity as Black, Hispanic, or Asian; do not have dental insurance; earn \$100,000 or more; or do not have a dental home. Individuals are more likely to want this shared insurance scenario if they have not seen a dentist in at least a year ([Appendix B5](#)).

I would be more likely to seek dental care if my dentist and doctor were located in the same office



Vaccinations in the Oral Health Care Setting

Oral health providers, primarily dentists, have been allowed to give certain vaccinations (e.g., influenza, human papillomavirus [HPV]) in several states and under limited circumstances. In early 2021, the US Department of Health and Human Services [authorized dentists and dental students to provide COVID-19 vaccinations](#) in order to boost the number of health care professionals available to administer the vaccine. This authorization expired with the end of the federal public health emergency in April 2023. As of 2023, the [number of states allowing dentists to provide vaccinations has increased](#), and additional legislation is pending.

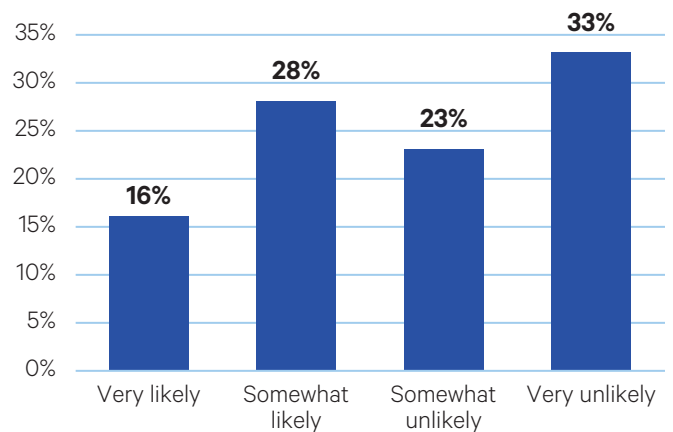
Adults' opinions about receiving vaccinations from their oral health providers are mixed. While 44% of adults say they receive a seasonal flu vaccine every year, only 26% say they would consider accepting the flu vaccine from their dentist. Adults are less likely to consider obtaining a flu vaccine from their oral health provider if they are female; did not have a dental visit in the last year; or do not have a dental home. Adults aged 60 or above, those earning \$100,000 or more annually, and adults with at least some college are more likely to consider receiving a flu vaccine from their oral health provider ([Appendix B6](#)).

HPV is linked to approximately 70% of cases of oropharyngeal cancer in the US, and the [HPV vaccine protects against the HPV types that cause oropharyngeal cancers](#). Three-quarters of adults think that the HPV vaccine is very or somewhat important for preventing oral and throat cancer (75%). However, only 6% of adults say their oral health provider has ever mentioned the HPV vaccine to them, and only 8% say an oral health provider has mentioned vaccinating their child for HPV.

Adults are less likely to consider oral health providers as qualified to educate patients about HPV if they are between 30–59 years of age; are female; or identify as Hispanic. Adults aged 60 or older and those who have a bachelor's degree or higher are more likely to say oral health providers are qualified to educate patients about HPV ([Appendix B7](#)). While 50% of adults believe that oral health providers are qualified to educate patients about HPV, 56% are somewhat or very unlikely to consent to having their child receive the HPV vaccination if their oral health provider recommends it. There were no significant differences among demographic groups in terms of likelihood to consent to this ([Appendix B8](#)).

Adults' opinions about receiving vaccinations from their oral health providers are mixed.

How likely are you to consent to HPV vaccine for your child if an oral health care provider recommends it?



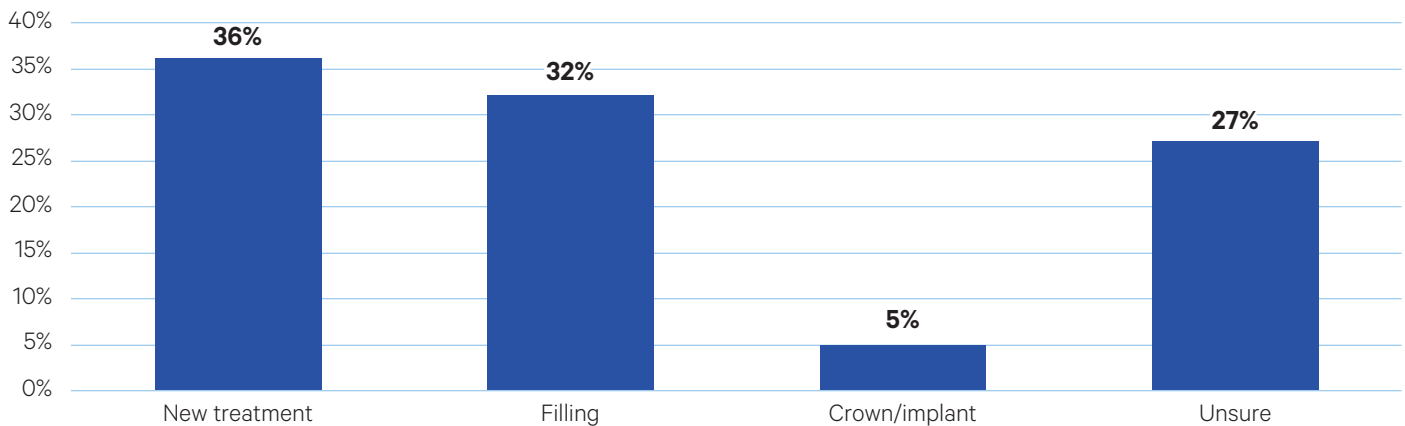


Minimally Invasive Care

The [goal of minimally invasive care](#) is to prevent and heal dental caries lesions through interventions that do not involve removing any tooth structure. Minimally invasive care involves techniques such as counseling about oral hygiene habits and the application of topical, noninvasive substances that arrest the caries process without requiring anesthesia or drilling. Adults' perceptions of a minimally invasive treatment for dental decay, such as [silver diamine fluoride](#), are mixed. The concept of minimally invasive care was described this way to survey respondents: "Cavities are caused by germs that produce

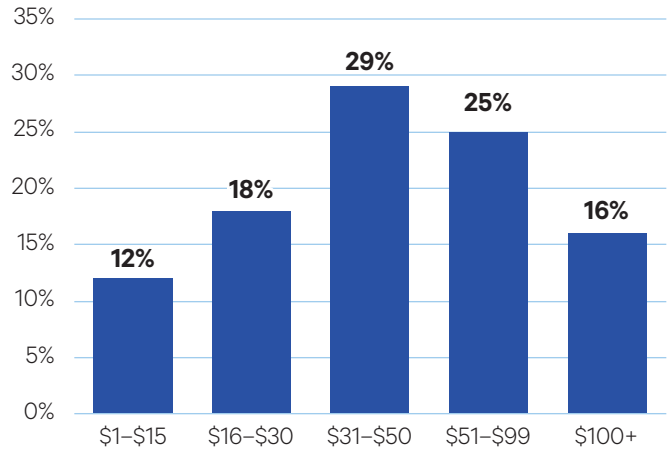
acid that breaks down the teeth. There is a new way to treat cavities, by painting liquid on the cavity to stop it from getting worse. However, in some cases, you may need to have a filling at a later date if the cavity does not stop getting worse. If you had cavities on your teeth, would you choose this new treatment, a filling, or a crown/implant?" In response to this question, 36% of adults say they would opt for the minimally invasive treatment to stop or arrest the caries (decay) process, 32% would choose a filling, 27% are unsure, and 5% would choose a crown or implant.

If you had cavities on your teeth, would you choose this new treatment, a filling, or a crown/implant?



Adults identifying as Asian are more likely to choose a filling over other options. Adults are less likely to select a filling if they are 30 years of age or older; identify as female; earn between \$30,000 and \$60,000 annually; have a high school education or more; did not have a dental visit in at least a year; or had at least one oral health symptom in the past year ([Appendix C1](#)). Adults identifying as Black and those experiencing an oral health problem in the last year are more likely to choose a crown or implant over other options. Adults are less likely to choose a crown or implant over alternatives if they are aged 60 or over; identify as female; earn \$30,000 or more annually; or have a high school education or more ([Appendix C2](#)). For those who would opt for the minimally invasive treatment, more than half would be willing to pay between \$31–\$99 out of pocket for this treatment.

