



Commonwealth of Virginia Department of Medical Assistance Services

2023–24 Dental Utilization Data Brief

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1. Overview and Methodology

The Commonwealth of Virginia Department of Medicaid Assistance Services (DMAS) contracted with Health Services Advisory Group, Inc. (HSAG) to assess dental utilization among pregnant women and adults covered by Virginia Medicaid or the Family Access to Medical Insurance Security (FAMIS) MOMS program through the Virginia CardinalCare Smiles program administered by DentaQuest.

This data brief includes an evaluation of the utilization of dental services for pregnant women and adults. For pregnant women who had deliveries during calendar year (CY) 2023, HSAG assessed dental utilization during the preconception period and the perinatal period (i.e., prenatal and postpartum periods). For the preconception period, HSAG evaluated services received six months prior to conception, and for the postpartum period, HSAG evaluated services received six months following birth. Additionally, HSAG separately evaluated dental utilization during a 12-month postpartum period for deliveries from July 1, 2022, through June 30, 2023. For adult members, HSAG assessed dental utilization during CY 2023.

For pregnant women, HSAG used deterministic and probabilistic data linking to match eligible members with birth registry records to identify births paid by Virginia Medicaid from July 1, 2022, to December 31, 2023, provided by DMAS and the Virginia Department of Health (VDH). HSAG included women of any age at the time of conception in this analysis. Since women less than 21 years of age are eligible for dental services under a separate benefit, HSAG reported this age group separately from the 21 years of age and older group.

For the adult population, HSAG used member demographic, enrollment, and eligibility data files and claims/encounter data files provided by DMAS to identify adults 21 years of age and older enrolled in Medicaid at any point during CY 2023.¹ Additionally, these data were used to assess dental utilization for pregnant women and the adult population. Dental services were identified and grouped according to DentaQuest's covered services and categories. For additional details, please see Appendix A.

Additionally, for the adult population, HSAG calculated the following Dental Quality Alliance (DQA) measures for CY 2023:

- *Adults With Diabetes—Oral Evaluation*—The percentage of adults with diabetes who received a comprehensive or periodic oral evaluation or a comprehensive periodontal evaluation during CY 2023.
- *Ambulatory Care Sensitive Emergency Department (ED) Visits for Non-Traumatic Dental Conditions in Adults*—The number of ED visits during CY 2023 for ambulatory care sensitive non-traumatic dental conditions per 100,000 member months for adults.
- *Follow-Up After ED Visits for Non-Traumatic Dental Conditions in Adults*—The percentage of ambulatory care sensitive non-traumatic dental condition ED visits during CY 2023 among adults for which the member visited a dentist within seven and 30 days of the ED visit.

¹ HSAG excluded any members from the adult population who were already in the pregnant women population, given that these members have a different benefit.

2. Findings

This section presents the CY 2023 dental utilization results for pregnant women and adults. Please note, for pregnant women, the separate 12-months postpartum dental utilization analysis is for births that occurred between July 1, 2022, and June 30, 2023.

Pregnant Women Dental Utilization

Overall, HSAG identified 36,603 deliveries during CY 2023 among 36,564 women. Of the 36,603 deliveries, 3,924 were to women less than 21 years of age and 32,679 were to women 21 years of age and older. Table 2-1 displays the count of CY 2023 deliveries from the study population wherein perinatal dental services were received (Num), the percentage of the study population wherein perinatal dental services were received (Rate), and percentage of deliveries that received any perinatal dental services (Percent of Num) for each age group (i.e., less than 21 years of age and 21 years of age and older), stratified by dental service category. Please note that a delivery is counted once for each applicable dental service category; thus, the same delivery may be included in more than one dental service category.

Table 2-1—Distribution of Women With Perinatal Dental Utilization, by Dental Service Category

Dental Service Category	Less than 21 Years of Age			21 Years of Age and Older		
	Num*	Rate	Percent of Num	Num*	Rate	Percent of Num
Any Dental Service	1,049	26.73%	100.00%	7,796	23.86%	100.00%
Adjunctive General Services	337	8.59%	32.13%	1,856	5.68%	23.81%
Diagnostic Services	1,005	25.61%	95.81%	7,460	22.83%	95.69%
Endodontics	114	2.91%	10.87%	1,533	4.69%	19.66%
Oral and Maxillofacial Surgery	141	3.59%	13.44%	1,729	5.29%	22.18%
Periodontics	81	2.06%	7.72%	1,607	4.92%	20.61%
Preventive Services	785	20.01%	74.83%	4,163	12.74%	53.40%
Prosthodontics	S	S	S	179	0.55%	2.30%
Restorative	406	10.35%	38.70%	3,743	11.45%	48.01%

*Because a woman may have had more than one dental service during the perinatal period, the count of deliveries for each dental service category may not sum to the overall number of deliveries among women with any dental service.
S indicates that the data were suppressed due to a small numerator or denominator (i.e., fewer than 11).

As shown in Table 2-1, 26.73 percent (n=1,049) of deliveries to women less than 21 years of age received any perinatal dental service compared to 23.86 percent (n=7,796) of deliveries to women 21 years of age and older. For women less than 21 years of age, a larger proportion of deliveries that received any dental service were for Adjunctive General Services (32.13 percent) and Preventive

Services (74.83 percent) compared to women 21 years of age and older. For women 21 years of age and older, a larger proportion of deliveries that received any dental service were for Endodontics (19.66 percent), Oral and Maxillofacial Surgery (22.18 percent), Periodontics (20.61 percent), and Restorative (48.01 percent) compared to women less than 21 years of age.

Of the deliveries among women less than 21 years of age, 10.22 percent were deliveries wherein services were received during the prenatal period only and 8.10 percent were deliveries wherein services were received during the postpartum period. Additionally, 8.41 percent were deliveries wherein services were received during both the prenatal and postpartum periods. Of the deliveries among women 21 years of age and older, 8.49 percent were deliveries wherein services were received during the prenatal period only and 7.99 percent were deliveries wherein services were received during the postpartum period. Additionally, 7.37 percent were deliveries wherein services were received during both the prenatal and postpartum periods.

Table 2-2 displays the count of deliveries from the study population that received preconception dental services (Num), the percentage of deliveries from the study population that received preconception dental services (Rate), and percentage of deliveries wherein preconception dental services were received (Percent of Num) for each age group, stratified by dental service category. Please note that a delivery is counted once for each applicable dental service category; thus, the same delivery may be included in more than one dental service category. Women who were continuously enrolled for six months prior to conception and had a delivery during CY 2023 are included in the results.

Table 2-2—Distribution of Women With Preconception Dental Utilization, by Dental Service Category

Dental Service Category	Less than 21 Years of Age			21 Years of Age and Older		
	Num*	Rate	Percent of Num	Num*	Rate	Percent of Num
Any Dental Service	580	22.91%	100.00%	2,538	13.01%	100.00%
Adjunctive General Services	196	7.74%	33.79%	488	2.50%	19.23%
Diagnostic Services	524	20.70%	90.34%	2,243	11.50%	88.38%
Endodontics	39	1.54%	6.72%	320	1.64%	12.61%
Oral and Maxillofacial Surgery	92	3.63%	15.86%	558	2.86%	21.99%
Periodontics	S	S	S	182	0.93%	7.17%
Preventive Services	424	16.75%	73.10%	1,190	6.10%	46.89%
Prosthodontics	0	0.00%	0.00%	42	0.22%	1.65%
Restorative	171	6.75%	29.48%	1,028	5.27%	40.50%

**Because a woman may have had more than one dental service during the preconception period, the count of deliveries for each dental service category may not sum to the overall number of deliveries among women with any dental service.*

S indicates that the data were suppressed due to a small numerator or denominator (i.e., fewer than 11).

