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Estimating the Cost and Effects of Adding a Dental Benefit to Medicare Part B

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Introduction

On March 16th, 2023, Senators Bob Casey (D-PA) and Ben Cardin (D-MD) introduced the Medicare and Medicaid Dental, Vision, and Hearing Benefit Act (Senate 2023). The legislation would expand Medicare to include dental, vision, and hearing services and increase federal matching rates for Medicaid for these services. Dental benefits would include routine cleanings, exams, X-rays, fillings, crowns, root canals, and other services. This legislation follows previous efforts dating back to 2019 when the House of Representatives passed H.R. 3, the Elijah E. Cummings Lower Drug Costs Now Act (House 2019). The bill failed in the Senate. Subsequently, similar bills were introduced in Congress in 2021 (H.R. 502 and S. 97). President Biden has included funding for Medicare dental benefits in budget proposals. The American Dental Association has supported creating a more limited dental coverage benefit in Medicare that would not be part of Medicare Part B and would be means-tested (Simon and Giannobile 2021).

This paper examines the coverage and cost implications of expanding Medicare Part B to include comprehensive dental benefits. The new benefits would be subject to the current Part B deductible and 20 percent cost sharing, and there would be no limit on out-of-pocket spending. There are other approaches to dental benefits. For example, legislation could place limits on the number of exams or cleanings within a given year. Benefits could be limited to exams, cleanings, X-rays, root canals,

extractions, and crowns. While we recognize there are several possible alternative designs, we focus here on the implications of expanding Part B to provide comprehensive dental benefits.

About US Health Reform—Monitoring and Impact

With support from the Robert Wood Johnson Foundation, the Urban Institute has undertaken US Health Reform—Monitoring and Impact, a comprehensive monitoring and tracking project examining the implementation and effects of health reforms. Since May 2011, Urban Institute researchers have documented changes to the implementation of national health reforms to help states, researchers, and policymakers learn from the process as it unfolds. The publications developed as part of this ongoing project can be found on both the Robert Wood Johnson Foundation's and Urban Institute Health Policy Center's websites.

Is There a Need for Dental Coverage in Medicare?

Expanding Medicare to include dental benefits could benefit enrollees in several ways (Shartzer et al. 2021). Among adults ages 65 and over, there is evidence of widespread prevalence of dental caries, dental decay, and tooth loss (CDC 2019). Further, poor oral health has been linked to cardiovascular disease (DeStefano et al. 1993; Dietrich et al. 2013; Dietrich et. al. 2017; Schenkein and Loos 2013; Tonetti and Van Dyke 2013), kidney disease (Akar et al. 2011; Ruokonen et al. 2017), and poor mental health (Kisely et al. 2015; Kisely 2016).

In addition, current out-of-pocket dental spending for the elderly is quite high. In an earlier brief, we found that the highest total and out-of-pocket spending levels, aside from those in the teenage years, occur at ages 65 to 79 (Shartzer et al. 2021). We estimate that, under current law, the average total spending for dental care is $841 for all enrollees, $946 for those in traditional Medicare (TM), and $732 for those in Medicare Advantage (MA), as shown in table 1 (we describe our data and methods in the next section). We estimate out-of-pocket spending to be almost 80 percent of overall spending, regardless of whether individuals are in TM or MA.

TABLE 1

2023 Total and Out-of-Pocket Dental Spending by TM and MA Enrollment

	Number of enrollees (millions)	Any dental events?	Average spending	Average OOP spending	Average spending, if any	Average OOP, if any	OOP to total expenditures, if any
All enrollees	67.2	53.0%	$841	$657	$1,615	$1,261	0.78
TM	34.0	55.6%	$946	$744	$1,749	$1,374	0.79
With dental coverage	9.7	78.5%	$1,234	$911	$1,989	$1,310	0.66
No dental coverage	24.4	46.5%	$833	$678	$1,587	$1,418	0.89
MA	33.2	50.3%	$732	$567	$1,466	$1,136	0.77
With dental coverage	6.5	74.1%	$910	$660	$1,533	$981	0.64
No dental coverage	26.7	44.5%	$689	$545	$1,439	$1,199	0.83

Source: 2023 MCARE-SIM estimates based on 2015–2018 MCBS.