How much out of pocket would you be willing to pay for this treatment?



Teledentistry

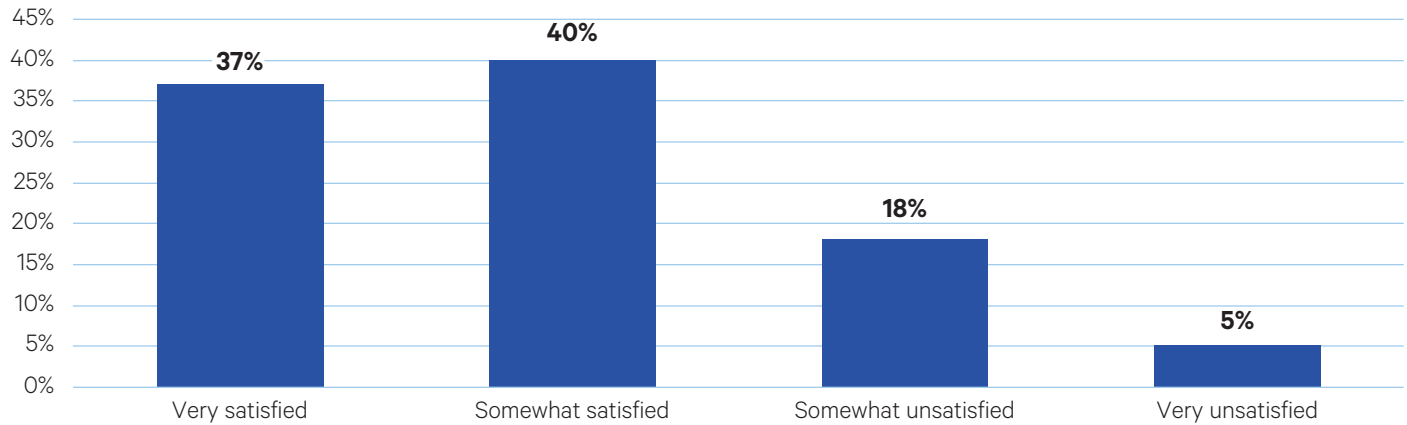
Teledentistry refers to the use of [telehealth systems and methodologies](#) that virtually connect individuals with oral health providers. These systems may involve real-time, synchronous discussions between providers and patients using telephone or video technology or asynchronous methods by which photos, videos, or other information is sent to the oral health provider to assist in treatment planning. The use of [teledentistry increased significantly during the COVID-19 pandemic](#) when dental offices were closed for all but emergent care. Since the pandemic, providers have continued to use this technology to help [reduce barriers to oral health care for underserved populations](#).

Of the adults completing the survey, only 185 (4%) say they have had a teledentistry visit at some point; more than two-thirds say this teledentistry visit occurred in the previous year (69%). One-third had a teledentistry visit via telephone (33%), while 28% saw an oral health provider through a video application (e.g., Zoom). Adults are more likely to have had a teledentistry visit if they are over the age of 45; identify

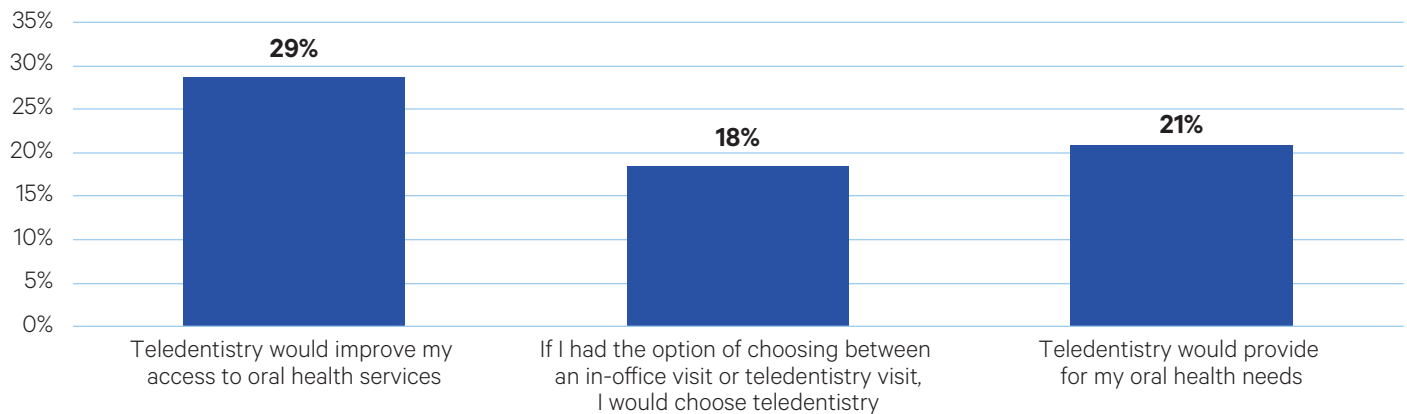
as female; live in nonmetro areas; earn more than \$30,000 annually; have at least some college education; or do not have a dental home. Adults are less likely to have had a teledentistry visit if they identify their race/ethnicity as Black, Hispanic, or Asian; do not have dental insurance; have not seen a dentist in a year or more; or had an oral health problem in the last year ([Appendix D1](#)).

Compared to a face-to-face oral health visit, the majority of adults say their teledentistry visit was the same (46%) or better (35%). Less than one in five adults say they are very or somewhat unsatisfied with their teledentistry experience (23%). Adults earning between \$30,000 and \$100,000 annually and adults without a dental home are more likely to be dissatisfied with their teledentistry experience. Adults identifying as Asian and adults with a high school education, some college/associate’s degree, or a bachelor’s degree are less likely to be dissatisfied with their teledentistry experience ([Appendix D2](#)). Three-quarters of adults with a teledentistry visit say they would use this technology again if it is offered (71%).

How would you rate your general experience with teledentistry?



How much do you agree or disagree with the following statements (strongly/somewhat agree)?



More adults strongly or somewhat agree that teledentistry would improve their access to oral health care services (29%) compared to those who strongly or somewhat agree that they would choose a teledentistry visit over an office visit (18%) or say that teledentistry provides for their oral health needs (21%).

Adults are more likely to strongly or somewhat disagree with the statement, “Teledentistry would improve my access to oral health services,” if they are 30 years of age or older; are female; earn \$60,000 or more annually, and have at least some amount of college education. Adults who identify their race/ethnicity as Black, Hispanic, Asian, or “other,” those who did not have a dental visit in at least a year, those who had an oral health problem in the past year, and those who do not have a dental home are less likely to disagree with this statement ([Appendix D3](#)). Adults are more likely to disagree that they would choose teledentistry over an in-person visit if they are aged 60 or

older; are female; earn \$30,000 or more annually; or have some college, an associate’s degree, or more. Those who are less likely to disagree that they would choose teledentistry over an in-person visit identify their race/ethnicity as Black, Hispanic, Asian, or “other”; did not have a dental visit in the past year; had an oral health problem in the last year; or do not have a dental home ([Appendix D4](#)). Adults aged 30 years or older, females, adults earning at least \$30,000 annually, and adults with some college education or more are more likely to disagree that teledentistry would provide for their oral health needs. Meanwhile, adults identifying their race/ethnicity as Black, Hispanic, Asian, or “other,” adults without a dental visit in the last year, those with an oral health problem in the previous year, and adults without a dental home are less likely to disagree that teledentistry would provide for their oral health needs ([Appendix D5](#)).



