BRIEF

Dental Services and the Impact of COVID-19

An Analysis of Private Claims

A FAIR Health Brief, September 16, 2020

Summary

The COVID-19 pandemic has left its mark on the entire US healthcare system, including the dental industry. In this study, FAIR Health delves into its database of private healthcare claims to study the impact of COVID-19 on dental service utilization. FAIR Health compares such utilization in the first six months of 2020 to the first six months of 2019, with special emphasis on March and April 2020, when the pandemic was rampant and many dental practices were closed, and June 2020, when many dental practices had reopened. The analysis is striated by age, state and procedure code, as well as by dental-related diagnoses in urgent care centers and emergency rooms (ERs). Among the findings:

- Use of dental services fell 75 percent in March 2020 and 79 percent in April 2020 compared to the same months the year before. In May 2020 compared to May 2019, the decline in utilization narrowed to 27 percent. In June 2020, there was a one percent increase in utilization compared to June 2019.
- In the period January-June 2020, patients 22 years and younger accounted for a larger percentage of dental services than in the same months the year before. Patients younger than 14 and patients aged 14-22 each accounted for two percent more than in January-June 2019.
- In March and April 2020 as compared to March and April 2019, the age group 14-22 showed a smaller decline in utilization of dental services than all other age groups.
- From June 2019 to June 2020, changes in dental service utilization varied greatly by age group. The youngest (22 and younger) and oldest (55 and older) age groups increased in utilization, while those in the middle (ages 23-54) decreased.
- All states in March and April 2020 exhibited some degree of decrease in dental service utilization compared to the corresponding months in 2019. The five largest decreases were in the Northeast and Midwest. The five smallest decreases were in the West in March and in the West and South in April.
- In June 2020, many states showed an increase in dental service utilization from the previous June, while other states decreased. The five largest decreases were in the Northeast and Midwest, the five largest increases in the West and South.
- From March and April 2019 to March and April 2020, comprehensive oral evaluations for new or established patients (D0150[1]) fell from 8th or 9th place among the most common dental procedures to 10th or 12th.
- Certain other procedures rose in utilization. Problem-focused, limited oral evaluations (D0140) rose from 11th place in March and April 2019 to 5th place in March 2020 and 4th place in April 2020.
- One procedure that rose to an even greater extent was the unspecified preventive procedure, by report (D1999), which, during the pandemic, was recommended for use to seek payment for the cost of additional personal protective equipment. It rose from number 366 in June 2019 to number 4 in June 2020.
- Dental procedures differed in how much of a rebound they showed in June 2020 as compared to June 2019. For problem-focused, limited oral evaluations (D0140), all age groups increased above their June 2019 levels. For comprehensive oral evaluations for new or established patients (D0150), no age group recovered to the level of the previous year's utilization. For periodic oral evaluations for established patients (D0120), some age groups showed increases, others decreases.
- From January and February 2020 to March and April 2020, dental caries (tooth decay or cavities) rose from fifth to fourth most common dental-related diagnosis presenting in urgent care centers and ERs.

[1] The Code on Dental Procedures and Nomenclature is published in *Current Dental Terminology (CDT)*, American Dental Association (ADA). All rights reserved.

Background

The COVID-19 pandemic has left its mark on the entire US healthcare system, including the dental industry. When the pandemic rapidly escalated in March and April 2020, many states banned elective dental procedures, including routine examinations and preventive care.[2,3] This was part of a broader effort to slow the spread of the novel coronavirus and preserve personal protective equipment for use in fighting COVID-19. In May, many of these state prohibitions expired and dental practices began to reopen for elective care, though with a variety of restrictions.[4] The Health Policy Institute of the American Dental Association (ADA) has predicted that US dental care spending could decline by up to 38 percent in 2020 and 20 percent in 2021.[5]

Overall patient health may suffer from postponement of routine dental visits.[6] Such postponements appear to be continuing. According to an ADA poll of dentists taken the week of August 10, 2020, 98.9 percent of respondents were open, but only 47.6 percent reported "business as usual"; 51.3 percent were open but had "lower patient volume than usual."[7]

In a series of studies, FAIR Health has examined several aspects of the COVID-19 pandemic. The first brief projected the costs to the nation of inpatient services for COVID-19 patients, and studied the potential of telehealth for helping to cope with the pandemic.[8] The second brief analyzed the impact of COVID-19 on hospitals and health systems.[9] The third brief concerned the impact of COVID-19 on healthcare professionals.[10] The fourth brief profiled COVID-19 patients by illuminating some of their key characteristics.[11] This fifth brief examines the impact of the pandemic on dental services.

---

[2] McGuireWoods, "State Governors' 'Stay-at-Home' and Prohibition on Elective Procedures Orders," July 27, 2020, https://www.mcguirewoods.com/client-resources/Alerts/2020/7/state-governors-stay-at-home-prohibition-elective-procedures-orders.

[3] ADA, *What Constitutes a Dental Emergency?*, updated March 31, 2020, https://success.ada.org/~/media/CPS/Files/Open%20Files/ADA_COVID19_Dental_Emergency_DDS.pdf.

[4] ADA Center for Professional Success, "COVID-19 State Mandates and Recommendations," August 5, 2020, https://success.ada.org/en/practice-management/patients/covid-19-state-mandates-and-recommendations.

[5] ADA Health Policy Institute, "COVID-19 Economic Impact on Dental Practices," https://www.ada.org/en/science-research/health-policy-institute/covid-19-dentists-economic-impact.

[6] ADA, "American Dental Association Responds to World Health Organization Recommendation: Dentistry Is Essential Health Care," August 12, 2020, https://www.ada.org/en/press-room/news-releases/2020-archives/august/american-dental-association-dentistry-is-essential-health-care?utm_source=adaorg&utm_medium=alertbar&utm_content=response-WHO&utm_campaign=covid-19.

[7] ADA Health Policy Institute, "COVID-19: Economic Impact on Dental Practices—Week of August 10 Results," https://surveys.ada.org/reports/RC/public/YWRhc3VydmV5cy01ZjM0M2RjZjc5NDFkZTAwMGY1M2JkZjUtVVJfNWlJWDFFU01IdmNDUlVO.

[8] FAIR Health, *COVID-19: The Projected Economic Impact of the COVID-19 Pandemic on the US Healthcare System*, A FAIR Health Brief, March 25, 2020, https://s3.amazonaws.com/media2.fairhealth.org/brief/asset/COVID-19%20-%20The%20Projected%20Economic%20Impact%20of%20the%20COVID-19%20Pandemic%20on%20the%20US%20Healthcare%20System.pdf.

[9] FAIR Health, *Illuminating the Impact of COVID-19 on Hospitals and Health Systems: A Comparative Study of Revenue and Utilization*, A FAIR Health Brief, May 12, 2020, https://s3.amazonaws.com/media2.fairhealth.org/brief/asset/Illuminating%20the%20Impact%20of%20COVID-19%20on%20Hospitals%20and%20Health%20Systems%20-%20A%20Comparative%20Study%20of%20Revenue%20and%20Utilization%20-%20A%20FAIR%20Health%20Brief.pdf.

[10] FAIR Health, *Healthcare Professionals and the Impact of COVID-19: A Comparative Study of Revenue and Utilization*, A FAIR Health Brief, June 10, 2020, https://s3.amazonaws.com/media2.fairhealth.org/brief/asset/Healthcare%20Professionals%20and%20the%20Impact%20of%20COVID-19%20-%20A%20Comparative%20Study%20of%20Revenue%20and%20Utilization%20-%20A%20FAIR%20Health%20Brief.pdf.

[11] FAIR Health, *Key Characteristics of COVID-19 Patients: Profiles Based on Analysis of Private Healthcare Claims*, A FAIR Health Brief, July 14, 2020, https://s3.amazonaws.com/media2.fairhealth.org/brief/asset/Key%20Characteristics%20of%20COVID-

To study this impact, FAIR Health analyzed data from its database of over 32 billion private healthcare claim records, the nation's largest such repository, which is growing by over 2 billion claim records per year. The study compares dental service utilization in the first six months of 2020 to the first six months of 2019, with special emphasis on March and April 2020, when the pandemic was first rampant and many dental practices were closed, and June 2020, when many dental practices had reopened. The analysis is striated by age, state and procedure code, as well as by dental-related diagnoses in urgent care centers and emergency rooms (ERs).