Notes: OOP = out-of-pocket; TM = traditional Medicare; MA = Medicare Advantage.

Table 1 shows that out-of-pocket spending averages over $657 for all beneficiaries and $1,615 for the 53 percent of enrollees with any dental spending. Currently, Medicare beneficiaries have some supplemental coverage either in employer or retirement plans or through MA, but the coverage in these plans tends to be meager; there are limits on benefits and cost sharing is typically around 50 percent. The data in table 1 shows how little dental coverage Medicare beneficiaries have. Whether they are in TM or MA, most have no dental coverage at all.[1] Even individuals with coverage still pay more than 60 percent of dental expenses out of pocket.

Also, there are substantial differences in dental utilization by enrollees' racial and ethnic backgrounds and income. Non-Hispanic Black Medicare enrollees have far lower spending on dental services than other racial and ethnic groups; at the same time, enrollees with incomes above 400 percent of the federal poverty level (FPL) have far greater expenditures than those with incomes below 100 percent of FPL. Table 2 shows that non-Hispanic white enrollees had estimated average expenditures of $965 in 2023, compared with $346 for Black and $523 for Hispanic enrollees. White enrollees were more likely than other groups to report a dental event (57.9 percent for white enrollees versus 32.9 percent for Black enrollees and 39.9 percent for Hispanic enrollees).

TABLE 2

Dental Spending Characteristics, by Enrollee Income and Racial-Ethnic Background

Spending by income group	Number of enrollees (millions)	Any dental events?	Average spending	Average OOP spending	Average spending, if any	Average OOP, if any	OOP to total expenditures, if any
Income <100% of FPL	11.0	30.2%	$348	$255	$1,214	$887	0.73
Income 100–200% of FPL	17.0	37.4%	$519	$422	$1,416	$1,152	0.81
Income 200–400%of FPL	19.6	57.0%	$821	$650	$1,466	$1,161	0.79
Income > 400% of FPL	19.5	75.4%	$1,419	$1,095	$1,900	$1,465	0.77
Spending by racial-ethnic background							
Non-Hispanic white	49.6	57.9%	$965	$766	$1,686	$1,339	0.79
Non-Hispanic Black	6.6	32.4%	$346	$232	$1,112	$745	0.67
Hispanic	6.7	39.9%	$523	$374	$1,381	$987	0.71
Non-Hispanic other race	4.4	48.0%	$663	$487	$1,421	$1,041	0.73

Source: 2023 MCARE-SIM estimates based on 2015–2018 MCBS.

Notes: OOP = out-of-pocket; TM = traditional Medicare; MA = Medicare Advantage; FPL = federal poverty level.

Enrollees with incomes above 400 percent of FPL had average spending of $1,419 in contrast to $348 for those with incomes below the poverty line and $523 for those with incomes between 100 and 200 percent of FPL (table 2). Differences in spending reflect income-based differences in dental utilization: 75.4 percent of those with incomes above 400 percent of FPL reported any dental event versus 30.2 percent of those with incomes below 100 percent of FPL and 37.4 percent for those with incomes between 100 percent and 200 percent of FPL. A policy to expand Part B could potentially help reduce these racial-ethnic and income differences.

Data and Methods

We use the Urban Institute's Medicare policy microsimulation model, MCARE-SIM, to investigate 2023 dental use and spending patterns among Medicare enrollees and to estimate the change in per capita and aggregate spending for dental services under a policy that includes dental services under Medicare Part B. MCARE-SIM uses data from the 2015–2018 Medicare Current Beneficiary Survey (MCBS) and projects Medicare enrollment and spending estimates to 2023. The MCBS provides nationwide information on demographic characteristics, medical expenditures, use of medical services, health status, access to health care, and sources of supplemental insurance coverage for Medicare enrollees. To project dental spending to 2023, we assume a growth rate that is the average of Parts A, B, and D growth rate projections from the 2021 Medicare Trustees report (Medicare Trustees 2021). We estimate 2023 dental care use, total dental spending, and the breakdown of dental spending by the following payer types: Medicare (including supplement dental benefits provided by some Medicare Advantage plans), Medicaid, supplemental plans (e.g., individually purchased plans or employer-sponsored insurance plans), and out-of-pocket spending. We further examine these outcomes by the following subgroups: Medicare coverage type (TM versus MA plans), race and ethnicity (white, Black, Hispanic, or other non-Hispanic race), and income group (below 100 percent of FPL, between 100 and 200 percent of FPL, between 200 and 400 percent of FPL, and at or above 400 percent of FPL).