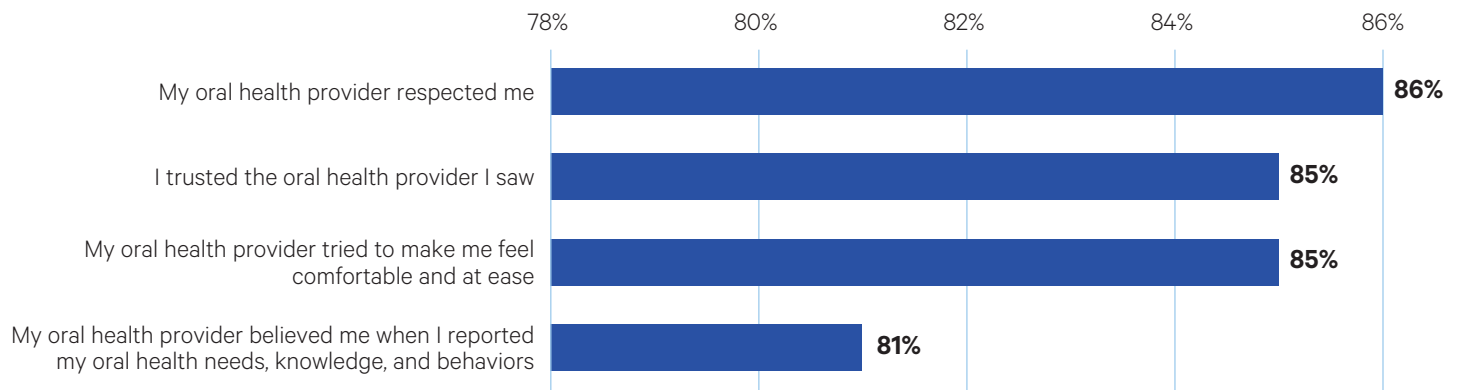
Discrimination and Dignity in Oral Health Care

Experiencing discrimination on a regular basis is linked to [health disparities and increased stress levels](#). Structural racism at the state level (i.e., racism in state-level domains such as education, economics, politics, judicial systems, and segregation) is linked with an [increased incidence of tooth loss](#) among non-Hispanic Black individuals. [Discrimination and disrespectful treatment in the dental setting](#) are associated with poorer oral health and avoidance of dental care.

A majority of adults say they were treated with respect by their oral health care team at their last dental visit (strongly or somewhat agreed; 86%). Similar percentages of adults say they trusted the oral health provider they saw (85%) and that this provider tried to make them feel comfortable and at ease during the visit (85%). Most adults somewhat or strongly agree with the statement, “*At my last oral health visit, my oral health provider believed me when I reported my oral health needs, knowledge, and behaviors*” (81%).

Discrimination and disrespectful treatment in the dental setting are associated with poorer oral health and avoidance of dental care.

How much do you agree with the following statements about your last oral health visit (strongly/somewhat agree)?



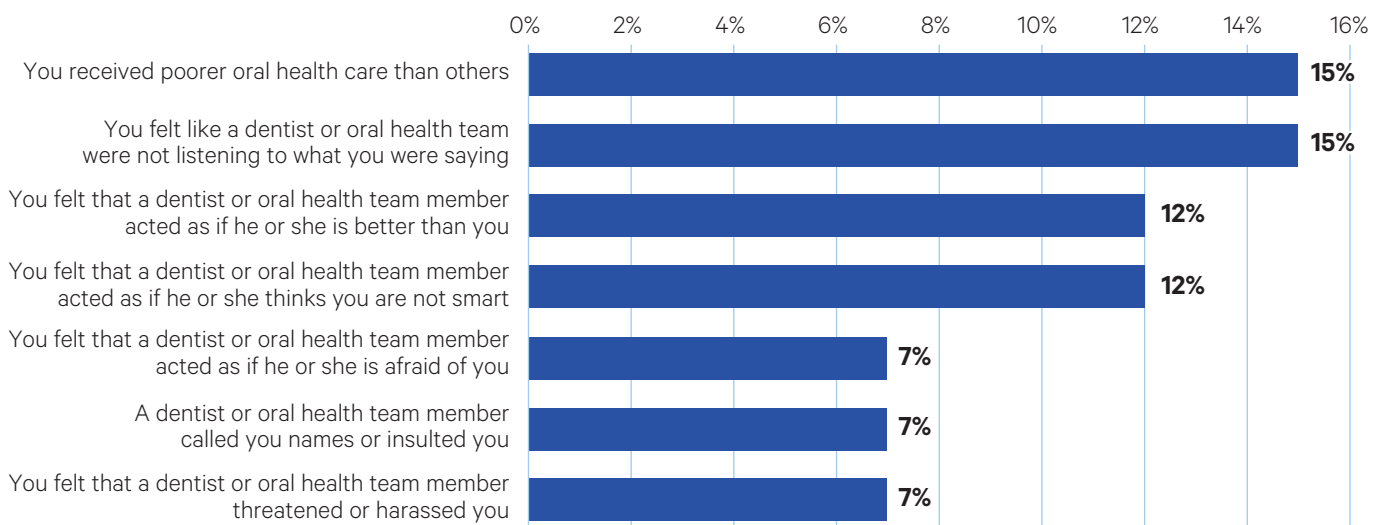
Adults are more likely to disagree with the statement, “My oral health provider respected me,” at their last dental visit if they identify as Hispanic; live in a suburban area; did not have a dental visit in the past year; had an oral health problem in the last year; or do not have a dental home. Conversely, adults aged 60 and above and those earning \$100,000 annually are less likely to disagree with this statement (Appendix E1). Similarly, adults are more likely to disagree with the statement, “I trusted the oral health provider I saw,” at the last dental visit if they identify as Hispanic; did not have a dental visit in the past year; had an oral health problem in the previous year; or do not have a dental home. Meanwhile, adults aged 60 and above and those earning \$60,000 annually are less likely to disagree with this statement (Appendix E2).

Adults are more likely to disagree with the statement, “My oral health provider tried to make me feel comfortable and at ease,” at their last dental visit if they identify as Black or Hispanic; did not have a dental visit in the past year; had an oral health problem in the previous year; or do not have a dental home. Adults aged 60 and above and those earning \$100,000 annually are less likely to disagree with this

statement (Appendix E3). Adults are more likely to disagree with the statement, “My oral health provider believed me when I reported my oral health needs, knowledge, and behaviors,” at their last dental visit if they identify as Hispanic; did not have a dental visit in the past year; or do not have a dental home. Conversely, adults earning \$60,000 annually or more are less likely to disagree with this statement (Appendix E4).

In addition to positive experiences, survey respondents were also asked how often in the last year they experienced different negative interactions with oral health care staff. Fifteen percent of adults say they received poorer oral health care than others. The same percentage (15%) say they felt their oral health team was not listening to what they were saying. Slightly fewer adults (12%) say they felt a member of their oral health team acted as if the team member was better than they were (12%) or thought they were not smart (12%). Seven percent say a member of the oral health team acted as if they were afraid of them, and the same percentage say an oral health team member called them names or insulted them (7%) or threatened or harassed them (7%).

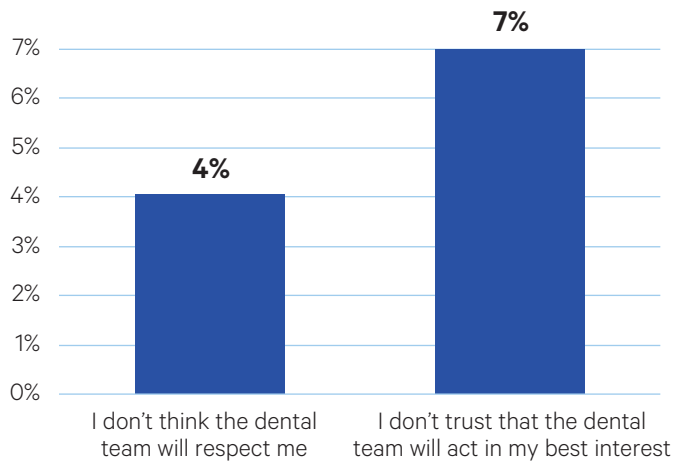
How often have any of the following things happened to you in the last year (sometimes/most of the time/always)?