FAIR Health is a national, independent nonprofit organization dedicated to bringing transparency to healthcare costs and health insurance information. The data in its repository of private healthcare claims are contributed by over 60 payors and third-party administrators who insure or process claims for private insurance plans covering more than 150 million individuals—an estimated 75 percent of the nation's privately insured population. The dataset includes data on fully insured and employer self-funded plans and Medicare Advantage (Medicare Part C) enrollees, but not on uninsured individuals or those on Medicare Parts A, B and D.[12] Those insured under other government programs, such as Medicaid, CHIP, and state and local government programs, are also not included.

Methodology

From its repository of private claims, FAIR Health retrieved data with dates of service from January to June 2020 that were submitted to FAIR Health by July 31, 2020. FAIR Health also retrieved claims data with dates of service from January to June 2019, obtaining only those data that were submitted to FAIR Health by July 31, 2019. This restriction meant that the data would be subject to the same incurred but not reported (IBNR) conditions as the data retrieved for the corresponding time period in 2020, providing an "apples-to-apples" comparison of the lag in filing claims.[13] It was assumed that the rate of IBNR was the same in 2020 as in 2019.

Data were selected in two ways:

- **Dental claims data.** Data were selected that had a valid CDT® code on the claim line (any claim line with a procedure code beginning with a D*).
- **Diagnosis-based dental data from medical claims.** For the urgent care center and ER analysis, medical claims data were selected that had a diagnosis code indicating that the primary reason for the service was dental in nature. Diagnoses in the K00-K14 section of the ICD-10-CM diagnosis codes, which are the "Diseases of oral cavity and salivary glands," were used. The only diagnosis grouping in this section that was not used was "Diseases of the salivary glands," as these are typically not included in dental diagnoses. Examples of diagnoses used include:
    - K02.3: Arrested dental caries; and
    - K02.51-K02.53: Dental caries on pit and fissure surface.

Data were analyzed by month, age, procedure code and state. For volume evaluation, the number of claim lines received in 2019 was compared to the number of claim lines received in 2020. The calculation used was:

19%20Patients%20-%20Profiles%20Based%20on%20Analysis%20of%20Private%20Healthcare%20Claims%20-%20A%20FAIR%20Health%20Brief.pdf.

[12] FAIR Health also receives the entire collection of claims for traditional Medicare Parts A, B and D under the Centers for Medicare & Medicaid Services (CMS) Qualified Entity Program, but those data are not a source for this report.

[13] IBNR claims are valid claims for covered services that have been performed but not yet reported to the insurer.

$$\frac{Volume_{2020} - Volume_{2019}}{Volume_{2019}} = PercentChange$$

Where:

$Volume_{2020}$ is the utilization amount for the time period in 2020.

$Volume_{2019}$ is the utilization amount for the time period in 2019.

Results

Changes in Dental Service Utilization

In March and April 2020, as compared to March and April 2019, the dental industry underwent severe declines in utilization (figure 1). Use of dental services fell 75 percent in March 2020 and 79 percent in April 2020 compared to the same months the year before. These were months when the COVID-19 pandemic first became widespread in the United States and many states banned elective dental procedures. In May, many of these bans were lifted and dentists started reopening their doors, but there was still a 27 percent drop in the number of procedures performed in May 2020 compared to May 2019.

In June 2020, there was a one percent increase in utilization compared to June 2019, equivalent to the one percent increase in January 2020 compared to January 2019, before the pandemic had spread widely in the United States.

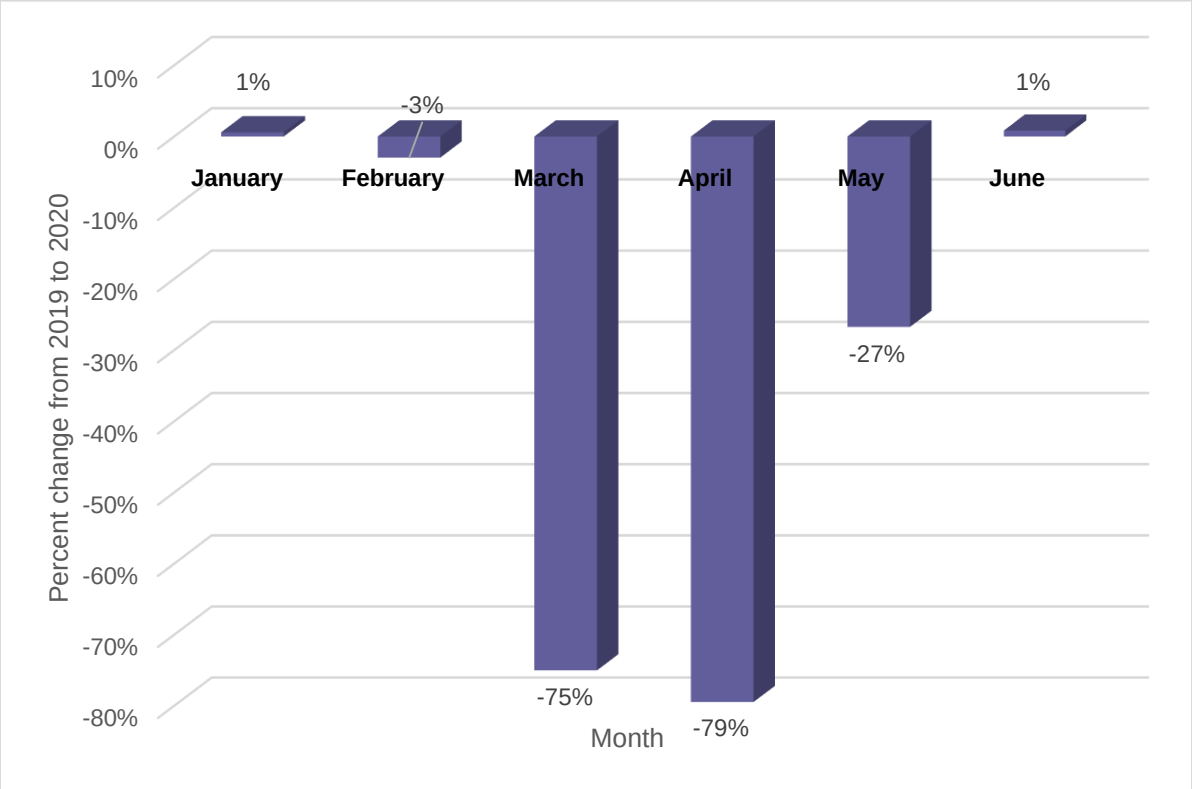


Figure 1. Monthly percent change in utilization of dental services from 2019 to 2020, nationally

The age distribution of dental claim lines in January-June 2020 skewed somewhat younger than in the same months in 2019 (figure 2). In 2020, individuals 22 years and younger accounted for a larger percentage of dental services than the year before. Patients younger than 14 rose from 16 percent of services in 2019 to 18 percent in 2020, and patients aged 14-22 increased from 11 percent to 13 percent. Patients 23 and older shifted one percent or remained the same, depending on the specific age group.