As shown in Table 2-2, women less than 21 years of age received preconception dental services in 22.91 percent (n=580) of deliveries, while women 21 years of age and older received preconception dental services in 13.01 percent (n=2,538) of deliveries. Of the deliveries among women less than 21 years of age who received preconception dental services, 64.14 percent also received dental services during the perinatal period. Of the deliveries among women 21 years of age and older who received preconception dental services, 63.12 percent also received dental services during the perinatal period.

The distribution of deliveries among women receiving perinatal dental services varied widely by Medicaid program (i.e., Medicaid for Pregnant Women, Medicaid Expansion, FAMIS MOMS, Low-Income Families with Children [LIFC], Other Medicaid, ^{2,3} or not enrolled) and delivery system (i.e., managed care, fee-for-service [FFS], or not enrolled). Table 2-3 presents the count of deliveries from the study population (Denom), the percentage of deliveries from the study population (Percent of Denom), the count of deliveries from the study population wherein perinatal dental services were received (Num), and percentage of deliveries that received any perinatal dental services (Rate) for each group, stratified by Medicaid program and delivery system as of the woman's date of delivery.

Table 2-3—Distribution of Women With Perinatal Dental Utilization, by Medicaid Program at Time of Delivery

Stratification	Less than 21 Years of Age				21 Years of Age and Older			
	Denom	Percent of Denom	Num	Rate	Denom	Percent of Denom	Num	Rate
Any Program	3,924	100.00%	1,049	26.73%	32,679	100.00%	7,796	23.86%
Medicaid Program								
Medicaid for Pregnant Women	950	24.21%	211	22.21%	11,735	35.91%	3,000	25.56%
Medicaid Expansion	430	10.96%	124	28.84%	7,409	22.67%	1,692	22.84%
FAMIS MOMS	115	2.93%	S	S	1,890	5.78%	415	21.96%
LIFC	87	2.22%	19	21.84%	3,812	11.66%	869	22.80%
Other Medicaid	2,279	58.08%	673	29.53%	6,226	19.05%	1,771	28.45%
Not Enrolled	63	1.61%	S	S	1,607	4.92%	49	3.05%
Medicaid Delivery System								
Managed Care	3,495	89.07%	1,011	28.93%	28,355	86.77%	7,397	26.09%

² Starting on July 1, 2021, DMAS began enrolling pregnant women who do not meet immigration status rules for other coverage into the FAMIS Prenatal Coverage program. Within this year's report, these members are included in the Other Medicaid program; however, in the 2023 report, these women were included in the FAMIS MOMS program.

³ Other Medicaid includes all other births not covered by Medicaid for Pregnant Women, Medicaid Expansion, FAMIS MOMS, and LIFC. Please note that Other Medicaid excludes births to women in Plan First and the Department of Corrections, which are included in the Not Enrolled category.

Stratification	Less than 21 Years of Age				21 Years of Age and Older			
	Denom	Percent of Denom	Num	Rate	Denom	Percent of Denom	Num	Rate
FFS	366	9.33%	S	S	2,717	8.31%	350	12.88%
Not Enrolled	63	1.61%	S	S	1,607	4.92%	49	3.05%

S indicates that the data were suppressed due to a small numerator or denominator (i.e., fewer than 11). In instances where only one stratification was suppressed, the value for the second smallest population was also suppressed, even if the value was 11 or more.

As shown in Table 2-3, most of the study population was covered by managed care regardless of age, with 89.07 percent (n=3,495) of deliveries to women less than 21 years and 86.77 percent (n=28,355) of deliveries to women 21 years of age and older covered by managed care. Deliveries covered by managed care for women less than 21 years of age had slightly higher rates of receiving any perinatal dental service (28.93 percent) compared to women 21 years of age and older age (26.09 percent). Of note, deliveries covered by FFS had low rates of receiving perinatal dental services for women 21 years of age and older (12.88 percent). Approximately 58 percent (n=2,279) of deliveries to women less than 21 years of age were enrolled in the Other Medicaid program, with 29.53 percent (n=673) receiving any perinatal dental services. For women 21 years of age and older, most deliveries were to women enrolled in Medicaid for Pregnant Women (35.91 percent; n=11,735), with 25.56 percent (n=3,000) receiving any perinatal dental services. Of note, the highest rate (28.45 percent) of receiving any perinatal dental service for the 21 years of age and older group was for women enrolled with Other Medicaid.

The length of time a woman was continuously enrolled in Medicaid during pregnancy may have also contributed to the ability to obtain perinatal dental services through the CardinalCare Smiles program. Of the overall study population, 72.17 percent (n=2,832) of women less than 21 years of age and 71.33 percent (n=23,311) of women 21 years of age and older were continuously enrolled in Medicaid for at least 90 days prior to and including the day of the delivery. Among the deliveries for continuously enrolled women, 29.73 percent (n=842) of women less than 21 years of age and 26.27 percent (n=6,123) of women 21 years of age and older received one or more dental services during the perinatal period. In contrast, 18.96 percent (n=207) of women less than 21 years of age and 17.86 percent (n=1,673) of women 21 years of age and older who were not continuously enrolled for at least 90 days prior to and including the day of delivery received perinatal dental services.

Table 2-4 presents the number of deliveries among continuously enrolled women (Denom), as well as the count (Num) and percentage of deliveries (Rate) wherein women received any dental services and preventive dental services in the perinatal period for each age group, stratified by managed care region of residence.

Table 2-4—Perinatal Dental Utilization Among Continuously Enrolled Women, by Managed Care Region of Residence

Managed Care Region of Residence	Less Than 21 Years of Age					21 Years of Age and Older				
	Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received		Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received	
		Num	Rate	Num	Rate		Num	Rate	Num	Rate
Total*	2,825	842	29.81%	637	22.55%	22,986	6,116	26.61%	3,319	14.44%
Central	758	219	28.89%	167	22.03%	6,236	1,753	28.11%	949	15.22%
Charlottesville/Western	394	120	30.46%	79	20.05%	2,788	612	21.95%	256	9.18%
Northern & Winchester	553	230	41.59%	186	33.63%	5,992	2,361	39.40%	1,473	24.58%
Roanoke/Alleghany	303	62	20.46%	46	15.18%	2,065	349	16.90%	154	7.46%
Southwest	144	41	28.47%	28	19.44%	629	113	17.97%	67	10.65%
Tidewater	673	170	25.26%	131	19.47%	5,275	928	17.59%	420	7.96%

*Note: Total also includes deliveries to women with Unknown/Missing managed care region of residence.