Table 3 reports the typical dental procedures that Medicare enrollees use. Among enrollees with any dental use, three-quarters report receiving a cleaning and 68 percent had an exam. Just under half (45 percent) report receiving X-rays. Among more intensive procedures, the most common are receiving a filling (about 18 percent of enrollees with any dental spending), a crown (14 percent), or having a tooth extracted (12 percent). Less common dental services that Medicare enrollees use include root canals, bridges, surgeries, periodontal, and orthodontist services.

TABLE 3

Share of Beneficiaries with Each Dental Procedure Type, among Those with Any Dental Use, 2023

Procedure type	All beneficiaries with any dental events
Preventive	
Cleaning	75.4%
Exam	68.3%
X-ray	45.3%
Extensive	
Bridge	2.5%
Crown	14.5%
Extraction	11.8%
Filling	17.6%
Orthodontist	0.5%
Other procedure	8.7%
Root canal	4.0%
Periodontal	2.5%
Bonding	0.7%
Surgery	1.2%

Source: 2023 MCARE-SIM Estimates Based on 2015–2018 MCBS.

Adding a dental benefit to Part B affects the effective price that enrollees pay for dental services. For modeling purposes, under current law, we define the price that enrollees face for dental services as an average price—the ratio of their out-of-pocket spending to their total spending for dental services. Under a policy that would include dental services under Part B in 2023, enrollees are required to first spend a total deductible (encompassing both traditional Part B services and dental services) of $226, and thereafter they would face a 20 percent cost share for all dental services. Compared with the estimated average cost share of 78 percent for dental services under current law (table 1), this policy represents a very large reduction in the price of dental services for most enrollees.

To predict how enrollees may respond to this large reduction in the price for dental services, we estimate the price elasticity of demand using a regression approach. Specifically, we regress the log of total dental spending against the log of the ratio of out-of-pocket spending to total dental spending under current law. Table 4 presents the results overall and separately by income group. We estimate an overall elasticity of about -0.2, indicating that a 10 percent decrease in the price of dental services would increase the use of dental services by an average of about 2 percent. The table shows higher elasticity estimates for lower-income groups, indicating that Medicare enrollees with lower incomes are more price sensitive to dental services than those in higher-income groups. We directly use these derived estimates by each income group to model enrollee response to the policy change. These elasticities are within the range of other estimated elasticities for dental and other health care services within the literature.[2]

TABLE 4

Estimated Price Elasticity of Demand for Dental Care

Group	Estimated elasticity
All enrollees	**-0.196** (0.02)
Enrollees with incomes < 100% of FPL	**-0.322** (0.089)
Enrollees with incomes 100–200% of FPL	**-0.237** (0.057)
Enrollees with incomes 200–400% of FPL	**-0.22** (0.035)
Enrollees with incomes > 400% of FPL	**-0.102** (0.027)

Source: 2023 MCARE-SIM Estimates Based on 2015–2018 MCBS.

Notes: FPL = federal poverty level. Estimated elasticity report coefficient of the log of the ratio of out-of-pocket to total dental spending in a regression with the log of total dental spending as the dependent variable. Estimates reflect the percent change in dental spending following a 1 percent change in the price of dental spending.

Using the estimated elasticities in table 4, we estimate how much Medicare enrollee spending for dental services would change given the individual-level changes in prices for these services. We apply the estimated elasticities to the individual changes in price using an arc elasticity formula.[3] For the base level of spending within the formula, we use predicted dental spending by payer type rather than actual spending measured under current law. Predicted spending is determined using Poisson regressions that include enrollee age, sex, institutionalized versus community residence, racial-ethnic background, Medicaid coverage, supplemental plan coverage, and income group as explanatory variables. Using predicted spending preserves the average actual dental spending for each group. It also ensures that nearly all enrollees have nonzero dental spending under current law and therefore have some modeled behavioral response to the policy. We then use the arc elasticity formula (using predicted spending as a base) to determine the predicted change in dental spending under the policy. We apply this predicted change in dental spending to actual measured spending under current law to predict the level of spending for each individual under the policy.