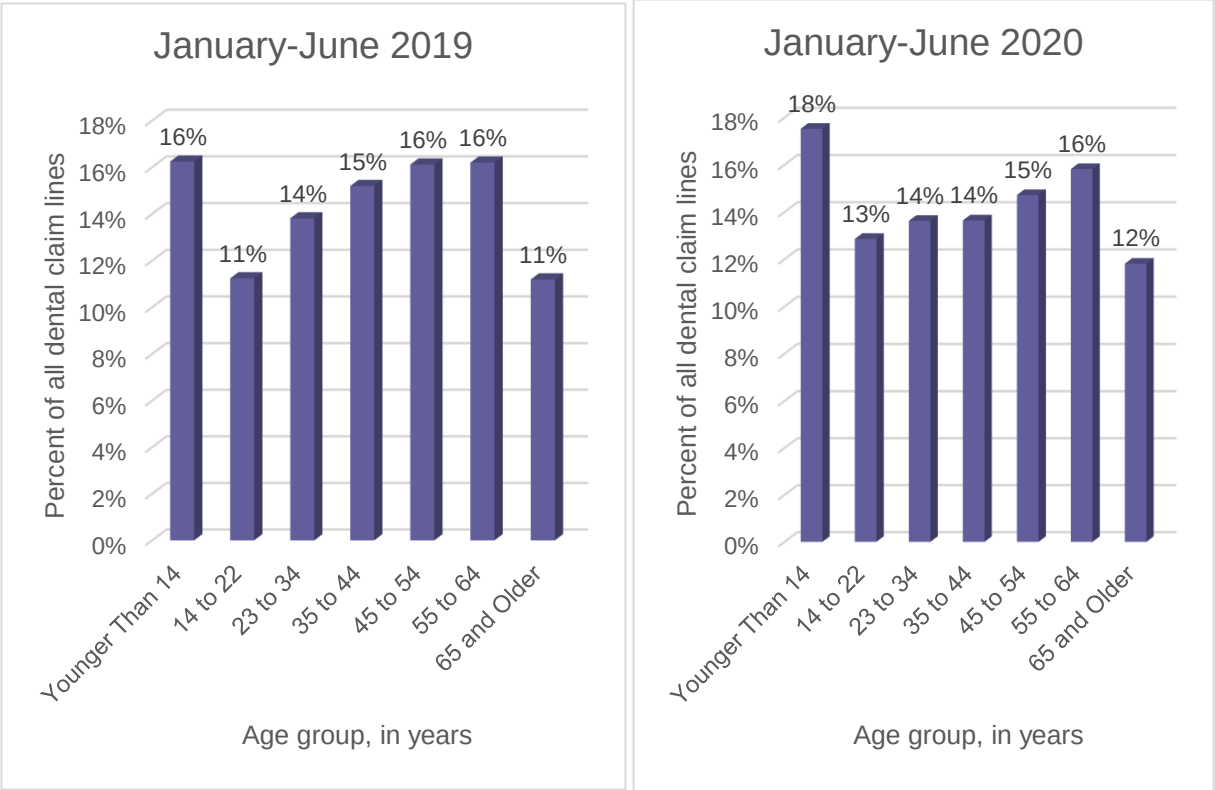


Figure 2. Dental services by age, January-June 2019 (left) compared to January-June 2020 (right), nationally

The next three figures show month by month, in March, April and June 2020 as compared to the same three months in 2019, how utilization of dental services changed by age of patient (figures 3-5). In March 2020, all age groups but one showed a decline in utilization ranging from 74 to 77 percent (figure 3). The exception was the age group 14-22, whose decrease was 69 percent. That the decrease was smaller in this age group is consistent with the increase in share of services associated with individuals aged 14-22 in January-June 2020 as compared with the same period in 2019 (figure 2).

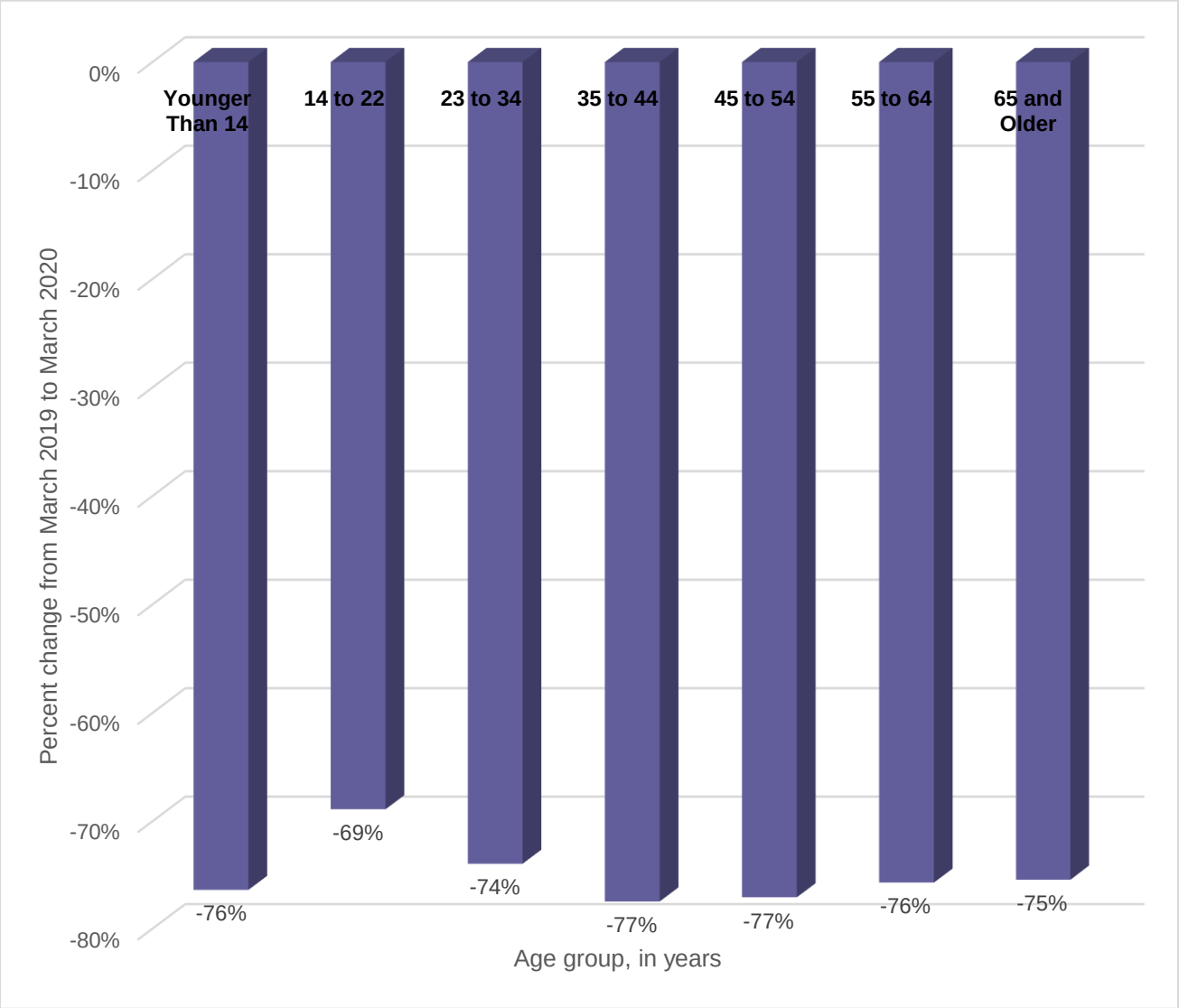


Figure 3. Percent change in utilization of dental services from March 2019 to March 2020 by age, nationally

In April as in March, all age groups except the one including patients aged 14-22 showed a similar decline in utilization of dental services from 2019 to 2020 (figure 4). The age group 14-22 decreased 74 percent in utilization from April 2019 to April 2020, compared to a range of 78 to 81 percent for all other age groups. In general, April exhibited greater declines than March, which is consistent with the overall view of changes in dental service utilization seen in figure 1.