Table 2-4 shows the highest rate of perinatal dental utilization occurred in deliveries among women residing in Northern & Winchester for both the less than 21 years of age group (41.59 percent; n=230) and the 21 years of age and older group (39.40 percent; n=2,361). The lowest rate of perinatal dental utilization occurred in deliveries among women residing in Roanoke/Alleghany for the less than 21 years of age group (20.46 percent; n=62) and the 21 years of age and older group (16.90 percent; n=349). Additionally, women less than 21 years of age had higher perinatal dental and preventive dental utilization rates than women 21 years of age and older when comparing each regional rate.

Table 2-5 presents the number of deliveries among continuously enrolled women (Denom), as well as the number (Num) and percentage (Rate) of deliveries wherein women received any perinatal dental service and preventive dental services, stratified by maternal age at the time of delivery.

Table 2-5—Dental Utilization Among Continuously Enrolled Women, by Maternal Age at Delivery

Stratification	Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received	
		Num	Rate	Num	Rate
Total	25,811	6,958	26.96%	3,956	15.33%
Age at Delivery					
15 Years and Younger	73	S	S	S	S
16–17	364	146	40.11%	117	32.14%
18–20	2,388	661	27.68%	489	20.48%
21–24	5,544	1,303	23.50%	718	12.95%
25–29	7,532	1,999	26.54%	1,070	14.21%
30–34	6,191	1,748	28.23%	929	15.01%
35–39	2,958	846	28.60%	476	16.09%
40–44	729	211	28.94%	122	16.74%
45 Years and Older	32	S	S	S	S

S indicates that the data were suppressed due to a small numerator or denominator (i.e., fewer than 11). In instances where only one stratification was suppressed, the value for the second smallest population was also suppressed, even if the value was 11 or more.

Table 2-5 shows that perinatal dental utilization rates were highest among deliveries to women 16 to 17 years of age (40.11 percent; n=146) and lowest among deliveries to women 21 to 24 years of age (23.50 percent; n=1,303). There was a decrease of approximately 17 and 19 percentage points in perinatal and preventive dental utilization, respectively, between the 16 to 17 years of age group and the 21 to 24 years of age group.

Table 2-6 presents the number of deliveries among continuously enrolled women (Denom), as well as the number (Num) and percentage (Rate) of deliveries wherein women received any perinatal dental service and preventive dental services for each age group, stratified by maternal race and ethnicity.

Table 2-6—Dental Utilization Among Continuously Enrolled Women, by Maternal Race and Ethnicity

Race and Ethnicity	Less Than 21 Years of Age					21 Years of Age and Older				
	Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received		Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received	
		Num	Rate	Num	Rate		Num	Rate	Num	Rate
Total	2,825	842	29.81%	637	22.55%	22,986	6,116	26.61%	3,319	14.44%
White, Non-Hispanic	1,462	478	32.69%	350	23.94%	11,722	3,309	28.23%	1,813	15.47%
Black, Non-Hispanic	1,058	283	26.75%	218	20.60%	7,621	1,781	23.37%	872	11.44%
Asian, Non-Hispanic	36	S	S	S	S	1,128	445	39.45%	274	24.29%
Hispanic, Any Race	178	46	25.84%	38	21.35%	1,352	360	26.63%	217	16.05%
Other/Unknown	91	S	S	S	S	1,163	221	19.00%	143	12.30%

S indicates that the data were suppressed due to a small numerator or denominator (i.e., fewer than 11). In instances where only one stratification was suppressed, the value for the second smallest population was also suppressed, even if the value was 11 or more.

Table 2-6 shows that perinatal dental utilization rates were highest among deliveries to White, Non-Hispanic women for the less than 21 years of age group (32.69 percent; n=478) and Asian, Non-Hispanic women for the 21 years of age and older group (39.45 percent; n=445). Preventive dental utilization rates were low among deliveries to Black, Non-Hispanic women for the less than 21 years of age group (20.60 percent; n=218) and the 21 years of age and older group (11.44 percent; n=872).

Table 2-7 presents the number of deliveries among continuously enrolled women (Denom), as well as the number (Num) and percentage (Rate) of deliveries wherein women received any perinatal dental service and preventive dental services for each age group, stratified by managed care region of residence and maternal race and ethnicity.

Table 2-7—Dental Utilization Among Continuously Enrolled Women, by Managed Care Region of Residence and Maternal Race and Ethnicity

Race and Ethnicity by Managed Care Region	Less Than 21 Years of Age					21 Years of Age and Older				
	Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received		Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received	
		Num	Rate	Num	Rate		Num	Rate	Num	Rate
Central										
White, Non-Hispanic	313	95	30.35%	71	22.68%	2,746	830	30.23%	473	17.23%
Black, Non-Hispanic	373	111	29.76%	84	22.52%	2,582	663	25.68%	312	12.08%
Asian, Non-Hispanic	S	S	S	S	S	224	92	41.07%	46	20.54%
Hispanic, Any Race	44	S	S	S	S	368	110	29.89%	74	20.11%
Other/Unknown	23	S	S	S	S	316	58	18.35%	44	13.92%
Charlottesville/Western										
White, Non-Hispanic	252	79	31.35%	50	19.84%	1,722	379	22.01%	161	9.35%
Black, Non-Hispanic	105	33	31.43%	23	21.90%	779	168	21.57%	67	8.60%
Asian, Non-Hispanic	S	S	S	S	S	54	13	24.07%	S	S
Hispanic, Any Race	25	S	S	S	S	126	32	25.40%	17	13.49%
Other/Unknown	S	S	S	S	S	107	20	18.69%	S	S
Northern & Winchester										
White, Non-Hispanic	389	164	42.16%	134	34.45%	3,531	1,443	40.87%	873	24.72%

Race and Ethnicity by Managed Care Region	Less Than 21 Years of Age					21 Years of Age and Older				
	Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received		Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received	
		Num	Rate	Num	Rate		Num	Rate	Num	Rate
Black, Non-Hispanic	64	25	39.06%	19	29.69%	1,001	352	35.16%	228	22.78%
Asian, Non-Hispanic	14	S	S	S	S	667	311	46.63%	208	31.18%
Hispanic, Any Race	52	26	50.00%	21	40.38%	428	150	35.05%	92	21.50%
Other/Unknown	34	S	S	S	S	365	105	28.77%	72	19.73%
Roanoke/Alleghany										
White, Non-Hispanic	210	46	21.90%	32	15.24%	1,449	259	17.87%	114	7.87%
Black, Non-Hispanic	68	S	S	S	S	399	65	16.29%	26	6.52%
Asian, Non-Hispanic	S	S	S	S	S	53	S	S	S	S
Hispanic, Any Race	14	S	S	S	S	93	12	12.90%	S	S
Other/Unknown	S	S	S	S	S	71	S	S	S	S
Southwest										
White, Non-Hispanic	136	39	28.68%	26	19.12%	572	104	18.18%	62	10.84%
Black, Non-Hispanic	S	S	S	S	S	13	S	S	S	S
Asian, Non-Hispanic	S	S	S	S	S	2	0	0.00%	0	0.00%
Hispanic, Any Race	S	S	S	S	S	24	S	S	S	S

Race and Ethnicity by Managed Care Region	Less Than 21 Years of Age					21 Years of Age and Older				
	Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received		Denom	Deliveries Wherein Any Perinatal Dental Service Was Received		Deliveries Wherein Preventive Dental Services Were Received	
		Num	Rate	Num	Rate		Num	Rate	Num	Rate
Other/Unknown	S	S	S	S	S	18	S	S	S	S
Tidewater										
White, Non-Hispanic	162	55	33.95%	37	22.84%	1,701	294	17.28%	130	7.64%
Black, Non-Hispanic	446	104	23.32%	84	18.83%	2,847	530	18.62%	236	8.29%
Asian, Non-Hispanic	S	S	S	S	S	128	22	17.19%	12	9.38%
Hispanic, Any Race	40	S	S	S	S	313	52	16.61%	26	8.31%
Other/Unknown	S	S	S	S	S	286	30	10.49%	16	5.59%

S indicates that the data were suppressed due to a small numerator or denominator (i.e., fewer than 11). In instances where only one stratification was suppressed, the value for the second smallest population was also suppressed, even if the value was 11 or more.