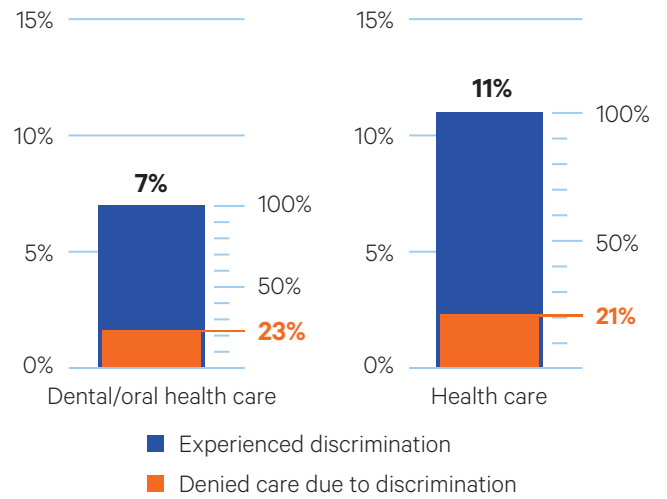
In addition to adults experiencing disrespectful treatment in the oral health setting, 7% of adults say they have experienced discrimination in the oral health care setting. Of those experiencing this discrimination, 23% say they have been denied oral health care due to discrimination. Slightly more adults say they have experienced discrimination in health care (for example, in a primary care physician's office; 11%) compared to oral health care. And, of those, 21% say they have been denied health care due to discrimination.

Discriminatory or disrespectful treatment by the oral health care team may affect whether individuals seek routine or preventive oral health care. Four percent of adults who say they do not plan to seek such care in the coming year say they plan to avoid the oral health care setting because they do not think the oral health team will respect them. Even more adults who do not intend to seek care say they do not believe the oral health team will act in their best interest (7%).

Which of the following reasons explain why you do not plan on seeing an oral health care provider in the next year for routine or preventive care?



Have you ever experienced discrimination in dental or health care/ been denied dental or health care due to discrimination (yes)?



Discriminatory or disrespectful treatment by the oral health care team may affect whether individuals seek routine or preventive oral health care.



Summary

A key to understanding how best to address such disparities is determining how individuals perceive the oral health care system and their experiences within it. Adults surveyed, overall, feel that their oral health providers treat them with respect, consider their best interests when creating treatment plans, and provide high-value oral health care. Adults surveyed are focused on preventing future oral health problems, minimizing costs, and receiving care from oral health teams that understand their needs. They are not very familiar with value-based approaches. This lack of knowledge presents a significant opportunity for further education, particularly as [patient-reported outcomes](#) are used more often to assess the value of oral health care.

Adults are knowledgeable about the link between oral and overall health but do not feel that having colocated oral health and primary care would increase their access to oral health care. They are comfortable with oral health providers screening for systemic conditions but have yet to generally experience these types of screenings or referrals to other health care providers in large numbers. Opinions are mixed regarding oral health providers administering vaccinations, such as those for the flu and HPV. Providing [integrated dental and medical care across the life span](#), as noted earlier, can help increase access to health screenings in underserved communities and improve overall health outcomes for patients.

Minimally invasive care is a new concept for individuals who were surveyed, with only one-third saying they would opt for a brush-on treatment (such as silver diamine fluoride [SDF]) to treat caries lesions. Adults are also mixed as to whether to opt for a more invasive, more conclusive treatment (e.g., a filling or crown) or a less invasive, less certain treatment (e.g., SDF). As more health care professionals make use of the [American Medical Association–approved billing code for SDF](#), more individuals will become familiar with this treatment and likely begin asking about it on their own.

Adults surveyed, overall, feel that their oral health providers treat them with respect, consider their best interests when creating treatment plans, and provide high-value oral health care.

Few adults surveyed have had a previous teledentistry visit, so it is challenging to draw representative conclusions from these results. Among the small number of individuals who have had a teledentistry visit, however, most are somewhat or very satisfied with their experience. They say their teledentistry visit was the same as or better than a face-to-face oral health visit. Less than a third of respondents, though, felt that teledentistry would provide for their oral health needs, improve their access to oral health services, or replace an office visit. The use of teledentistry increased exponentially during the COVID-19 pandemic, and more than 1 in 10 dentists say they [plan to continue using teledentistry in the future](#). Oral health providers can continue to use teledentistry for screenings, examinations, information sharing, emergency triage, and follow-up visits. Teledentistry is key to [reaching underserved communities](#), including individuals with barriers to care, such as those living in rural areas, by removing the need to travel for oral health care for certain types of visits. Oral health providers' use of teledentistry is influenced by reimbursement or lack thereof; [policy changes by states and payors](#) have the potential to significantly improve access to this technology for patients and providers.

Methodology

[The State of Oral Health Equity in America \(SOHEA\)](#) survey is a nationally representative survey of consumer and patient attitudes, experiences, and behaviors related to oral health. It was designed by CareQuest Institute for Oral Health. The survey was administered in January and February 2023 to adults aged 18 and older by NORC at the University of Chicago as part of the AmeriSpeak panel. AmeriSpeak is a probability-based panel designed to be representative of the US household population. Randomly selected US households were sampled using area probability and address-based sampling, with a known, nonzero probability of selection from the NORC National Sample Frame. Sampled households were contacted by US mail, telephone, and field interviewers. A sampling unit of 18,521 was used, with a final sample size of 5,240 for a survey completion rate of 28.3% and a final weighted cumulative response rate (through all phases of panel recruitment and retention and survey completion) of 4.4%. All data presented account for appropriate sample weights.

When possible, data from 2023 were combined with the [2021 \(N=5,320\)](#) and [2022 \(N=5,682\)](#) SOHEA rounds. Crosstab analyses were used to determine significant differences in frequencies between groups. We presented regression analysis results for outcomes of interest controlling for demographics such as age, gender (male/female); race/ethnicity (Asian, Black, Hispanic, white, other); dental insurance (yes/no); geographic

location (urban, rural, suburban); household income (under \$30,000, \$30,000–\$60,000, \$60,000–\$100,000, \$100,000 or above); level of education (less than high school, high school graduate or equivalent, some college/associate's degree, bachelor's degree, postgraduate/professional degree); whether they had a dental visit in the last year (yes/no); whether they had at least one oral health problem in the previous year (yes/no); and whether they have a dental home or usual source of dental care (yes/no). For the sake of clarity, the results of statistically significant ($p < 0.05$) regression analyses are phrased as respondents being "more/less likely" to give a specific response. All results presented are statistically significant ($p < 0.05$).

While most respondents report being treated with respect by their oral health team, a small percentage of respondents say they experienced discriminatory and disrespectful treatment by the oral health team, including being denied care due to discrimination. Experiencing [discrimination in the oral health care setting](#) is associated with fair to poor self-rated oral health and irregular dental attendance. This highlights the need for [increasing representation of underrepresented minority individuals in oral health care](#), as well as raising awareness of and addressing [implicit bias among oral health providers](#).

This report emphasizes the need for patient-focused outcomes within oral health care. Not all individuals participating in the survey were regular consumers of oral health care, and examining the responses of those who either did not have a dental visit in the last year or do not have a dental home can help increase understanding of barriers to care. Addressing these barriers holds the promise of improving access and equity within oral health care.

The restricted response options for demographic questions in this survey and report (particularly for race and ethnicity) represent a current limitation of the data. Future data analyses and reports from the SOHEA survey will employ equitable data collection methods, focused on questions that allow more granular reporting of such factors as race, ethnicity, language, disability, sexual orientation, and gender identity (REALD-SOGI) by respondents. By collecting data in this manner, we will be able to more accurately detect and describe oral health inequities, which is a key step in creating a health care system that is accessible, equitable, and integrated for all.

Appendix A1

Value-Based Care Regression Analysis Results: On What Are Your Oral Health Provider's Treatment Decisions Based?