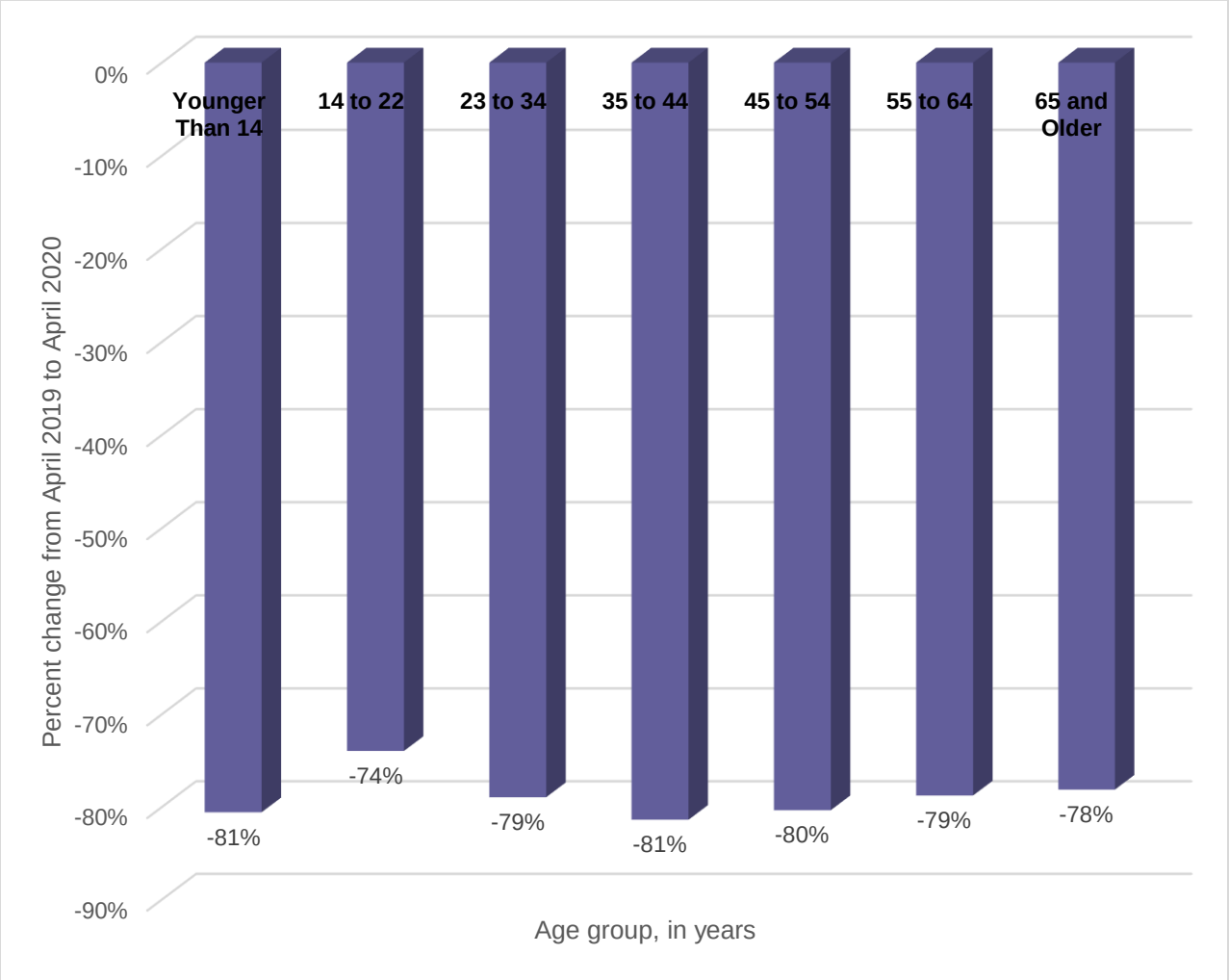


Figure 4. Percent change in utilization of dental services from April 2019 to April 2020 by age, nationally

From June 2019 to June 2020, changes in dental service utilization varied greatly by age group (figure 5). The youngest and oldest age groups increased in utilization: Patients younger than 14 rose by 8 percent; those aged 14-22 by 10 percent; those aged 55-64 by 1 percent; and those aged 65 and older the most of any age group, by 15 percent. By contrast, the age groups in the middle decreased. Individuals aged 23-34 decreased by 1 percent, those aged 35-44 by 12 percent and those aged 45-54 by 9 percent.

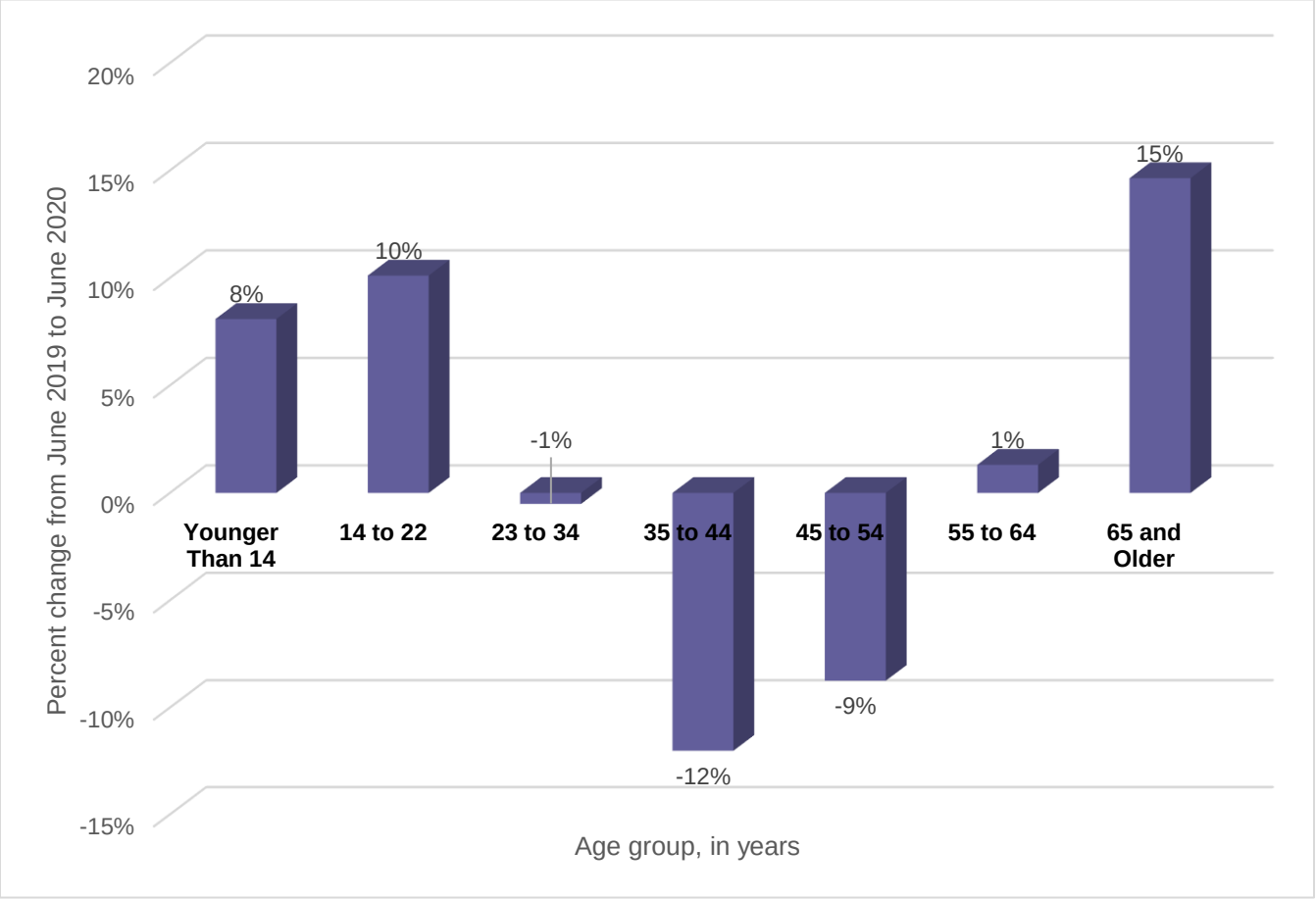


Figure 5. Percent change in utilization of dental services from June 2019 to June 2020 by age, nationally

State-by-State Changes in Dental Service Utilization

The following heat maps show how changes in dental service utilization varied from state to state in March, April and June 2020 as compared to the same months in 2019 (figures 6-8). Figure 6 represents March 2020 as compared to March 2019. All states in March 2020 exhibited some degree of decrease in dental service utilization. The five largest decreases were in the Northeast and Midwest. Vermont had the largest decrease (82.5 percent), followed by Iowa (81.2 percent), Wisconsin (81.0 percent), Minnesota (80.7 percent) and Maine (80.0 percent).