Overall, Table 2-7 shows that for both age groups, the rate of deliveries wherein any perinatal dental service was received varied across race and ethnicity and managed care regions. For women less than 21 years of age, rates were highest among White, Non-Hispanic women in four of the six managed care regions with sufficient sizes (Central, Roanoke/Alleghany, Southwest, and Tidewater). For women 21 years of age and older, rates were highest for at least two managed care regions with sufficient sizes among Asian, Non-Hispanic women (Central and Northern & Winchester) and White, Non-Hispanic women (Roanoke/Alleghany and Southwest).

12-Months Postpartum Dental Utilization

To assess dental utilization for pregnant women 12-months postpartum, HSAG assessed births that occurred between July 1, 2022, and June 30, 2023. Overall, HSAG identified 37,320 deliveries from July 1, 2022, through June 30, 2023, among 37,282 women. Of the 37,320 deliveries, 4,018 were to women less than 21 years of age and 33,302 were to women 21 years of age and older.

Table 2-8 presents the count of deliveries from July 1, 2022, and June 30, 2023, wherein any postpartum dental services were received within 12 months of delivery (Num), the percentage of the study population wherein postpartum dental services were received (Rate), and percentage of deliveries that received any postpartum dental services (Percent of Num) for each age group (i.e., less than 21 years of age and 21 years of age and older), stratified by dental service category.

Table 2-8—Distribution of Women With Postpartum Dental Utilization, by Dental Service Category

Dental Service Category	Less than 21 Years of Age			21 Years of Age and Older		
	Num*	Rate	Percent of Num	Num*	Rate	Percent of Num
Any Dental Service	991	24.66%	100.00%	7,286	21.88%	100.00%
Adjunctive General Services	378	9.41%	38.14%	1,881	5.65%	25.82%
Diagnostic Services	936	23.30%	94.45%	6,789	20.39%	93.18%
Endodontics	152	3.78%	15.34%	1,392	4.18%	19.11%
Oral and Maxillofacial Surgery	208	5.18%	20.99%	1,884	5.66%	25.86%
Periodontics	78	1.94%	7.87%	1,303	3.91%	17.88%
Preventive Services	671	16.70%	67.71%	3,646	10.95%	50.04%
Prosthodontics	S	S	S	155	0.47%	2.13%
Restorative	447	11.12%	45.11%	3,557	10.68%	48.82%

*Because a woman may have had more than one dental service during the postpartum period, the count of deliveries for each dental service category may not sum to the overall number of deliveries among women with any dental service.

S indicates that the data were suppressed due to a small numerator or denominator (i.e., fewer than 11).

As shown in Table 2-8, 24.66 percent (n=991) of deliveries to women less than 21 years of age received any postpartum dental service compared to 21.88 percent (n=7,286) of deliveries to women 21 years of age and older. For women less than 21 years of age, a larger proportion of deliveries that received any postpartum dental service were for Adjunctive General Services (38.14 percent) and Preventive Services (67.71 percent) compared to women 21 years of age and older. For women 21 years of age and older, a larger proportion of deliveries that received any postpartum dental service were for Endodontics (19.11 percent), Oral and Maxillofacial Surgery (25.86 percent), and Periodontics (17.88 percent) compared to women less than 21 years of age.

Table 2-9 presents the count (Num) and percentage of deliveries (Rate) wherein women received any dental service and preventive dental services postpartum for each age group, stratified by postpartum time periods. Please note, the dental services were only classified based on the earliest month in which a postpartum dental service was received for a member (i.e., dental services received after the earliest postpartum dental service are not included in the counts for this table).

Table 2-9—Dental Utilization Among Continuously Enrolled Women, by Postpartum Time Periods

Postpartum Time Periods	Less Than 21 Years of Age				21 Years of Age and Older			
	Received Any Dental Utilization		Received Preventive Dental Utilization		Received Any Dental Utilization		Received Preventive Dental Utilization	
	Num	Rate	Num	Rate	Num	Rate	Num	Rate
Total	991	24.66%	671	16.70%	7,286	21.88%	3,646	10.95%
Within One Month	123	3.06%	79	1.97%	886	2.66%	422	1.27%
One to Two Months	291	7.24%	216	5.38%	2,207	6.63%	1,149	3.45%
Three to Five Months	241	6.00%	179	4.45%	1,889	5.67%	1,032	3.10%
Six to Eight Months	205	5.10%	127	3.16%	1,312	3.94%	628	1.89%
Nine to Twelve Months	131	3.26%	70	1.74%	992	2.98%	415	1.25%

Table 2-9 shows the highest rate of postpartum dental utilization occurred one to two months after delivery for both the less than 21 years of age group (7.24 percent; n=291) and the 21 years of age and older group (6.63 percent; n=2,207). Given that postpartum coverage expanded from 60-days to 12-months postpartum, it is important to note that 14.36 percent and 12.59 percent of women utilized dental services three to 12 months after delivery for the less than 21 years of age group and the 21 years of age and older groups, respectively. The lowest rate of postpartum dental utilization occurred within one month after delivery for both the less than 21 years of age group (3.06 percent; n=123) and the 21 years of age and older group (2.66 percent; n=886).

Adult Dental Utilization

Overall, HSAG identified 1,137,482 adults who were enrolled for at least one day in a Medicaid program and eligible to receive dental services during CY 2023, and 199,250 adults (17.52 percent) who received any dental service during CY 2023. Of the 1,137,482 adults, 97.01 percent (n=1,103,460) were continuously enrolled in any Medicaid program for at least 90 days. Among continuously enrolled adults, 18.02 percent (n=198,789) received any dental service and 8.64 percent (n=95,368) received preventive dental services. Please note, Table 2-10 through Table 2-15 assess utilization for adults with at least one day of enrollment in any Medicaid program.

Table 2-10 displays the count of adults that received dental services (Num), the percentage of the study population wherein dental services were received (Rate), and percentage of adults that received any dental services (Percent of Num), stratified by dental service category.

Table 2-10—Distribution of Adults With Dental Utilization, by Dental Service Category

Dental Service Category	Num*	Rate	Percent of Num
Any Dental Service	199,250	17.52%	100.00%
Adjunctive General Services	48,255	4.24%	24.22%
Diagnostic Services	184,327	16.20%	92.51%
Endodontics	25,623	2.25%	12.86%
Oral and Maxillofacial Surgery	56,500	4.97%	28.36%
Periodontics	33,576	2.95%	16.85%
Prosthodontics	21,218	1.87%	10.65%
Restorative	77,682	6.83%	38.99%
Preventive Services	95,533	8.40%	47.95%
D1110—Adult Prophylaxis Visit	95,047	8.36%	47.70%
D1354—Application of Caries Arresting Medicament—Per Tooth	1,032	0.09%	0.52%

*Because an adult may have had more than one dental service during CY 2023, the count for each dental service category may not sum to the overall number of any dental and preventive services.