Question	Variable	Categories	OR	95% CI	P value
Are the treatment decisions your oral health provider makes based more often on the best care for you or more often on what is most profitable for the provider? <i>Most profitable</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	0.96	0.77–1.21	0.7
		45–59 years	1.17	0.94–1.46	0.2
		60+ years	0.88	0.70–1.10	0.3
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.01	0.87–1.17	0.9
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.81	0.63–1.02	0.082
		Hispanic	1.07	0.88–1.31	0.5
		Asian	0.87	0.64–1.19	0.4
		Other	1.42	0.93–2.13	0.10
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	0.96	0.81–1.14	0.7
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	1.20	0.97–1.48	0.10
		Urban	1.40	1.12–1.76	0.004
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	0.97	0.79–1.20	0.8
		\$60,000–under \$100,000	0.79	0.63–0.98	0.036
		\$100,000 or more	0.72	0.57–0.91	0.007
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.73	0.55–0.96	0.023
		Some college/associate's degree	0.93	0.70–1.23	0.6
Bachelor's degree		1.15	0.85–1.55	0.4	
Postgraduate study/professional degree		1.13	0.81–1.58	0.5	
Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	More than a year ago	1.59	1.33–1.90	<0.001	
Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	Yes	1.62	1.40–1.88	<0.001	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	1.95	1.61–2.37	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix A2

Value-Based Care Regression Analysis Results: Quality of Care Associated with Value

Question	Variable	Categories	OR	95% CI	P value
Which do you associate most with value when thinking about your overall health care? <i>Quality of care</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	0.83	0.69–1.01	0.061
		45–59 years	0.89	0.73–1.07	0.2
		60+ years	0.81	0.67–0.97	0.023
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	0.98	0.88–1.11	0.8
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.86	0.71–1.04	0.11
		Hispanic	0.92	0.78–1.09	0.3
		Asian	0.93	0.73–1.19	0.6
		Other	1.23	0.84–1.80	0.3
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	0.98	0.85–1.13	0.8
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	0.93	0.79–1.10	0.4
		Urban	0.92	0.76–1.10	0.4
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.22	1.02–1.46	0.026
		\$60,000–under \$100,000	1.28	1.06–1.54	0.011
		\$100,000 or more	1.61	1.32–1.96	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.03	0.81–1.31	0.8
		Some college/associate’s degree	1.30	1.02–1.66	0.035
		Bachelor’s degree	1.40	1.08–1.81	0.011
		Postgraduate study/professional degree	1.49	1.12–1.97	0.005
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	0.69	0.59–0.80	<0.001
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Yes	0.91	0.81–1.03	0.13
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	0.71	0.59–0.84	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix A3

Value-Based Care Regression Analysis Results: Importance of Dental Office Accepting My Insurance

Question	Variable	Categories	OR	95% CI	P value
What is most important to you when you think about choosing where to receive dental care? <i>Dental office accepts my insurance</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.14	0.93–1.41	0.2
		45–59 years	0.98	0.80–1.20	0.9
		60+ years	0.74	0.61–0.90	0.002
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.05	0.93–1.19	0.4
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.74	0.61–0.91	0.003
		Hispanic	0.91	0.76–1.09	0.3
		Asian	0.77	0.60–1.00	0.047
	Other		1.08	0.71–1.67	0.7
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	0.57	0.49–0.66	<0.001
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	1.01	0.85–1.21	>0.9
		Urban	1.06	0.87–1.29	0.6
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.37	1.13–1.65	0.001
		\$60,000–under \$100,000	1.14	0.93–1.39	0.2
		\$100,000 or more	0.83	0.68–1.02	0.085
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.91	0.70–1.18	0.5
		Some college/associate's degree	0.91	0.70–1.18	0.5
		Bachelor's degree	0.75	0.56–0.98	0.038
		Postgraduate study/professional degree	0.76	0.57–1.03	0.077
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	1.07	0.91–1.26	0.4
Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	Yes	1.05	0.93–1.19	0.4	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	1.16	0.96–1.40	0.12	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix A4

Value-Based Care Regression Analysis Results: Should Oral Health Providers Be Financially Rewarded for Patients' Health?

Question	Variable	Categories	OR	95% CI	P value
Do you think oral health providers should be financially rewarded by insurance companies for how healthy their patients are? No	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.03	0.81–1.29	0.8
		45–59 years	1.20	0.95–1.52	0.12
		60+ years	1.13	0.90–1.42	0.3
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.95	1.69–2.26	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.72	0.57–0.90	0.005
		Hispanic	0.59	0.48–0.72	<0.001
		Asian	0.48	0.35–0.65	<0.001
		Other	0.87	0.54–1.39	0.6
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.20	1.01–1.43	0.035
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	0.92	0.75–1.13	0.4
		Urban	0.93	0.74–1.17	0.5
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.47	1.19–1.83	<0.001
		\$60,000–under \$100,000	1.62	1.29–2.05	<0.001
		\$100,000 or more	1.32	1.04–1.69	0.025
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.42	1.06–1.91	0.020
		Some college/associate's degree	1.10	0.81–1.48	0.5
		Bachelor's degree	1.20	0.88–1.66	0.3
		Postgraduate study/professional degree	1.23	0.87–1.73	0.2
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	1.11	0.92–1.34	0.3
Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	Yes	0.97	0.84–1.12	0.7	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	1.27	1.02–1.58	0.030	

OR = odds ratio; 95% CI = 95% confidence interval; *ref* = variable reference level; **bold** = significant at $p < 0.05$

Appendix B1

Medical-Dental Integration Regression Analysis Results: Referral to Primary Care Provider

Question	Variable	Categories	OR	95% CI	P value
Has your dentist ever referred you to any of the following? Primary Care Provider No	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	0.98	0.64–1.49	>0.9
		45–59 years	1.70	1.05–2.77	0.031
		60+ years	2.33	1.43–3.86	<0.001
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.26	0.91–1.73	0.2
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.26	0.17–0.39	<0.001
		Hispanic	0.43	0.28–0.66	<0.001
		Asian	0.36	0.20–0.70	0.001
		Other	0.48	0.21–1.34	0.11
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.14	0.78–1.69	0.5
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	0.84	0.51–1.34	0.5
		Urban	1.07	0.63–1.77	0.8
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	0.87	0.58–1.31	0.5
		\$60,000–under \$100,000	1.25	0.76–2.07	0.4
		\$100,000 or more	1.40	0.81–2.43	0.2
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.74	0.44–1.22	0.3
		Some college/associate’s degree	1.19	0.68–2.05	0.5
		Bachelor’s degree	1.91	0.98–3.77	0.057
		Postgraduate study/professional degree	1.59	0.75–3.49	0.2
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	1.44	0.98–2.15	0.071
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		0.49	0.34–0.68	<0.001	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	0.80	0.53–1.23	0.3	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix B2

Medical-Dental Integration Regression Analysis Results: Referral to Mental Health Provider

Question	Variable	Categories	OR	95% CI	P value
Has your dentist ever referred you to any of the following? Mental Health Provider No	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	0.74	0.46–1.18	0.2
		45–59 years	1.36	0.81–2.32	0.2
		60+ years	1.44	0.88–2.36	0.15
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.83	1.32–2.55	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.32	0.21–0.48	<0.001
		Hispanic	0.59	0.38–0.93	0.021
		Asian	0.62	0.32–1.33	0.2
		Other	0.47	0.21–1.23	0.085
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.26	0.84–1.95	0.3
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	0.86	0.53–1.33	0.5
		Urban	1.22	0.73–2.00	0.4
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.31	0.86–2.00	0.2
		\$60,000–under \$100,000	1.71	1.06–2.80	0.028
		\$100,000 or more	3.46	1.95–6.30	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.92	0.52–1.57	0.8
		Some college/associate's degree	1.33	0.72–2.37	0.3
		Bachelor's degree	1.85	0.92–3.71	0.082
		Postgraduate study/professional degree	1.23	0.58–2.63	0.6
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	1.05	0.71–1.56	0.8
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		0.60	0.43–0.84	0.003	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	1.37	0.86–2.24	0.2	

OR = odds ratio; 95% CI = 95% confidence interval; *ref* = variable reference level; **bold = significant at p<0.05**

Appendix B3

Medical-Dental Integration Regression Analysis Results: Referral to Other Medical Provider