The five smallest decreases were all in the West. Idaho had the smallest decrease (64.0 percent), followed by Utah (65.1 percent), Montana (66.1 percent), Wyoming (66.4 percent) and Arizona (67.7 percent).

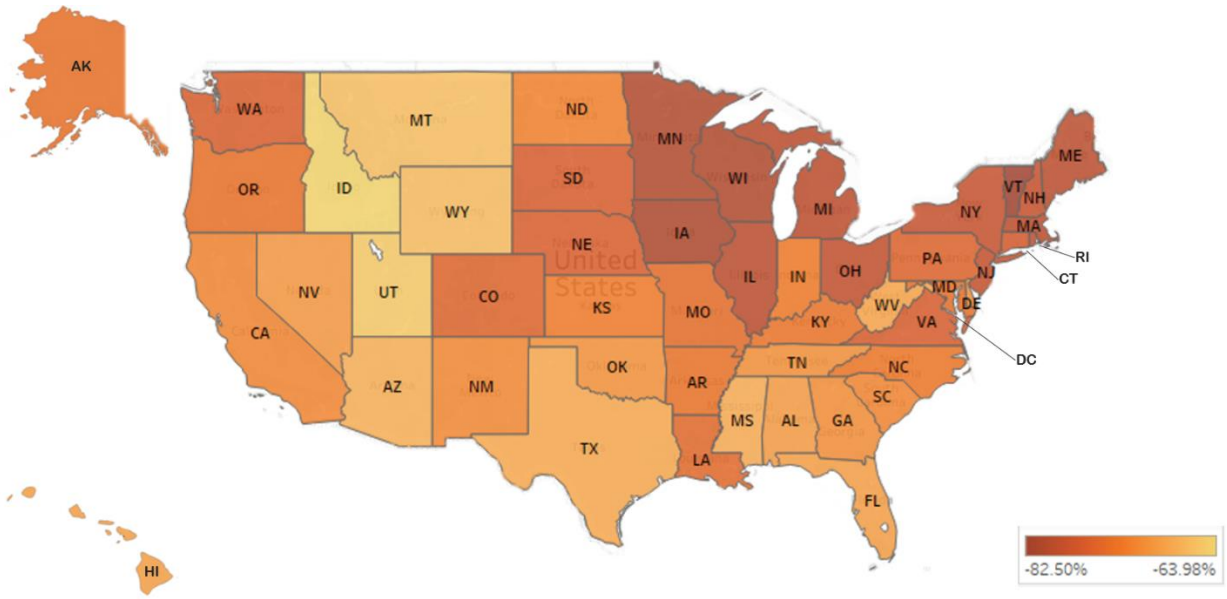


Figure 6. Percent change in utilization of dental services from March 2019 to March 2020, by state

In April as in March 2020, all states exhibited some degree of decrease in dental service utilization compared to the corresponding month in 2019, but there was greater variation across states (figure 7). Thirty-four states and the District of Columbia decreased by more than 70 percent, and the other 16 states varied between a 35.1 percent decrease and a 68.4 percent decrease.

As in the prior month, the five largest decreases in April 2020 were in the Northeast and Midwest. Once again, Vermont had the largest decrease, this time 95.3 percent, more than 12 percentage points greater than the month before. It was followed by Michigan (93.8 percent), Massachusetts (93.1 percent), Maine (92.2 percent) and Connecticut (92.0 percent). The five smallest decreases were in the West and South: Utah (35.1 percent), Idaho (48.5 percent), Wyoming (50.0 percent), Montana (55.6 percent) and Oklahoma (56.4 percent).

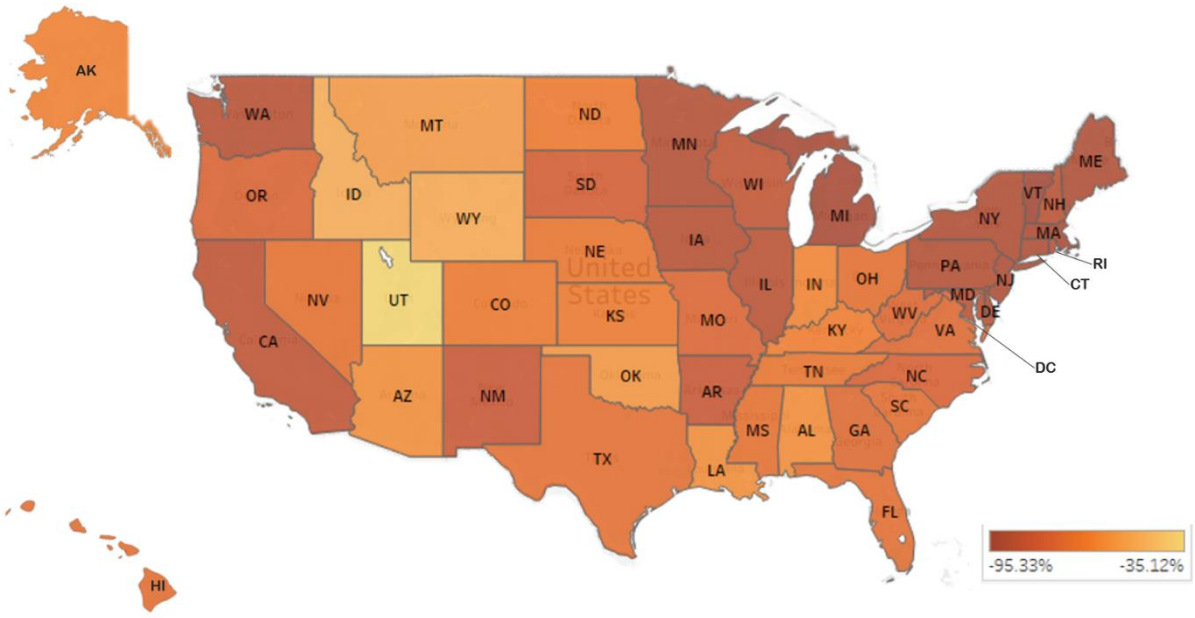


Figure 7. Percent change in utilization of dental services from April 2019 to April 2020, by state

In June 2020, many states (those in blue in figure 8) showed an increase in dental service utilization from the previous June, of up to 28 percent. Other states decreased by up to nearly 24 percent. Differences among states may have been due in part to differences in protocols for dental practices, such as reduced schedules and longer times between appointments for cleaning.

The five largest decreases were in the Northeast and Midwest: Massachusetts (23.9 percent), South Dakota (19.0 percent), Vermont (18.9 percent), Wisconsin (17.9 percent) and Maine (13.5 percent). The five largest increases were in the West and South: Alaska (28.3 percent), Utah (26.6 percent), Hawaii (25.3 percent), Kentucky (22.7 percent) and Montana (20.7 percent).

ADA data indicate that patient volume in dental practices in June 2020 remained lower than usual across the country.[14] This FAIR Health analysis, however, measures utilization by number of procedures rather than patients. An analysis of the longitudinal subset of the FAIR Health data shows that the number of procedures per longitudinal patient increased from, on average, 3.26 in June 2019 to 3.51 in June 2020. The reasons for this are not yet clear. They may include patients wanting to get more procedures done at each visit to minimize number of visits, and providers rendering more services per visit to manage costs of personal protective equipment.