As shown in Table 2-10, approximately 17.52 percent (n=199,250) of adults received any dental service during CY 2023. Of the adults who received any dental service, a large proportion were for Diagnostic Services (92.51 percent), Preventive Services (47.95 percent), and Restorative (38.99 percent).

The distribution of adults receiving dental services varied by Medicaid program (i.e., Aged, Blind, Disabled [ABD], Dual Eligible, FAMIS Children, Medicaid Expansion, and Other Eligibility Groups) and delivery system (i.e., managed care, FFS, or not enrolled). Table 2-11 presents the count of adults from the study population (Denom), the percentage of adults from the study population (Percent of Denom), the count of adults from the study population wherein dental services were received (Num), and percentage of adults who received any dental services (Rate) for each group, stratified by Medicaid program and delivery system.

Table 2-11—Distribution of Adults With Any Dental Utilization, by Medicaid Program

Stratification	Denom	Percent of Denom	Num	Rate
Any Program	1,137,482	100.00%	199,250	17.52%
Medicaid Program				
ABD	106,282	9.34%	21,750	20.46%
Dual Eligible	124,232	10.92%	19,491	15.69%
FAMIS Children*	141	0.01%	29	20.57%

Stratification	Denom	Percent of Denom	Num	Rate
Medicaid Expansion	712,401	62.63%	123,239	17.30%
Other Eligibility Groups	194,426	17.09%	34,741	17.87%
Medicaid Delivery System				
Managed Care	1,036,335	91.11%	193,748	18.70%
FFS	101,147	8.89%	5,502	5.44%

* While FAMIS Children aid categories apply to children through age 19, some members who were age 21 years and older in CY 2023 may have retained aid categories for the FAMIS Children program given the continuous coverage provision under the coronavirus disease 2019 (COVID-19) public health emergency through March 31, 2023.

As shown in Table 2-11, approximately 91 percent of adults eligible to receive dental services were covered by managed care, and those covered by managed care had a higher rate of utilizing dental services than those covered by FFS. While the majority of adults eligible to receive dental services were enrolled in the Medicaid Expansion program (62.63 percent; n=712,401), members enrolled in FAMIS Children had the highest rate (20.57 percent) of receiving any dental service, and Dual Eligible members had the lowest rate (15.69 percent).

Table 2-12 presents the number of adults in the study population (Denom), as well as the count (Num) and percentage of adults (Rate) that received any dental services and preventive dental services in CY 2023, stratified by managed care region of residence.

Table 2-12–Dental Utilization Among Adults, by Managed Care Region of Residence

Managed Care Region of Residence	Denom	Received Any Dental Utilization		Received Preventive Dental Utilization	
		Num	Rate	Num	Rate
Total*	1,137,482	199,250	17.52%	95,533	8.40%
Central	286,483	55,525	19.38%	25,254	8.82%
Charlottesville/Western	133,936	20,938	15.63%	8,082	6.03%
Northern & Winchester	265,048	62,618	23.63%	36,670	13.84%
Roanoke/Alleghany	114,131	14,976	13.12%	5,944	5.21%
Southwest	77,286	9,949	12.87%	4,940	6.39%
Tidewater	260,517	35,240	13.53%	14,643	5.62%

*Note: Total also includes adults with Unknown/Missing managed care region of residence.

Table 2-12 shows that adults residing in Northern & Winchester had the highest rates of receiving any dental service and preventive dental services (23.63 percent and 13.84 percent, respectively). Adults residing in Roanoke/Alleghany, Southwest, and Tidewater had the lowest rates of receiving any dental

service and preventive dental services, with rates at least approximately 10 percentage points and 8 percentage points lower, respectively, than adults residing in Northern & Winchester.

Table 2-13 presents the number of adults in the study population (Denom), as well as the count (Num) and percentage of adults (Rate) that received any dental service and preventive dental services in CY 2023, stratified by age.

Table 2-13—Dental Utilization Among Adults, by Age

Age	Denom	Received Any Dental Utilization		Received Preventive Dental Utilization	
		Num	Rate	Num	Rate
Total	1,137,482	199,250	17.52%	95,533	8.40%
21–24 Years	120,248	19,673	16.36%	12,974	10.79%
25–34 Years	298,019	49,648	16.66%	25,903	8.69%
35–44 Years	241,206	44,000	18.24%	20,602	8.54%
45–54 Years	175,328	34,108	19.45%	15,073	8.60%
55–64 Years	180,115	34,463	19.13%	14,241	7.91%
65 Years and Older	122,566	17,358	14.16%	6,740	5.50%

As Table 2-13 shows, adults ages 35 to 64 years have similar rates of dental utilization, with rates for the individual age groups (e.g., 35–44 Years, 45–54 Years) within approximately 1 percentage point for receiving any dental service and for receiving preventive dental services. Adults 65 years of age and older had the lowest rates of receiving both any dental service (14.16 percent) and preventive dental services (5.50 percent).

Table 2-14 presents the number of adults in the study population (Denom), as well as the count (Num) and percentage of adults (Rate) that received any dental service and preventive dental services in CY 2023, stratified by race and ethnicity.

Table 2-14—Dental Utilization Among Adults, by Race and Ethnicity

Race and Ethnicity	Denom	Received Any Dental Utilization		Received Preventive Dental Utilization	
		Num	Rate	Num	Rate
Total	1,137,482	199,250	17.52%	95,533	8.40%
White, Non-Hispanic	565,379	95,819	16.95%	45,674	8.08%
Black, Non-Hispanic	368,949	68,633	18.60%	29,538	8.01%
Asian, Non-Hispanic	61,651	16,934	27.47%	10,011	16.24%

Race and Ethnicity	Denom	Received Any Dental Utilization		Received Preventive Dental Utilization	
		Num	Rate	Num	Rate
Hispanic, Any Race	29,623	5,233	17.67%	2,765	9.33%
Other/Unknown	111,880	12,631	11.29%	7,545	6.74%

Table 2-14 shows that Asian, Non-Hispanic adults had the highest rate of receiving both any dental service and preventive dental services (27.47 percent and 16.24 percent, respectively), while adults of Other/Unknown race and ethnicity had the lowest rates of receiving both any dental service and preventive dental services (11.29 percent and 6.74 percent, respectively).

Table 2-15 presents the number of adults in the study population (Denom), as well as the count (Num) and percentage of adults (Rate) that received any dental service and preventive dental services in CY 2023, stratified by managed care region of residence, and race and ethnicity.