For enrollees that had any Medicaid or supplemental plan spending for dental care, we assume that Medicare will, in many cases, cover spending that had been covered by these payers, but that they would maintain existing coverage levels and thereby not reduce the extent of their coverage if the non-Medicare portion of dental spending were to increase. That is, we do not model how Medicaid or supplemental policies may restructure benefit packages in response to this policy change.[4]

Results

A Medicare Dental Benefit under Part B Would Increase Dental Care Spending by about One-Third

The key results from introducing a Medicare dental benefit into Part B are shown in tables 5 through 8. Table 5 shows results on a per capita basis. Total spending for dental services would increase from $841 to $1,129 per capita, a 34 percent increase. Medicare spending would increase from $53 under the current law to $948 under the new policy. Out-of-pocket spending would fall by $530 per person, from $657 to $127, a reduction of over 80 percent. We also see reductions in supplementary insurance and Medicaid payments for dental services.

Among TM beneficiaries, overall per capita spending for dental care would increase by $335, or 35 percent. For this enrollee group, Medicare spending for dental care increases from $0 to $1,133. Out-of-pocket spending falls from $744 to $95, a reduction of 87 percent. For MA enrollees, the change in total dental care spending is similar in percentage terms to TM, but they spent less under current law and so they continue to spend less. Among MA enrollees, Medicare spending increases by $649 to $757, and out-of-pocket spending declines by $408.

TABLE 5

Effect of Including Dental in Part B on Per Capita Spending for Dental Services

	All Enrollees			
	Current law	Policy	Difference	Percent difference
Spending on dental services	$841	$1,129	$289	34%
Medicare	$53	$948	$894	N/A
Supplementary	$123	$50	-$73	-59%
Medicaid	$7	$5	-$2	-32%
Out-of-pocket	$657	$127	-$530	-81%
Enrollees (millions)	67.2	67.2		

	All TM Enrollees			
	Current law	Policy	Difference	Percent difference
Spending on dental services	$946	$1,282	$335	35%
Medicare	$0	$1,133	$1,133	N/A
Supplementary	$194	$50	-$144	-74%
Medicaid	$8	$4	-$4	-52%
Out-of-pocket	$744	$95	-$649	-87%
Enrollees (millions)	34.0	34.0		

	All MA Enrollees			
	Current law	Policy	Difference	Percent difference
Spending on dental services	$732	$973	$241	33%
Medicare	$108	$757	$649	600%
Supplementary	$51	$51	$0	0%
Medicaid	$6	$6	$0	0%
Out-of-pocket	$567	$159	-$408	-72%
Enrollees (millions)	33.2	33.2		

Source: 2023 MCARE-SIM Estimates Based on 2015–2018 MCBS.

Notes: TM = traditional Medicare; MA = Medicare Advantage.

Spending Would Increase the Most for Beneficiaries with Low Incomes, but Income-Based Differences in Spending on Dental Care Remain

Table 6 shows changes in per capita spending for dental care by income. In percentage terms, the largest increase is for those with incomes below 100 percent of FPL (72 percent increase in dental spending) and the smallest increase in percentage terms is for those with incomes over 400 percent of FPL (20 percent increase), reflecting the different estimated elasticities by income. Since the differences in spending for dental services across income groups are so large under current law, the greater percentage increases in dental spending for low-income relative to high-income individuals are not enough to reduce differences by income under this policy change. With the dental policy, for those under 100 percent of FPL, spending increases to $598 per capita. In contrast, spending is $1,705 for

those over 400 percent of FPL. The 71 percent increase in spending among those with income under 100 percent of FPL amounts to a $249 increase, while the 20 percent increase in spending among those with income above 400 percent of FPL amounts to an additional $286 in dental spending. Those between 100 and 200 percent of FPL and 200 and 400 percent of FPL have spending levels of $737 and $1,196, respectively, reflecting increases of over 40 percent.