Question	Variable	Categories	OR	95% CI	P value
Has your dentist ever referred you to any of the following? Other Medical Provider No	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	0.95	0.66–1.36	0.8
		45–59 years	1.33	0.91–1.94	0.14
		60+ years	0.82	0.58–1.15	0.3
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.54	1.23–1.93	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	1.06	0.75–1.52	0.7
		Hispanic	2.14	1.47–3.19	<0.001
		Asian	1.16	0.76–1.83	0.5
		Other	1.22	0.61–2.79	0.6
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.13	0.86–1.50	0.4
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	0.63	0.44–0.89	0.012
		Urban	0.56	0.38–0.81	0.002
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.67	1.19–2.36	0.003
		\$60,000–under \$100,000	1.35	0.95–1.90	0.094
		\$100,000 or more	1.42	0.99–2.02	0.056
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.77	1.16–2.68	0.007
		Some college/associate’s degree	1.79	1.16–2.74	0.007
		Bachelor’s degree	1.35	0.87–2.09	0.2
		Postgraduate study/ professional degree	1.04	0.65–1.66	0.9
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	2.27	1.64–3.19	<0.001
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		0.49	0.39–0.62	<0.001	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	0.81	0.58–1.15	0.2	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix B4

Medical-Dental Integration Regression Analysis Results: Colocation of Dentist and Medical Doctor

Question	Variable	Categories	OR	95% CI	P value
I would be more likely to seek dental care if my dentist and doctor were located in the same office. <i>Somewhat or strongly disagree, neither agree nor disagree</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.06	0.85–1.30	0.6
		45–59 years	1.24	1.00–1.53	0.053
		60+ years	1.79	1.45–2.23	<0.001
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.15	1.00–1.33	0.049
	Race/ethnicity	White	<i>Ref</i>	<i>Ref</i>	<i>Ref</i>
		Black	0.28	0.23–0.34	<0.001
		Hispanic	0.41	0.34–0.49	<0.001
		Asian	0.30	0.23–0.40	<0.001
		Other	0.42	0.28–0.40	<0.001
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.04	0.88–1.23	0.7
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	0.74	0.60–0.92	0.007
		Urban	0.74	0.59–0.93	<0.001
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.29	1.06–1.57	0.011
		\$60,000–under \$100,000	1.51	1.21–1.87	<0.001
		\$100,000 or more	1.63	1.29–2.06	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.33	1.03–1.71	0.027
		Some college/associate’s degree	1.57	1.21–2.03	<0.001
		Bachelor’s degree	1.78	1.34–2.36	<0.001
		Post-graduate study/professional degree	2.32	1.66–3.23	<0.001
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	0.71	0.60–0.85	<0.001
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		0.86	0.74–0.99	0.037	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	0.95	0.78–1.16	0.6	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix B5

Medical-Dental Integration Regression Analysis Results: Medical and Dental Insurance Offered Through Same Company

Question	Variable	Categories	OR	95% CI	P value
Would you prefer to have your medical and dental insurance provided through the same insurance company? No	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	0.95	0.68–1.35	0.8
		45–59 years	0.95	0.68–1.35	0.8
		60+ years	1.31	0.95–1.83	0.10
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.11	0.90–1.37	0.3
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	1.73	1.25–2.36	<0.001
		Hispanic	1.35	1.00–1.80	0.043
		Asian	1.67	1.12–2.46	0.010
		Other	0.77	0.31–1.62	0.5
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.37	1.07–1.74	0.011
	Urbanicity	Rural	<i>Ref</i>	<i>Ref</i>	<i>Ref</i>
		Suburban	1.13	0.83–1.56	0.4
		Urban	0.87	0.62–1.24	0.4
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	0.79	0.57–1.11	0.2
		\$60,000–under \$100,000	1.13	0.80–1.58	0.5
		\$100,000 or more	1.82	1.29–2.56	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.80	0.54–1.21	0.3
		Some college/associate's degree	0.85	0.57–1.28	0.4
		Bachelor's degree	0.69	0.44–1.08	0.10
		Post-graduate study/professional degree	1.00	0.63–1.60	>0.9
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	0.65	0.49–0.86	0.003
Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	Yes	1.07	0.86–1.32	0.5	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	2.29	1.71–3.08	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix B6

Medical-Dental Integration Regression Analysis Results: Consider Receiving a Flu Vaccine from Your Dentist

Question	Variable	Categories	OR	95% CI	P value
Would you consider receiving a flu vaccine from your dentist? No	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.15	0.92–1.44	0.2
		45–59 years	1.13	0.90–1.41	0.3
		60+ years	0.80	0.65–0.99	0.042
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.57	1.37–1.79	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	1.18	0.94–1.48	0.15
		Hispanic	1.12	0.93–1.37	0.2
		Asian	1.12	0.86–1.47	0.4
		Other	1.02	0.66–1.60	>0.9
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	0.99	0.84–1.17	>0.9
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	0.91	0.74–1.10	0.3
		Urban	0.84	0.68–1.04	0.11
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.02	0.83–1.27	0.8
		\$60,000–under \$100,000	1.11	0.88–1.38	0.4
		\$100,000 or more	0.78	0.62–0.97	0.027
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.88	0.64–1.19	0.4
		Some college/associate’s degree	0.61	0.45–0.82	0.001
		Bachelor’s degree	0.42	0.31–0.58	<0.001
		Postgraduate study/professional degree	0.31	0.22–0.44	<0.001
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	1.25	1.05–1.50	0.014
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Yes	0.89	0.78–1.02	0.085
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	1.29	1.04–1.59	0.019	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix B7

Medical-Dental Integration Regression Analysis Results: Oral Health Provider Qualified to Educate Patients about HPV?

Question	Variable	Categories	OR	95% CI	P value
Do you think a dentist or other oral health care provider, such as a dental hygienist, is qualified to educate patients about the HPV vaccine? No	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.35	1.12–1.64	0.002
		45–59 years	1.31	1.09–1.58	0.005
		60+ years	0.82	0.68–0.99	0.035
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.42	1.26–1.60	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	1.11	0.91–1.34	0.3
		Hispanic	1.19	1.00–1.40	0.046
		Asian	0.92	0.71–1.18	0.5
		Other	0.76	0.52–1.12	0.2
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.03	0.90–1.19	0.7
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	1.06	0.90–1.25	0.5
		Urban	0.91	0.76–1.09	0.3
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.11	0.93–1.32	0.3
		\$60,000–under \$100,000	1.03	0.86–1.24	0.7
		\$100,000 or more	0.92	0.75–1.12	0.4
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.11	0.88–1.41	0.4
		Some college/associate's degree	0.93	0.73–1.18	0.5
		Bachelor's degree	0.69	0.53–0.89	0.004
		Postgraduate study/professional degree	0.61	0.46–0.80	<0.001
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	1.10	0.94–1.28	0.2
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		0.92	0.81–1.03	0.15	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	1.17	0.98–1.39	0.077	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix B8

Medical-Dental Integration Regression Analysis Results: Consent to HPV Vaccine for Your Child if Dentist Recommends

Question	Variable	Categories	OR	95% CI	P value
How likely are you to consent to an HPV vaccine for your child if an oral health care provider recommends it? <i>Somewhat/very unlikely</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.04	0.68–1.61	0.9
		45–59 years	1.17	0.72–1.89	0.5
		60+ years	1.35	0.47–3.67	0.6
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.22	0.91–1.64	0.2
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.99	0.61–1.57	>0.9
		Hispanic	1.00	0.68–1.47	>0.9
		Asian	0.67	0.35–1.24	0.2
		Other	1.61	0.63–4.00	0.3
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	0.69	0.46–1.04	0.078
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	0.95	0.63–1.45	0.8
		Urban	0.94	0.60–1.47	0.8
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.15	0.73–1.81	0.5
		\$60,000–under \$100,000	1.17	0.71–1.94	0.5
		\$100,000 or more	0.85	0.48–1.51	0.6
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.66	0.34–1.28	0.2
		Some college/associate’s degree	1.09	0.57–2.11	0.8
		Bachelor’s degree	0.62	0.30–1.29	0.2
		Postgraduate study/professional degree	0.57	0.26–1.25	0.2
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	1.42	0.98–2.07	0.065
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		0.75	0.55–1.01	0.057	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	1.26	0.83–1.93	0.3	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix C1

Minimally Invasive Care Regression Analysis Results: Choose Filling for Cavities over Other Options