Table 2-15—Dental Utilization Among Adults, by Managed Care Region of Residence and Race and Ethnicity

Race and Ethnicity by Managed Care Region	Denom	Received Any Dental Utilization		Received Preventive Dental Utilization	
		Num	Rate	Num	Rate
Central					
White, Non-Hispanic	114,999	21,679	18.85%	10,093	8.78%
Black, Non-Hispanic	126,444	26,437	20.91%	11,124	8.80%
Asian, Non-Hispanic	9,598	2,482	25.86%	1,328	13.84%
Hispanic, Any Race	7,622	1,472	19.31%	757	9.93%
Other/Unknown	27,820	3,455	12.42%	1,952	7.02%
Charlottesville/Western					
White, Non-Hispanic	79,870	12,788	16.01%	4,917	6.16%
Black, Non-Hispanic	38,299	6,385	16.67%	2,324	6.07%
Asian, Non-Hispanic	2,175	356	16.37%	169	7.77%
Hispanic, Any Race	2,784	401	14.40%	172	6.18%
Other/Unknown	10,808	1,008	9.33%	500	4.63%
Northern & Winchester					
White, Non-Hispanic	130,424	30,086	23.07%	17,208	13.19%

Race and Ethnicity by Managed Care Region	Denom	Received Any Dental Utilization		Received Preventive Dental Utilization	
		Num	Rate	Num	Rate
Black, Non-Hispanic	48,290	12,411	25.70%	6,800	14.08%
Asian, Non-Hispanic	40,869	12,881	31.52%	7,890	19.31%
Hispanic, Any Race	8,024	1,985	24.74%	1,244	15.50%
Other/Unknown	37,441	5,255	14.04%	3,528	9.42%
Roanoke/Alleghany					
White, Non-Hispanic	81,346	11,046	13.58%	4,365	5.37%
Black, Non-Hispanic	20,259	2,829	13.96%	1,011	4.99%
Asian, Non-Hispanic	1,895	260	13.72%	130	6.86%
Hispanic, Any Race	2,061	207	10.04%	90	4.37%
Other/Unknown	8,570	634	7.40%	348	4.06%
Southwest					
White, Non-Hispanic	70,835	9,216	13.01%	4,499	6.35%
Black, Non-Hispanic	2,113	285	13.49%	152	7.19%
Asian, Non-Hispanic	344	41	11.92%	28	8.14%
Hispanic, Any Race	564	62	10.99%	34	6.03%
Other/Unknown	3,430	345	10.06%	227	6.62%
Tidewater					
White, Non-Hispanic	87,844	11,001	12.52%	4,592	5.23%
Black, Non-Hispanic	133,526	20,285	15.19%	8,127	6.09%
Asian, Non-Hispanic	6,770	914	13.50%	466	6.88%
Hispanic, Any Race	8,567	1,106	12.91%	468	5.46%
Other/Unknown	23,810	1,934	8.12%	990	4.16%

Overall, Table 2-15 shows that Black, Non-Hispanic adults had the highest rates of receiving any dental services in four of the six regions (Charlottesville/Western, Roanoke/Alleghany, Southwest, and Tidewater) and Asian, Non-Hispanic adults had the highest rates of receiving preventive dental services in all six regions. Adults with Other/Unknown race and ethnicity had the lowest rate of utilizing any dental services in all six regions and the lowest rates of preventive dental services in five of the six regions (Central, Charlottesville/Western, Northern & Winchester, Roanoke/Alleghany, and Tidewater).

Adult DQA Measures

HSAG calculated three DQA measures for the adult population. Table 2-16 presents the number of adults in the measure eligible population (Denom), as well as the count (Num), and percentage of adults (Rate) that received the select dental services in CY 2023.

Table 2-16—DQA Measure Findings

Study Indicators	Denom	Num	Rate
Adults With Diabetes—Oral Evaluation			
Adults With Diabetes—Oral Evaluation	119,720	20,441	17.07%
Ambulatory Care Sensitive ED Visits for Non-Traumatic Dental Conditions in Adults			
Ambulatory Care Sensitive ED Visits for Non-Traumatic Dental Conditions in Adults*	12,394,271	24,241	195.58
Follow-Up After ED Visits for Non-Traumatic Dental Conditions in Adults			
7-Day Follow-Up	23,641	2,499	10.57%
30-Day Follow-Up	23,641	4,355	18.42%

**Please note, the denominator for this measure is member months and the rate is calculated per 100,000 member months.*

Approximately 17 percent of adults with diabetes had a comprehensive or periodic oral evaluation or a comprehensive periodontal evaluation during CY 2023. For CY 2023, the rate of ED visits for non-traumatic dental conditions in adults was 195.58 visits per 100,000 member months (2,346.96 visits per 100,000 members), which is in alignment with national Medicaid trends.⁴ Of those members who had an ED visit for non-traumatic dental conditions, approximately 11 percent and 18 percent had a follow-up visit with a dentist within 7 and 30 days, respectively.

⁴ Centers for Medicare & Medicaid Services (CMS). Medicaid Adult Beneficiaries Emergency Department Visits for Non-Traumatic Dental Conditions. Available at: <https://www.medicaid.gov/medicaid/benefits/downloads/adult-non-trauma-dental-ed-visits.pdf>. Accessed on: Nov 19, 2024.

3. Additional Considerations and Conclusions

Additional Considerations

Pregnant Women

For the pregnant women dental utilization portion of this study, HSAG considered perinatal dental utilization data for all women with a delivery during CY 2023. HSAG used deterministic and probabilistic data linking to match eligible members with birth registry records to identify births paid by Virginia Medicaid provided by DMAS and VDH. Enrollment was determined by matching these birth records to Medicaid enrollment data provided by DMAS. Methodological or data-related factors may influence the identification of dental services utilized during the perinatal period. This year's report assessed whether dental services were received prior to conception for those women eligible for Medicaid prior to becoming pregnant, and it will be important to continue to monitor whether members who received dental care during the preconception period also received dental services during the perinatal period. Additionally, HSAG's dental utilization results were derived from dental encounter data provided by DMAS.

Prior to this year's report, HSAG included births to women covered by FAMIS Prenatal Coverage in the FAMIS MOMS program. This year, births to women covered by FAMIS Prenatal Coverage were included in Other Medicaid. Therefore, exercise caution when comparing prior year FAMIS MOMS results to this year's results.

Starting July 1, 2022, postpartum coverage was expanded from 60 days to 12 months after delivery. While this year's study allowed for a 12-month time period for births from July 1, 2022, through June 30, 2023, it will be important to continue to monitor how the increased postpartum coverage impacts dental utilization in the 12-month postpartum period in future studies. Additionally, the claims/encounter data received for this activity were only complete through May 2024 due to the run-out period needed for claims/encounter data. Therefore, postpartum dental utilization for women who had births in June 2023 or later may be underestimated, since postpartum dental utilization could occur past May 2024.

Adults

For the adult dental utilization analysis, adult members were included if they had at least one day of enrollment in any Medicaid program. As a result, exercise caution when interpreting these results as the member may not have been enrolled long enough to receive dental services.