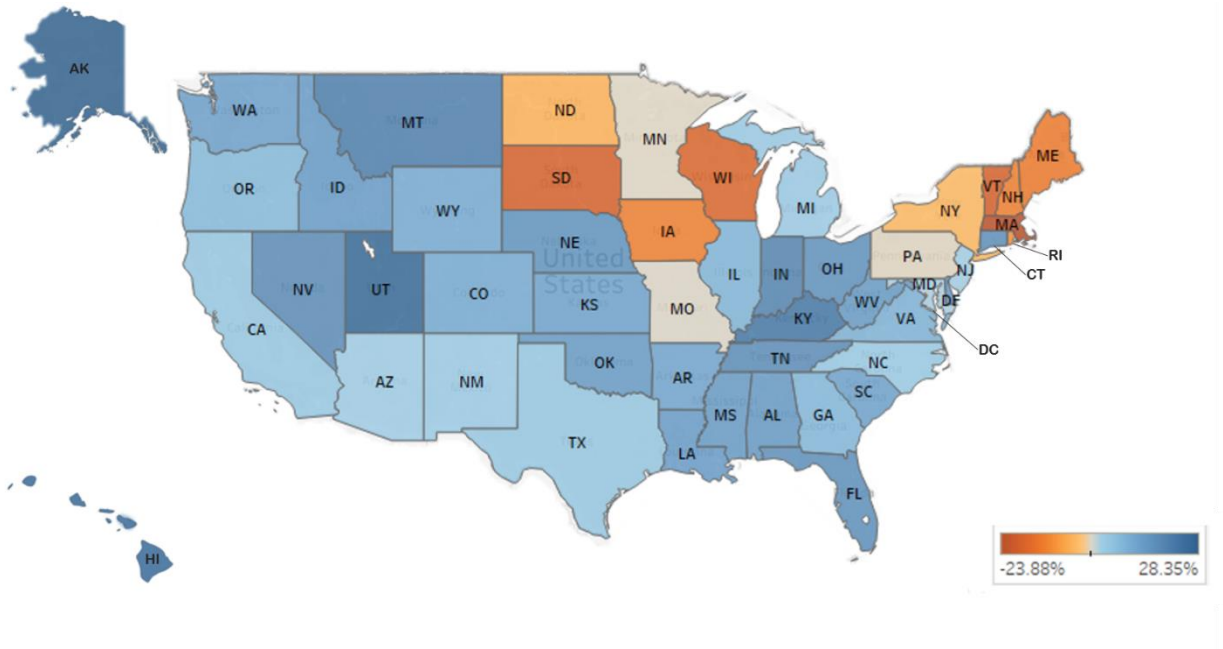


Figure 8. Percent change in utilization of dental services from June 2019 to June 2020, by state

[14] ADA Health Policy Institute, "COVID-19: Economic Impact on Dental Practices—Week of June 15 Results," https://surveys.ada.org/reports/RC/public/YWRhc3VydmV5cy01ZWU3YjRkYWE5ZTlhNzAwMGUwZGEwMDgtVVJfNWlJWDFFU01IdmNDUlVO.

Changes in Common Dental Procedures

Table 1 shows how the 10 most common dental procedures by utilization changed in 2020 versus 2019. For each year, four months are analyzed—January, March, April and June. There was little change from January to June 2019, and from January 2019 to January 2020. The top procedure, periodic oral evaluation for an established patient (D0120), remained in the number one rank throughout the months studied. But elsewhere in the top 10 lists, there was considerable change in March and April 2020 from the corresponding months the year before. For example, prophylaxis for a child (D1120) dropped from the sixth most common procedure to the ninth. Comprehensive oral evaluations for new or established patients (D0150) fell from 8th or 9th place to 10th or 12th.

Other procedures rose in utilization. Problem-focused, limited oral evaluations (D0140) rose from 11th place in March and April 2019 to 5th place in March 2020 and 4th place in April 2020. This suggests that, during the months when the pandemic was at its height, more patients than usual were going to the dentist to be treated for specific urgent or emergent issues rather than for cleanings and regular or routine visits.

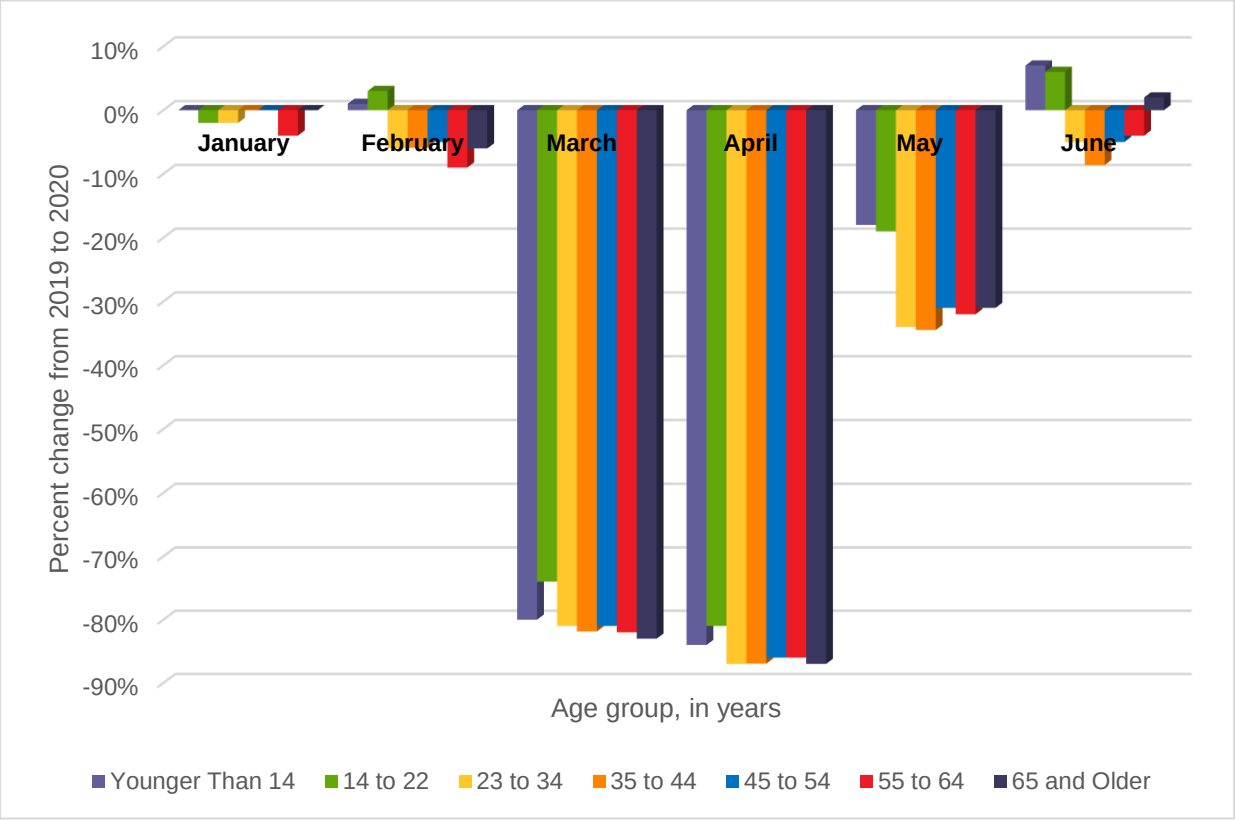
One procedure that made an even greater ascent in the rankings was the unspecified preventive procedure, by report (D1999). This procedure ranked in the 300s in March and April 2019. In March 2020, it reached number 19; in April, number 7; and in June, number 4. The ADA advocates use of this code once per patient visit to reflect the cost of additional personal protective equipment during the pandemic.[15]

Table 1. Ten most common dental procedures by utilization, with rank number, January-June 2019 versus January-June 2020, nationally

CDT Code	Description	2019 Ranking				2020 Ranking			
		January	March	April	June	January	March	April	June
D0120	Periodic oral evaluation – established patient	1	1	1	1	1	1	1	1
D1110	Prophylaxis – adult	2	2	2	2	2	2	3	2
D0274	Bitewing – single radiographic image	3	3	3	3	3	4	5	3
D0220	Intraoral – periapical first radiographic image	4	4	4	4	4	3	2	5
D0230	Intraoral – periapical each additional radiographic image	5	5	5	5	5	6	6	6
D1120	Prophylaxis – child	6	6	6	6	7	9	9	8
D1206	Topical application of fluoride varnish	7	7	7	7	6	8	8	7
D0150	Comprehensive oral evaluation – new or established patient	8	8	9	9	8	10	12	11
D2392	Resin-based composite – two surfaces, posterior	9	9	8	10	10	7	10	12
D1208	Topical application of fluoride – excluding varnish	10	10	10	8	9	11	13	9
D0140	Limited oral evaluation – problem-focused	11	11	11	11	11	5	4	10
D1999	Unspecified preventive procedure, by report	387	382	360	366	342	19	7	4

[15] ADA, *Statement on Third Party Payer Reimbursement for Costs Associated with Increased Standards for Personal Protective Equipment (PPE)*, April 21, 2020, https://success.ada.org/~/media/CPS/Files/COVID/ADA_Third_Party_Payer_Reimbursement_for_PPE.pdf.