Medicare spending increased by $414 for those with incomes below 100 percent of FPL and $1,462 for those above 400 percent of FPL. Supplementary and Medicaid spending fell or was unchanged for each group. Out-of-pocket spending also fell considerably. Out-of-pocket spending was relatively low for those with incomes below 100 percent of FPL compared with other income groups. The drop in out-of-pocket spending was 61 percent but only $155. In contrast, those with incomes above 400 percent of FPL saw a reduction of $978, or 89 percent, in out-of-pocket spending. Out-of-pocket spending for those with incomes between 100 and 200 percent of FPL and 200 and 400 percent of FPL fell by $292 and $502 per capita (69 percent and 77 percent), respectively.

TABLE 6

Impact of Including Dental in Part B on Per Capita Spending for Dental Services by Income Group

	Income < 100 Percent of FPL			
	Current law	**Policy**	**Difference**	**Percent difference**
Spending on dental services	$348	$598	$249	71.6%
Medicare	$49	$463	$414	N/A
Supplementary	$16	$16	-$1	-3.3%
Medicaid	$28	$18	-$10	-34.5%
Out-of-pocket	$255	$100	-$155	-60.6%
Enrollees (millions)	11.0	11.0		

	Income 100–200 Percent of FPL			
	Current law	**Policy**	**Difference**	**Percent difference**
Spending on dental services	$519	$737	$218	41.9%
Medicare	$49	$563	$515	N/A
Supplementary	$41	$37	-$4	-9.8%
Medicaid	$7	$6	-$2	-21.9%
Out-of-pocket	$422	$131	-$292	-69.0%
Enrollees (millions)	17.0	17.0		

	Income 200–400 Percent of FPL			
	Current law	**Policy**	**Difference**	**Percent difference**
Spending on dental services	$821	$1,196	$375	45.7%
Medicare	$55	$983	$928	N/A
Supplementary	$114	$64	-$50	-43.8%
Medicaid	$2	$1	-$1	-40.4%
Out-of-pocket	$650	$148	-$502	-77.2%
Enrollees (millions)	19.6	19.6		

	Income > 400 Percent of FPL			
	Current law	**Policy**	**Difference**	**Percent difference**
Spending on dental services	$1,419	$1,705	$286	20.1%
Medicare	$59	$1,521	$1,462	N/A
Supplementary	$265	$67	-$198	-74.7%
Medicaid	$0	$0	$0	-45.0%
Out-of-pocket	$1,095	$117	-$978	-89.4%
Enrollees (millions)	19.5	19.5		

Source: 2023 MCARE-SIM Estimates Based on 2015–2018 MCBS.

Note: FPL = federal poverty level.

Spending by Non-Hispanic Black and Hispanic Enrollees Increased by a Greater Percentage than for Non-Hispanic White Enrollees, but Racial-Ethnic Differences in Dental Spending Levels Remain

Table 7 shows per-capita spending under current law and under the dental policy by race and ethnicity. Non-Hispanic white enrollees would have increased spending on dental services from $965 under current law to $1,283 under the new Medicare benefit, an increase of $318, or 33 percent. Non-Hispanic Black enrollees would have increases in spending from $346 to $498, a $152 increase or 44 percent over baseline. Dental spending for Hispanic enrollees increases by a similar percentage (45 percent), rising $234 from $523 at baseline to $757 under the policy. Both non-Hispanic Black and Hispanic enrollees experienced a greater percent increase in dental spending under the policy than non-Hispanic white enrollees. Even with this greater percent increase, differences in the level of dental spending by race/ethnicity persist under the policy.

Medicare spending for dental care increases the most for non-Hispanic white enrollees, by $1,032; this contrasts with smaller increases for non-Hispanic Black enrollees ($356), Hispanic enrollees ($530), and non-Hispanic enrollees from all other racial backgrounds ($689). Supplementary and Medicaid spending for dental care fell for each group. The largest drop in out-of-pocket spending was for non-Hispanic white enrollees, who saw a decline from $776 to $140. For non-Hispanic Black enrollees, whose spending levels were far below those for non-Hispanic white enrollees under current law, the policy would result in a reduction of $169 in out-of-pocket spending for dental care, from $232 to $63. Hispanic and non-Hispanic other race enrollees saw substantial reductions in out-of-pocket spending, but not as large as for non-Hispanic white enrollees because the baseline levels were so much lower.