For the adult DQA measures, HSAG followed the 2024 DQA technical measure specifications; however, adjustments were made to the ages included for the *Ambulatory Care Sensitive ED Visits for Non-Traumatic Dental Conditions in Adults* and *Follow-Up After ED Visits for Non-Traumatic Dental Conditions in Adults* measures (i.e., HSAG included adults 21 years of age and older in the

denominator instead of 18 years of age and older) in alignment with the CardinalCare Smiles program for adults.⁵

Conclusions

Pregnant Women

Enhanced oral healthcare among pregnant women is essential for both mother and baby. Pregnancy may result in changes in oral health (e.g., pregnancy gingivitis, periodontic disease). Poor oral health is associated with cardiovascular disease and diabetes, and periodontic disease is associated with an increased risk for preterm birth.⁶ Therefore, delaying necessary dental treatment could result in significant risk for mother and baby (e.g., an infection of a tooth could spread throughout the body).⁷ The Virginia CardinalCare Smiles program provides women who become eligible for Medicaid when they become pregnant with a critically important opportunity to receive dental services during the prenatal and postpartum periods. Further, given that all Medicaid adults are eligible to receive dental services under the Virginia CardinalCare Smiles program, it is also an opportunity for adult women to receive dental services prior to conception. Recent studies have shown that increased access to dental care, like the dental coverage to all Medicaid adults in Virginia, can lead to lower medical costs for individuals who are pregnant or have chronic conditions (e.g., diabetes, heart disease).⁸ This is because poor oral health is associated with poor birth outcomes (e.g., preterm births, low birth weight infants) and can result in worse diabetes and hypertension, all of which can increase the medical costs during a woman's pregnancy and post-delivery.⁹

In CY 2023, younger women (i.e., less than 21 years of age) received dental services at higher rates than all other women (i.e., 21 years of age and older) in both the preconception and perinatal periods. Of note, younger women were more likely to have preventive dental utilization than all other women in both the preconception and perinatal periods. Women 21 years of age and older enrolled in managed care at the time of delivery had higher perinatal dental utilization than women 21 years of age and older enrolled in FFS. The majority of younger women who received perinatal dental services were enrolled in the Other Medicaid program, while approximately 36 percent of women 21 years of age and older who received perinatal dental services were enrolled with Medicaid for Pregnant Women (i.e., the member became eligible for Medicaid due to pregnancy). Of note, approximately 23 percent of women 21 years of age and older who received perinatal dental services were enrolled in Medicaid Expansion at the time of delivery and had lower rates of perinatal dental utilization than women enrolled in

⁵ Dental Quality Alliance. Dental Quality Measures. Available at: <https://www.ada.org/en/resources/research/dental-quality-alliance/dqa-dental-quality-measures>. Accessed on: Nov 19, 2024.

⁶ The American College of Obstetricians and Gynecologists. Oral Health Care During Pregnancy and Through the Lifespan. Committee Opinion No. 569. *Obstet Gynecol* 2013;122:417–22. Available at: <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2013/08/oral-health-care-during-pregnancy-and-through-the-lifespan>. Accessed on: Nov 19, 2024.

⁷ Oral Health Care During Pregnancy Expert Workgroup. 2012. Oral Health Care During Pregnancy: A National Consensus Statement. Washington, DC: National Maternal and Child Oral Health Resource Center. Available at: <https://www.mchoralhealth.org/PDFs/OralHealthPregnancyConsensus.pdf>. Accessed on: Nov 19, 2024.

⁸ Auger S, Preston R, Tranby EP, et al. The Role of Medicaid Adult Dental Benefits During Pregnancy and Postpartum. CareQuest Institute. Available at: https://www.carequest.org/system/files/CareQuest_Institute_The-Role-Medicaid-Adult-Dental-Benefits-During-Pregnancy_4.10.23.pdf. Accessed on: Nov 19, 2024.

⁹ Ibid.

Medicaid for Pregnant Women. This finding suggests there is an opportunity to ensure women enrolled with Medicaid prior to becoming pregnant establish a regular dentist to receive consistent dental care.

Overall, perinatal dental utilization and the receipt of preventive dental services varied by managed care region and race and ethnicity. Among women of all ages with continuous enrollment, dental utilization was highest in the Northern & Winchester region and lowest in the Roanoke/Alleghany region. Perinatal dental utilization was highest for deliveries among White, Non-Hispanic women for the less than 21 years of age group and Asian, Non-Hispanic women for the 21 years of age and older group. Preventive dental utilization rates were lowest among deliveries to Black, Non-Hispanic women regardless of age. The statewide patterns for race and ethnicity varied within each managed care region. It should be noted that women may have received services that DMAS did not cover (e.g., the services were covered by other public health initiatives);¹⁰ however, the regional distribution of perinatal dental utilization may be indicative of regional differences in women's access to dental providers.

12-Months Postpartum

For women who had births between July 1, 2022, and June 30, 2023, women less than 21 years of age had higher rates of postpartum dental utilization compared to women 21 years of age and older. Regardless of age, the highest rate of initial postpartum dental utilization occurred one to two months after delivery and the lowest rate of initial postpartum dental utilization occurred within one month after delivery. However, a majority of women who had an initial dental service in the 12-months postpartum period utilized them three to twelve months after delivery. Given this was the first full year of births that a 12-month postpartum period could be assessed, it will be important to monitor how dental utilization in the postpartum period changes over time.

Adults

On July 1, 2021, adults participating in Virginia Medicaid started receiving comprehensive dental benefits. Research has shown there is a relationship between oral health and physical health, and by expanding comprehensive adult dental coverage, there is the potential to improve outcomes and reduce costs.¹¹

In CY 2023, approximately 18 percent of adults received any dental service, with a large proportion of this dental utilization for diagnostic, preventive, and restorative services. Approximately 91 percent of adults eligible to receive dental services were covered by managed care, and those covered by managed care had a higher rate of utilizing dental services than those covered by FFS. While the majority of adults eligible to receive dental services were enrolled in the Medicaid Expansion program, members enrolled in Medicaid Expansion had the second lowest rate of receiving any dental service.

Overall, dental utilization and the receipt of preventive dental services varied by member demographics. Adults residing in Northern & Winchester had the highest rates of receiving any dental service and preventive dental services, while adults residing in Roanoke/Alleghany, Southwest, and

¹⁰ Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative. Richmond, VA: Virginia Department of Health. Available at: <https://www.mchoralhealth.org/PDFs/H47MC28478.pdf>. Accessed on: Nov 19, 2024.

¹¹ CareQuest Institute for Oral Health. Medicaid Adult Dental Benefit Forecasting Tool. Available at: <https://www.carequest.org/resource-library/medicaid-adult-dental-benefit-forecasting-tool>. Accessed on: Nov 19, 2024.

Tidewater had the lowest rates of receiving any dental service and preventive dental services. Adults ages 35 to 64 years had similar rates of dental utilization, while adults ages 65 and older had the lowest rates of receiving both any dental service and preventive dental services. Black, Non-Hispanic adults had the highest rates of utilizing any dental services in four of the six regions (Charlottesville/Western, Roanoke/Alleghany, Southwest, and Tidewater) and Asian, Non-Hispanic adults had the highest rates of utilizing preventive dental services in all six regions. Adults with Other/Unknown race and ethnicity had the lowest rate of utilizing any dental services in all six regions and the lowest rates of preventive dental services in five of the six regions (Central, Charlottesville/Western, Northern & Winchester, Roanoke/Alleghany, and Tidewater).