In the next three figures, the focus is on three of the procedures just discussed—D0120, D0150 and D0140—with an analysis of their changes in utilization from 2019 to 2020 by patient age (figures 9-11). D0120, periodic oral evaluation for an established patient, was the number one procedure throughout the months sampled for most common procedures in 2020 (table 1), but it nevertheless underwent great decreases in utilization in March and April 2020 compared to March and April 2019 (figure 9). Decreases occurred in all age groups, but the decrease was less sharp in the age group 14-22. In March, for example, that age group had a decline of 74 percent compared to 80 to 83 percent in all other age groups.



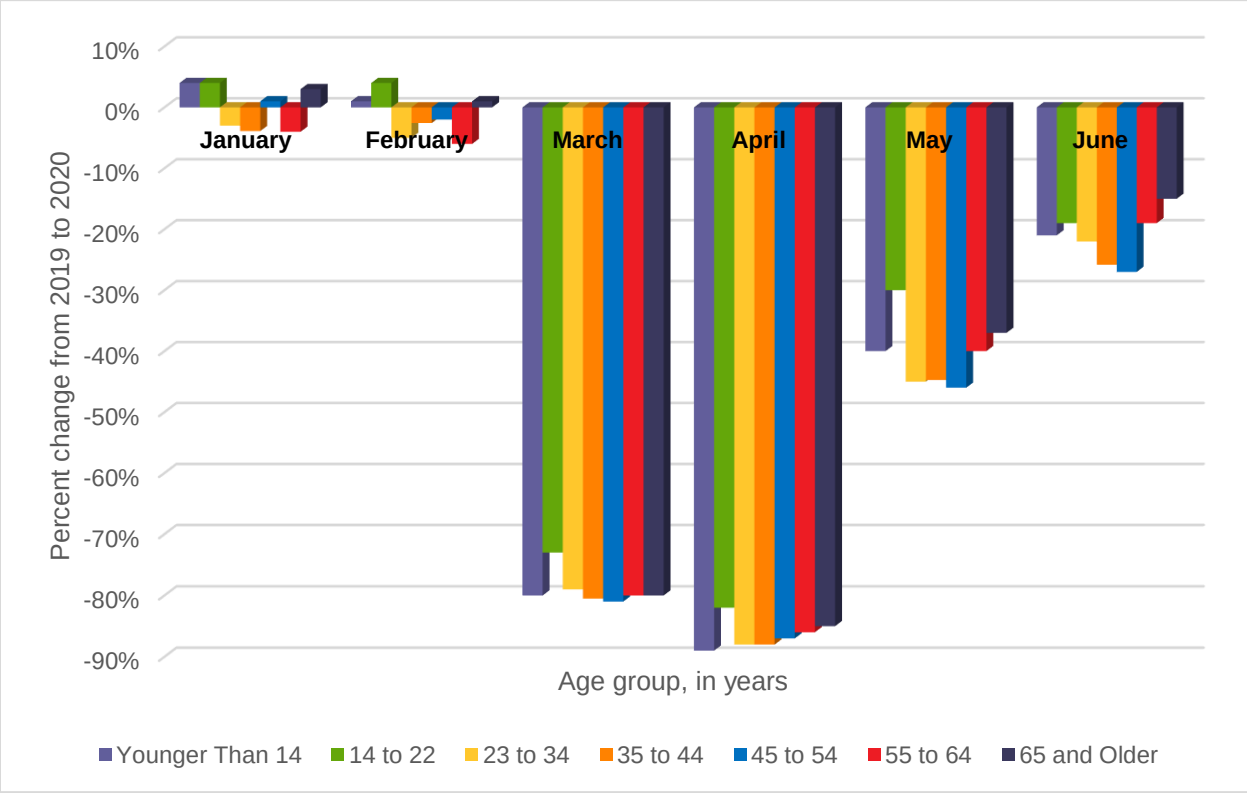
	January	February	March	April	May	June
Younger Than 14	0%	1%	-80%	-84%	-18%	7%
14 to 22	-2%	3%	-74%	-81%	-19%	6%
23 to 34	-2%	-6%	-81%	-87%	-34%	-5%
35 to 44	0%	-6%	-82%	-87%	-34%	-9%
45 to 54	0%	-5%	-81%	-86%	-31%	-5%
55 to 64	-4%	-9%	-82%	-86%	-32%	-4%
65 and Older	0%	-6%	-83%	-87%	-31%	2%

Figure 9. Monthly percent change in utilization of procedure D0120 (periodic oral evaluation – established patient) from 2019 to 2020, by age, nationally

May 2020, as compared to May 2019, showed some recovery for periodic oral evaluations for established patients (D0120), with smaller declines across age groups, particularly in those younger than 23. Those in that age range had declines of 18 to 19 percent compared to 31 to 34 percent for those 23 and older. In June 2020, those younger than 23 increased in utilization of D0120 by six to seven percent above the level of June 2019. All other age groups showed declines (of four to nine percent), except for the age group of individuals 65 years and older, which had an increase of two percent.

Like D0120, comprehensive oral evaluation for a new or established patient (D0150) had steep declines in March and April 2020 compared with the same months the previous year (figure 10). And, as with D0120, the age group 14 to 22 showed less of a decline. In March, for example, that age group had a drop of 73 percent compared to 79 to 81 percent for the other age groups.

D0150 did not show as great a rebound in June as D0120. In June 2020, no age group recovered to the level of the previous year's utilization of D0150. The smallest decrease from June 2019, 15 percent, was found with the age group of individuals 65 years and older. The largest decrease, 27 percent, was with those aged 45-54.