Question	Variable	Categories	OR	95% CI	P value
If you had cavities on your teeth, would you choose this new treatment, a filling, or a crown/implant? <i>Filling</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	0.56	0.44–0.70	<0.001
		45–59 years	0.47	0.37–0.59	<0.001
		60+ years	0.53	0.42–0.66	<0.001
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	0.85	0.74–0.98	0.030
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	1.27	1.00–1.61	0.052
		Hispanic	1.15	0.95–1.40	0.2
		Asian	1.82	1.35–2.45	<0.001
	Other	Other	0.74	0.46–1.20	0.2
		Dental insurance	Yes	<i>ref</i>	<i>ref</i>
	No	No	1.03	0.87–1.22	0.7
		Urbanicity	Rural	<i>ref</i>	<i>ref</i>
	Suburban		0.98	0.80–1.19	0.8
	Urban		0.90	0.72–1.12	0.3
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	0.76	0.61–0.95	0.017
		\$60,000–under \$100,000	0.93	0.74–1.17	0.5
		\$100,000 or more	0.79	0.62–1.01	0.059
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.62	0.46–0.84	0.002
		Some college/associate’s degree	0.62	0.45–0.84	0.002
		Bachelor’s degree	0.46	0.33–0.63	<0.001
		Postgraduate study/professional degree	0.54	0.38–0.76	<0.001
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	0.77	0.64–0.93	0.007
Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	Yes	0.76	0.66–0.88	<0.001	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	0.84	0.68–1.04	0.12	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix C2

Minimally Invasive Care Regression Analysis Results: Choose Crown/Implant for Cavities over Other Options

Question	Variable	Categories	OR	95% CI	P value
If you had cavities on your teeth, would you choose this new treatment, a filling, or a crown/implant? <i>Crown/implant</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	0.81	0.52–1.24	0.3
		45–59 years	0.68	0.44–1.06	0.085
		60+ years	0.56	0.36–0.86	0.008
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	0.61	0.45–0.81	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	2.68	1.84–3.89	<0.001
		Hispanic	0.91	0.60–1.39	0.7
		Asian	1.07	0.50–2.30	0.9
		Other	0.74	0.27–2.01	0.6
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.02	0.73–1.42	>0.9
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	0.99	0.67–1.47	>0.9
		Urban	1.04	0.68–1.59	0.9
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	0.69	0.48–0.99	0.046
		\$60,000–under \$100,000	0.41	0.26–0.64	<0.001
		\$100,000 or more	0.31	0.19–0.51	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.54	0.34–0.86	0.010
		Some college/associate’s degree	0.51	0.31–0.83	0.007
		Bachelor’s degree	0.23	0.12–0.41	<0.001
		Postgraduate study/professional degree	0.37	0.19–0.72	0.003
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	0.76	0.53–1.08	0.12
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		1.75	1.29–2.37	<0.001	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	0.85	0.57–1.26	0.4	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix D1

Teledentistry Regression Analysis Results: Have You Ever Been Seen Through Teledentistry?

Question	Variable	Categories	OR	95% CI	P value
Teledentistry is the use of interactive audio, video, or data communications to get dental or oral health care. Have you ever been seen through teledentistry? No	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.01	0.79–1.30	>0.9
		45–59 years	1.47	1.12–1.94	0.006
		60+ years	2.73	2.01–3.74	<0.001
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.56	1.28–1.89	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.18	0.14–0.24	<0.001
		Hispanic	0.30	0.23–0.39	<0.001
		Asian	0.12	0.09–0.17	<0.001
		Other	1.15	0.54–3.00	0.7
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	0.79	0.64–0.99	0.037
	Urbanicity	Nonmetro area	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Metro area	1.41	1.07–1.83	0.012
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.47	1.16–1.88	0.002
		\$60,000–under \$100,000	1.90	1.42–2.56	<0.001
		\$100,000 or more	1.82	1.34–2.50	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.29	0.98–1.68	0.063
		Some college/associate’s degree	2.00	1.49–2.69	<0.001
		Bachelor’s degree	2.82	1.96–4.08	<0.001
		Postgraduate study/professional degree	5.61	3.39–9.70	<0.001
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	0.69	0.56–0.85	<0.001
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		0.60	0.49–0.73	<0.001	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	2.28	1.77–2.97	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix D2

Teledentistry Regression Analysis Results: Satisfaction with Teledentistry Experience

Question	Variable	Categories	OR	95% CI	P value
How would you rate your general experience with teledentistry? <i>Somewhat/very unsatisfied</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.82	0.85–3.99	0.13
		45–59 years	1.20	0.56–2.57	0.6
		60+ years	1.30	0.52–3.18	0.6
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	0.89	0.51–1.53	0.7
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.59	0.31–1.12	0.11
		Hispanic	0.57	0.28–1.16	0.12
		Asian	0.03	0.00–0.18	0.003
		Other	0.03	—	0.2
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.21	0.64–2.29	0.6
	Urbanicity	Nonmetro area	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Metro area	1.34	0.66–2.81	0.4
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	2.52	1.29–5.02	0.007
		\$60,000–under \$100,000	4.56	2.06–10.3	<0.001
		\$100,000 or more	1.10	0.30–3.49	0.9
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.16	0.07–0.35	<0.001
		Some college/associate’s degree	0.27	0.12–0.59	0.001
		Bachelor’s degree	0.18	0.06–0.53	0.002
Postgraduate study/ professional degree		0.00	—	>0.9	
Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	More than a year ago	1.04	0.57–1.89	0.9	
Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	Yes	0.69	0.38–1.26	0.2	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	2.33	1.20–4.51	0.012	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix D3

Teledentistry Regression Analysis Results: Teledentistry Would Improve My Access to Oral Health Care Services

Question	Variable	Categories	OR	95% CI	P value
Teledentistry would improve my access to oral health care services. <i>Somewhat/strongly disagree</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.13	1.01–1.26	0.031
		45–59 years	1.20	1.07–1.35	0.002
		60+ years	1.64	1.46–1.83	<0.001
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.46	1.36–1.57	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.52	0.46–0.58	<0.001
		Hispanic	0.63	0.57–0.70	<0.001
		Asian	0.39	0.34–0.45	<0.001
		Other	0.70	0.57–0.88	0.001
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.08	0.99–1.18	0.085
	Urbanicity	Nonmetro area	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Metro area	0.94	0.85–1.05	0.3
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.08	0.98–1.20	0.13
		\$60,000–under \$100,000	1.13	1.01–1.27	0.034
		\$100,000 or more	1.44	1.28–1.63	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.91	0.79–1.05	0.2
		Some college/associate’s degree	1.18	1.02–1.36	0.024
		Bachelor’s degree	1.21	1.04–1.41	0.015
		Postgraduate study/professional degree	1.25	1.05–1.48	0.011
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	0.65	0.60–0.71	<0.001
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Yes	0.76	0.70–0.81	<0.001
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	0.80	0.72–0.88	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix D4

Teledentistry Regression Analysis Results: Choosing Teledentistry over In-Office Visit

Question	Variable	Categories	OR	95% CI	P value
If I had the option of choosing between an in-office visit or a teledentistry visit, I would choose teledentistry. <i>Somewhat/strongly disagree</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	0.97	0.85–1.10	0.6
		45–59 years	0.93	0.81–1.06	0.3
		60+ years	1.53	1.33–1.75	<0.001
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.28	1.17–1.40	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.43	0.38–0.49	<0.001
		Hispanic	0.62	0.55–0.69	<0.001
		Asian	0.35	0.29–0.41	<0.001
		Other	0.74	0.57–0.96	0.021
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	0.92	0.83–1.02	0.12
	Urbanicity	Nonmetro area	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Metro area	1.04	0.92–1.18	0.5
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.18	1.05–1.33	0.007
		\$60,000–under \$100,000	1.20	1.05–1.36	0.008
		\$100,000 or more	1.71	1.48–1.99	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.15	0.99–1.34	0.068
		Some college/associate’s degree	1.70	1.45–1.99	<0.001
		Bachelor’s degree	2.37	1.98–2.84	<0.001
		Postgraduate study/professional degree	2.18	1.77–2.68	<0.001
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	0.55	0.50–0.61	<0.001
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Yes	0.74	0.67–0.81	<0.001
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	0.63	0.56–0.70	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix D5