TABLE 7

Impact of Including Dental in Part B on Per Capita Spending for Dental Services by Enrollee Racial-Ethnic Background

	Non-Hispanic White Enrollees			
	Current law	**Policy**	**Difference**	**Percent difference**
Spending for dental services	$965	$1,283	$318	33.0%
Medicare	$50	$1,082	$1,032	N/A
Supplementary	$143	$58	-$86	-59.6%
Medicaid	$5	$3	-$2	-35.2%
Out-of-pocket	$766	$140	-$627	-81.8%
Enrollees (millions)	49.6	49.6		

	Non-Hispanic Black Enrollees			
	Current law	**Policy**	**Difference**	**Percent difference**
Spending for dental services	$346	$498	$152	43.9%
Medicare	$50	$406	$356	N/A
Supplementary	$53	$22	-$31	-59.1%
Medicaid	$11	$7	-$4	-37.8%
Out-of-pocket	$232	$63	-$169	-72.8%
Enrollees (millions)	6.6	6.6		

	Hispanic Enrollees			
	Current law	**Policy**	**Difference**	**Percent difference**
Spending for dental services	$523	$757	$234	44.7%
Medicare	$80	$610	$530	N/A
Supplementary	$55	$28	-$27	-49.3%
Medicaid	$14	$11	-$3	-23.9%
Out-of-pocket	$374	$107	-$266	-71.2%
Enrollees (millions)	6.7	6.7		

	Non-Hispanic Other Race Enrollees			
	Current law	**Policy**	**Difference**	**Percent difference**
Spending for dental services	$663	$903	$240	36.3%
Medicare	$60	$748	$689	N/A
Supplementary	$107	$40	-$67	-62.5%
Medicaid	$9	$8	-$2	-16.6%
Out-of-pocket	$487	$107	-$380	-78.0%
Enrollees (millions)	4.4	4.4		

Source: 2023 MCARE-SIM Estimates Based on 2015–2018 MCBS.

Medicare Part B Spending Would Increase by an Estimated $60.1 Billion in 2023 from Adding a Medicare Dental Benefit

Table 8 shows the overall spending changes that would occur with the Medicare benefit. Overall, Medicare spending would increase from $3.6 billion to $63.7 billion, an increase of $60.1 billion, assuming the policy had been enacted in 2023. There would be a reduction in supplementary, Medicaid, and out-of-pocket spending for dental care. Overall expenditures on dental care would increase by $19.4 billion (34 percent).

Medicare spending for those with TM would increase by $38.6 billion under the policy. There would be reductions in supplementary insurance and Medicaid, and a substantial $22.1 billion decrease in out-of-pocket costs for these enrollees. Total dental spending would increase by 11.4 billion, or by 35 percent. MA enrollees would also have increases in spending as MA plans increased benefits to comply with the new Part B standards. Medicare spending would increase from $3.6 billion to $25.1 billion, an increase of $21.5 billion. However, out-of-pocket spending would decline by $13.5 billion. Overall new dental spending on the Medicare Advantage population would increase by $8.0 billion, or 33 percent.

TABLE 8

Total Spending for Dental Services under Current Law and under Policy (In Billions)

All enrollees	Current law	Policy	Difference
Total dental	$56.5	$75.9	$19.4
Medicare spending (from MA)	$3.6	$63.7	$60.1
Supplementary	$8.3	$3.4	-$4.9
Medicaid	$0.5	$0.3	-$0.1
Out-of-pocket	$44.2	$8.5	-$35.6
TM enrollees	**Current law**	**Policy**	**Difference**
Total dental	$32.2	$43.6	$11.4
Medicare spending	–	–	–
Supplementary	$6.6	$1.7	-$4.9
Medicaid	$0.3	$0.1	-$0.1
Out-of-pocket	$25.3	$3.2	-$22.1
MA enrollees	**Current law**	**Policy**	**Difference**
Total dental	$24.3	$32.3	$8.0
Medicare spending	$3.6	$25.1	$21.5
Supplementary	$1.7	$1.7	$0.0
Medicaid	$0.2	$0.2	$0.0
Out-of-pocket	$18.8	$5.3	-$13.5

Source: 2023 MCARE-SIM Estimates Based on 2015–2018 MCBS.