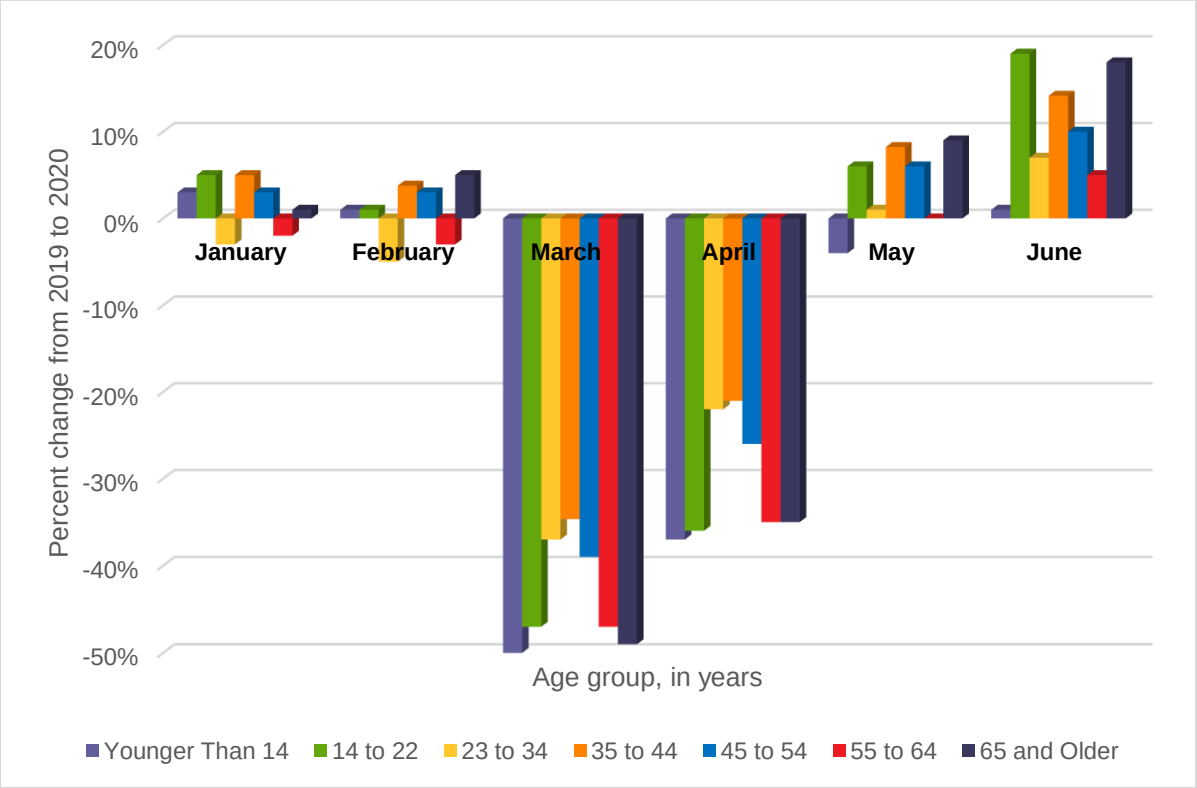


	January	February	March	April	May	June
Younger Than 14	4%	1%	-80%	-89%	-40%	-21%
14 to 22	4%	4%	-73%	-82%	-30%	-19%
23 to 34	-3%	-5%	-79%	-88%	-45%	-22%
35 to 44	-4%	-3%	-81%	-88%	-45%	-26%
45 to 54	1%	-2%	-81%	-87%	-46%	-27%
55 to 64	-4%	-6%	-80%	-86%	-40%	-19%
65 and Older	3%	1%	-80%	-85%	-37%	-15%

Figure 10. Monthly percent change in utilization of procedure D0150 (comprehensive oral evaluation – new or established patient) from 2019 to 2020, by age, nationally

The problem-focused, limited oral evaluation (D0140) showed declines in March and April 2020 as compared to the same months the previous year (figure 11), but the declines were less extreme than those for D0120 and D0150 (figures 9 and 10, respectively). In March, the declines for D0140 ranged from 35 to 50 percent depending on age group; in April, they were lower, from 21 to 37 percent. This relatively low rate of decline was consistent with the rise of this procedure in the rankings of most common dental procedures during those months (table 1).

In May 2020 for D0140, all age groups but one (those younger than 14) rebounded to or above their May 2019 levels. In June 2020, all age groups increased above their June 2019 levels, with rises ranging from 1 percent (for those younger than 14) to 19 percent (for those aged 14-22).



	January	February	March	April	May	June
Younger Than 14	3%	1%	-50%	-37%	-4%	1%
14 to 22	5%	1%	-47%	-36%	6%	19%
23 to 34	-3%	-5%	-37%	-22%	1%	7%
35 to 44	5%	4%	-35%	-21%	8%	14%
45 to 54	3%	3%	-39%	-26%	6%	10%
55 to 64	-2%	-3%	-47%	-35%	0%	5%
65 and Older	1%	5%	-49%	-35%	9%	18%

Figure 11. Monthly percent change in utilization of procedure D0140 (limited oral evaluation – problem-focused) from 2019 to 2020, by age, nationally

Dental-Related Diagnoses in Urgent Care Centers and Emergency Rooms

With many dental practices closed for all but emergency issues in March and April 2020, it might be expected that there would be an effect on the types of dental-related conditions for which patients sought treatment at urgent care centers and ERs. But the 10 most common dental-related diagnoses presenting in urgent care centers and ERs did not change greatly during the pandemic (table 2). For example, diseases of pulp and periapical tissues, which are typically abscesses, remained number one from January to June 2020. And other disorders of teeth and supporting structures, a category that includes partial and complete loss of a tooth or teeth, remained number two during those months.

There were some changes, however. In March and April, dental caries (tooth decay or cavities) rose from fifth to fourth most common. The condition returned to fifth place in May and June, suggesting that its change in rank in urgent care centers and ERs was related to access to dental practices during the worst of the pandemic. Another diagnosis, other diseases of hard tissues and teeth, similarly rose from ninth place to eighth place during March and April, but remained in eighth place in May and June.

Table 2. Ten most common dental-related diagnoses by utilization, with rank number, in urgent care centers and ERs, January-June 2020, nationally

	Ranking					
	January	**February**	**March**	**April**	**May**	**June**
Diseases of Pulp and Periapical Tissues	1	1	1	1	1	1
Other Disorders of Teeth and Supporting Structures	2	2	2	2	2	2
Stomatitis and Related Lesions	3	3	3	3	3	3
Other Diseases of Lip and Oral Mucosa	4	4	5	5	4	4
Dental Caries	5	5	4	4	5	5
Gingivitis and Periodontal Diseases	6	6	6	6	6	6
Disorders of Tooth Development and Eruption	7	7	7	7	7	7
Other Disorders of Gingiva and Edentulous Alveolar Ridge	8	8	9	9	9	9
Other Diseases of Hard Tissues of Teeth	9	9	8	8	8	8
Embedded and Impacted Teeth	10	10	10	10	10	10

Conclusion

The COVID-19 pandemic has had a profound impact on the dental industry. Use of dental services fell 75 percent in March 2020 and 79 percent in April 2020 compared to the same months the year before. With many dental practices reopening by June 2020, there was a one percent increase in utilization that month compared to June 2019.

Patient age affected utilization during the pandemic. In the period January-June 2020, patients 22 years and younger accounted for a larger percentage of dental services than in the same months the year before. In March and April 2020 as compared to March and April 2019, the age group 14-22 showed a smaller decline in utilization of dental services than all other age groups. From June 2019 to June 2020,

changes in dental service utilization varied greatly by age group. The youngest and oldest age groups increased in utilization, while those in the middle (ages 23-54) decreased.

Although all states in March and April 2020 exhibited some degree of decrease in dental service utilization compared to the corresponding months in 2019, there were regional differences. The five largest decreases were in the Northeast and Midwest. The five smallest decreases were in the West in March and in the West and South in April.

Different procedures fared differently in utilization during the pandemic. From March and April 2019 to March and April 2020, comprehensive oral evaluations for new or established patients (D0150) fell from 8th or 9th place among the most common dental procedures to 10th or 12th. Other procedures rose in utilization, including problem-focused, limited oral evaluations (D0140) and unspecified preventive procedures, by report (D1999). Dental procedures differed in how much of a rebound they showed in June 2020 as compared to June 2019. For problem-focused, limited oral evaluations (D0140), all age groups increased above their June 2019 levels. For comprehensive oral evaluations for new or established patients (D0150), no age group recovered to the level of the previous year's utilization.

The pandemic also had an effect on dental-related diagnoses presenting in urgent care centers and ERs. From January and February 2020 to March and April 2020, dental caries rose from fifth to fourth most common dental-related diagnosis presenting in those venues of care.

As with past studies in its COVID-19 series, FAIR Health presents this information in the hope that it will be useful to stakeholders throughout the healthcare sector, particularly dentists and other oral healthcare providers, as well as payors, policy makers and researchers.

About FAIR Health

FAIR Health is a national, independent nonprofit organization dedicated to bringing transparency to healthcare costs and health insurance information through data products, consumer resources and health systems research support. FAIR Health qualifies as a public charity under section 501(c)(3) of the tax code. FAIR Health possesses the nation's largest collection of private healthcare claims data, which includes over 32 billion claim records contributed by payors and administrators who insure or process claims for private insurance plans covering more than 150 million individuals. FAIR Health licenses its privately billed data and data products—including benchmark modules, data visualizations, custom analytics and market indices—to commercial insurers and self-insurers, employers, providers, hospitals and healthcare systems, government agencies, researchers and others. Certified by the Centers for Medicare & Medicaid Services (CMS) as a national Qualified Entity, FAIR Health also receives data representing the experience of all individuals enrolled in traditional Medicare Parts A, B and D; FAIR Health includes among the private claims data in its database, data on Medicare Advantage enrollees. FAIR Health can produce insightful analytic reports and data products based on combined Medicare and commercial claims data for government, providers, payors and other authorized users. FAIR Health's free, award-winning, national consumer websites are fairhealthconsumer.org and fairhealthconsumidor.org. For more information on FAIR Health, visit fairhealth.org.

FAIR Health, Inc.
530 Fifth Avenue, 18th Floor
New York, NY 10036
212-370-0704
fairhealth.org
fairhealthconsumer.org
fairhealthconsumidor.org