Teledentistry Regression Analysis Results: Teledentistry Would Provide for My Oral Health Needs

Question	Variable	Categories	OR	95% CI	P value
Teledentistry would provide for my oral health needs. <i>Somewhat/strongly disagree</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.15	1.01–1.30	0.030
		45–59 years	1.19	1.05–1.35	0.007
		60+ years	1.62	1.43–1.84	<0.001
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.46	1.35–1.59	<0.001
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	0.31	0.27–0.35	<0.001
		Hispanic	0.47	0.42–0.52	<0.001
		Asian	0.25	0.21–0.29	<0.001
		Other	0.71	0.55–0.92	0.007
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.08	0.98–1.19	0.13
	Urbanicity	Nonmetro area	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Metro area	1.00	0.89–1.13	>0.9
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.19	1.06–1.34	0.003
		\$60,000–under \$100,000	1.15	1.02–1.31	0.028
		\$100,000 or more	1.44	1.26–1.66	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	0.87	0.75–1.01	0.067
		Some college/associate’s degree	1.32	1.13–1.54	<0.001
		Bachelor’s degree	1.62	1.36–1.92	<0.001
		Postgraduate study/professional degree	1.83	1.51–2.23	<0.001
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	0.76	0.68–0.84	<0.001
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		0.84	0.78–0.92	<0.001	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	0.74	0.66–0.83	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix E1

Discrimination and Dignity Regression Analysis Results: My Oral Health Provider Respected Me

Question	Variable	Categories	OR	95% CI	P value
At my last oral health visit, my oral health provider respected me. <i>Somewhat or strongly disagree, neither agree nor disagree</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.15	0.88–1.51	0.3
		45–59 years	0.96	0.72–1.27	0.8
		60+ years	0.69	0.52–0.92	0.012
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.03	0.85–1.24	0.8
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	1.30	0.98–1.72	0.066
		Hispanic	1.31	1.02–1.67	0.032
		Asian	0.94	0.60–1.43	0.8
		Other	0.95	0.53–1.63	0.9
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.15	0.94–1.42	0.2
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	1.31	1.01–1.72	0.044
		Urban	1.08	0.81–1.45	0.6
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	0.93	0.73–1.19	0.6
		\$60,000–under \$100,000	0.80	0.61–1.05	0.11
		\$100,000 or more	0.51	0.37–0.70	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.29	0.92–1.82	0.15
		Some college/associate’s degree	1.13	0.80–1.61	0.5
		Bachelor’s degree	0.91	0.61–1.36	0.6
		Postgraduate study/professional degree	1.16	0.74–1.82	0.5
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
More than a year ago		2.10	1.68–2.61	<0.001	
Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	Yes	1.43	1.18–1.73	<0.001	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	3.31	2.65–4.15	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix E2

Discrimination and Dignity Regression Analysis Results: I Trusted the Oral Health Provider I Saw

Question	Variable	Categories	OR	95% CI	P value
At my last oral health visit, I trusted the oral health provider I saw. <i>Somewhat or strongly disagree, neither agree nor disagree</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.13	0.87–1.48	0.4
		45–59 years	1.00	0.76–1.32	>0.9
		60+ years	0.68	0.51–0.91	0.009
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.08	0.90–1.31	0.4
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	1.30	0.98–1.72	0.068
		Hispanic	1.59	1.25–2.02	<0.001
		Asian	1.16	0.76–1.72	0.5
		Other	1.05	0.59–1.77	0.9
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.10	0.89–1.35	0.4
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	1.27	0.97–1.66	0.084
		Urban	1.22	0.92–1.64	0.2
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	0.89	0.70–1.14	0.3
		\$60,000–under \$100,000	0.63	0.48–0.83	0.001
		\$100,000 or more	0.47	0.34–0.65	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.14	0.82–1.59	0.5
		Some college/associate’s degree	1.06	0.76–1.50	0.7
		Bachelor’s degree	1.06	0.72–1.55	0.8
		Postgraduate study/professional degree	1.14	0.73–1.77	0.6
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	1.85	1.48–2.29	<0.001
	Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>
Yes		1.27	1.05–1.53	0.013	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	4.22	3.39–5.28	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix E3

Discrimination and Dignity Regression Analysis Results: My Oral Health Provider Tried to Make Me Feel Comfortable and At Ease

Question	Variable	Categories	OR	95% CI	P value
At my last oral health visit, my oral health provider tried to make me feel comfortable and at ease. <i>Somewhat or strongly disagree, neither agree nor disagree</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.08	0.83–1.41	0.6
		45–59 years	0.97	0.74–1.28	0.8
		60+ years	0.62	0.47–0.82	<0.001
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.16	0.96–1.40	0.12
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	1.47	1.11–1.93	0.006
		Hispanic	1.50	1.18–1.90	<0.001
		Asian	1.36	0.89–2.01	0.14
		Other	1.02	0.57–1.74	>0.9
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.15	0.94–1.41	0.2
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	1.27	0.98–1.65	0.071
		Urban	1.08	0.82–1.44	0.6
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	1.06	0.84–1.35	0.6
		\$60,000–under \$100,000	0.81	0.62–1.07	0.14
		\$100,000 or more	0.50	0.36–0.68	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.20	0.87–1.67	0.3
		Some college/associate's degree	0.88	0.63–1.23	0.4
		Bachelor's degree	0.74	0.51–1.09	0.12
		Postgraduate study/professional degree	0.85	0.54–1.31	0.5
	Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>
		More than a year ago	1.71	1.38–2.12	<0.001
Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	Yes	1.31	1.08–1.58	0.005	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	3.67	2.94–4.58	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

Appendix E4

Discrimination and Dignity Regression Analysis Results: My Oral Health Provider Believed Me

Question	Variable	Categories	OR	95% CI	P value
At my last oral health visit, my oral health provider believed me when I reported my oral health needs, knowledge, and behaviors. <i>Somewhat or strongly disagree, neither agree nor disagree</i>	Age	18–29 years	<i>ref</i>	<i>ref</i>	<i>ref</i>
		30–44 years	1.03	0.81–1.31	0.8
		45–59 years	1.10	0.86–1.41	0.5
		60+ years	0.79	0.62–1.01	0.064
	Gender	Male	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Female	1.03	0.88–1.22	0.7
	Race/ethnicity	White	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Black	1.08	0.84–1.39	0.5
		Hispanic	1.29	1.04–1.59	0.021
		Asian	1.02	0.70–1.46	>0.9
		Other	0.92	0.55–1.50	0.7
	Dental insurance	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>
		No	1.09	0.91–1.31	0.4
	Urbanicity	Rural	<i>ref</i>	<i>ref</i>	<i>ref</i>
		Suburban	1.15	0.92–1.44	0.2
		Urban	1.12	0.87–1.43	0.4
	Income	Less than \$30,000	<i>ref</i>	<i>ref</i>	<i>ref</i>
		\$30,000–under \$60,000	0.89	0.72–1.10	0.3
		\$60,000–under \$100,000	0.68	0.53–0.86	0.002
		\$100,000 or more	0.52	0.39–0.68	<0.001
	Education	Less than high school	<i>ref</i>	<i>ref</i>	<i>ref</i>
		High school graduate or equivalent	1.16	0.87–1.57	0.3
		Some college/associate’s degree	0.99	0.73–1.34	>0.9
Bachelor’s degree		0.97	0.69–1.36	0.8	
Postgraduate study/professional degree		0.77	0.52–1.15	0.2	
Last dental visit	Within the last year	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	More than a year ago	2.38	1.97–2.87	<0.001	
Oral health symptom in the last year	No	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	Yes	1.07	0.97–1.26	0.4	
Dental home	Yes	<i>ref</i>	<i>ref</i>	<i>ref</i>	
	No	2.34	1.91–2.86	<0.001	

OR = odds ratio; 95% CI = 95% confidence interval; ref = variable reference level; **bold = significant at p<0.05**

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