Approximately 17 percent of adults with diabetes had a comprehensive or periodic oral evaluation or a comprehensive periodontal evaluation during CY 2023. Given that diabetics are at increased risk for oral infections, tooth loss, periodontal problems, and dental caries, opportunities exist for Virginia Medicaid to ensure these members are receiving an annual oral evaluation.¹²

Nationally, in 2019, 1.5 percent of ED visits were for non-traumatic dental conditions and cost approximately \$3.4 billion.¹³ For CY 2023, the rate for ED visits for non-traumatic dental conditions in adults was 195.58 visits per 100,000 member months (2,346.96 visits per 100,000 members), which is in alignment with national Medicaid trends.¹⁴ Of those members who had an ED visit for non-traumatic dental conditions, approximately 11 percent and 18 percent had a follow-up visit with a dentist within 7 and 30 days, respectively. Given that dental care in an ED setting may be limited (e.g., symptoms may be managed; however, the problem is not addressed), it is critical that members receive follow-up care after the ED visit with a dentist who can address the unresolved dental issues and provide the necessary care.¹⁵

¹² Tarim, BA and Arican, B. Evaluation of oral health in different types of diabetes mellitus: A cross-sectional retrospective study. *Primary Care Diabetes*. 2023; 17(3):278-282. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S1751991823000694>. Accessed on: Nov 19, 2024.

¹³ CareQuest. Institute for Oral Health. Recent Trends in Hospital Emergency Department Visits for Non-Traumatic Dental Conditions. Available at: https://www.carequest.org/system/files/CareQuest_Institute_Recent-Trends-in-Hospital-ED-Visits_6.7.22_FINAL.pdf. Accessed on: Nov 19, 2024.

¹⁴ CMS. Medicaid Adult Beneficiaries Emergency Department Visits for Non-Traumatic Dental Conditions. Available at: <https://www.medicaid.gov/medicaid/benefits/downloads/adult-non-trauma-dental-ed-visits.pdf>. Accessed on: Nov 19, 2024.

¹⁵ Curt A and Samuels-Kalow M. How Should Emergency Department Clinicians Respond to Unmet Dental Needs? *AMA Journal of Ethics*. 2022. Available at: <https://journalofethics.ama-assn.org/article/how-should-emergency-department-clinicians-respond-unmet-dental-needs/2022-01>. Accessed on: Nov 19, 2024.

Appendix A. Covered Dental Services Included in Analysis

Appendix A provides the list of the Current Dental Terminology procedure codes for pregnant women and the adult population dental benefits covered by the CardinalCare Smiles program from the October 4, 2023, DentaQuest Smiles For Children (SFC) Office Reference Manual,¹⁶ which aligns with the CY 2023 dental utilization assessed in this data brief.

Pregnant Women Current Dental Terminology Procedure Codes

- Adjunctive General Services
 - D9110, D9222, D9223, D9230, D9239, D9243, D9248, D9310, D9420, D9440, D9610, D9612, D9630, D9910, D9920, D9930, D9944, D9945, D9946, D9990, D9992, D9994, D9995, D9996, D9999
- Diagnostic Services
 - D0120, D0140, D0145, D0150, D0170, D0210, D0220, D0230, D0240, D0250, D0251, D0270, D0272, D0273, D0274, D0330, D0340, D0372, D0373, D0374, D0470
- Endodontics
 - D3110, D3120, D3220, D3221, D3230, D3240, D3310, D3320, D3330, D3346, D3347, D3348, D3351, D3352, D3353, D3410, D3421, D3425, D3426, D3430
- Implant Services
 - D6096
- Maxillofacial Prosthetics
 - D5951
- Oral and Maxillofacial Surgery
 - D7111, D7140, D7210, D7220, D7230, D7240, D7241, D7250, D7260, D7261, D7270, D7280, D7282, D7283, D7285, D7286, D7288, D7310, D7311, D7320, D7321, D7450, D7451, D7471, D7472, D7473, D7485, D7510, D7511, D7880, D7961, D7962, D7963, D7970, D7971, D7972
- Orthodontics
 - D8010, D8020, D8030, D8040, D8080, D8210, D8220, D8660, D8670, D8680, D8703, D8704, D8999
- Periodontics
 - D4210, D4211, D4249, D4260, D4261, D4263, D4264, D4270, D4273, D4277, D4278, D4283, D4322, D4323, D4341, D4342, D4346, D4355, D4910
- Preventive Services
 - D1110, D1120, D1206, D1208, D1351, D1354, D1510, D1516, D1517, D1520, D1526, D1527, D1551, D1552, D1553, D1556, D1557, D1558, D1575

¹⁶ DentaQuest, LLC. *Office Reference Manual Smiles for Children Commonwealth of Virginia Medicaid, FAMIS, FAMIS Plus, Dental Program*. Oct 4, 2023.

- **Prosthodontics**
 - D5110, D5120, D5130, D5140, D5211, D5212, D5213, D5214, D5221, D5222, D5223, D5224, D5225, D5226, D5227, D5228, D5282, D5283, D5284, D5286, D5410, D5411, D5421, D5422, D5511, D5512, D5520, D5611, D5612, D5621, D5622, D5630, D5640, D5650, D5660, D5725, D5730, D5731, D5740, D5741, D5750, D5751, D5760, D5761, D5765, D5850, D5851, D6205, D6211, D6212, D6214, D6240, D6241, D6242, D6243, D6245, D6250, D6251, D6252, D6545, D6548, D6710, D6720, D6721, D6722, D6740, D6750, D6751, D6752, D6753, D6784, D6790, D6791, D6792, D6794, D6930
- **Restorative**
 - D2140, D2141, D2150, D2160, D2161, D2330, D2331, D2332, D2335, D2390, D2391, D2392, D2393, D2394, D2644, D2710, D2721, D2722, D2740, D2750, D2751, D2752, D2753, D2790, D2791, D2792, D2794, D2915, D2920, D2928, D2930, D2931, D2932, D2933, D2934, D2940, D2950, D2951, D2952, D2954, D2962

Adult Current Dental Terminology Procedure Codes

- **Adjunctive General Services**
 - D9110, D9222, D9223, D9230, D9239, D9243, D9248, D9310, D9410, D9420, D9610, D9630, D9920, D9930, D9990, D9992, D9994, D9995, D9996, D9999
- **Diagnostic Services**
 - D0120, D0140, D0150, D0170, D0210, D0220, D0230, D0240, D0250, D0251, D0270, D0272, D0274, D0330, D0372, D0373, D0374
- **Endodontics**
 - D3110, D3120, D3221, D3310, D3320, D3330
- **Oral and Maxillofacial Surgery**
 - D7140, D7210, D7220, D7230, D7240, D7241, D7250, D7260, D7261, D7285, D7286, D7288, D7310, D7311, D7320, D7321, D7450, D7451, D7471, D7472, D7473, D7510, D7511, D7880
- **Periodontics**
 - D4210, D4211, D4341, D4342, D4346, D4355, D4910
- **Preventive Services**
 - D1110, D1354
- **Prosthodontics**
 - D5110, D5120, D5130, D5140, D5211, D5212, D5213, D5214, D5511, D5512, D5520, D5640, D5650, D5730, D5731, D5750, D5751, D6930
- **Restorative**
 - D2140, D2150, D2160, D2161, D2330, D2331, D2332, D2335, D2391, D2392, D2393, D2394, D2740, D2750, D2751, D2752, D2780, D2781, D2782, D2783, D2790, D2791, D2792, D2794, D2920, D2931, D2932, D2940, D2950, D2951, D2952, D2954