Notes: TM = traditional Medicare; MA = Medicare Advantage.

Discussion

There are now several legislative proposals to add dental benefits to Medicare. We modeled a policy that would add a comprehensive set of dental benefits to Medicare Part B. The policy we modeled would result in a substantial increase in spending on dental services for Medicare beneficiaries. TM and MA enrollees would see about a 35 percent increase in spending on dental care. Medicare spending would increase substantially because of substituting for existing supplementary insurance, Medicaid and out-of-pocket expenditures, and because the new benefit would induce additional utilization and, thereby, spending.

In this paper, we also compare differences in spending by race/ethnicity and income. We showed that non-Hispanic white enrollees have substantially higher spending than non-Hispanic Black enrollees and other groups under current law. Non-Hispanic white enrollees also have smaller percentage increases than non-Hispanic black enrollees and those of other racial-ethnic backgrounds but have larger increases in absolute dollars. The differences in dental spending that existed before adding a dental benefit persist after the policy.

There are also differences in dental spending by income group that persist under this policy. Higher-income enrollees with incomes above 400 percent of FPL spend substantially more than enrollees in the lowest income group under current law and under the dental policy. Higher-income Medicare beneficiaries have smaller percentage increases in spending but greater increases in dollar terms. Thus, differences between high- and low-income Medicare beneficiaries expand somewhat relative to current law. The low spending levels for enrollees with low incomes and Black and Hispanic enrollees suggest access problems that are not addressed by simply adding a dental benefit.

We conclude that while adding a dental benefit would not solve all access problems or eliminate differences in dental spending by enrollee race and ethnicity, it would result in a substantial increase in the use of and spending on dental care for all beneficiaries, with the largest percentage increases for income and racial-ethnic groups with the lowest levels of dental use and spending today. The estimated cost to Medicare would be substantial and the benefit structure would have to be carefully designed. We estimate that Medicare would spend $60.1 billion on a new Medicare drug benefit in 2023. Again, this is because of substituting Medicare for other sources of payment and increased demand for services because the new benefit would make dental care more affordable. About 25 percent of this would be financed through beneficiary premiums, but the remaining amount is still significant.

There may be alternative policies that could reduce this amount somewhat. Payment rates to dentists can be lower than those assumed here, but that could adversely affect access to dentists. We also assume a comprehensive benefits package, including the services shown in table 3. A policy could be designed to cover fewer services. But while data is unavailable on spending for individual services, it does not appear that the services that could reasonably be eliminated are responsible for much spending. Another alternative is to create a new Part of Medicare, say a Part E (D being taken). This would allow for a separate deductible and cost-sharing structure. For example, after providing some protections for the lowest-income people, deductibles could be higher, say $500, for middle- or higher-

income individuals, or tiered to go even higher for the high-income group. Designing a tiered policy could help narrow the income-based and racial-ethnic-based inequities in dental spending that persist under the broad policy considered in this study.

Notes

[1] While most MA enrollees in the MCBS report having no coverage, many may be enrolled in plans that provide supplemental dental coverage. In 2022, more than 85 percent of MA plans reported offering supplemental benefits for dental care (Gangopadhyaya, Pugazhendhi, and Zuckerman 2023). Among MA enrollees reporting no dental coverage, we find that more than 90 percent of expenditures that were not paid out-of-pocket were paid by MA plans, suggesting higher rates of dental coverage than that reported by enrollees.

[2] Keeler and Rolph (1988) used data from the RAND Health Insurance Experiment, which randomly assigned insurance benefit packages to participants, including packages that varied benefits in dental services. They estimated that the price elasticity of demand for dental services ranged between -0.12 and -0.39. Parkin and Yule (1988) used household data on dental expenditures and prices from Scotland and estimated price elasticities of demand for dental services in the range of -0.024 to -0.75. Most other studies estimated elasticities in a similar range. The magnitude of our estimated elasticities, using much more recent data, are in the middle of the range of these reported elasticities. For a detailed discussion of this literature, see section 3.2 in Sintonen and Linnosmaa (2000).

[3] The new induced dental spending can be determined if the researcher knows the following: the price elasticity of demand for dental services, the price for dental services under the policy, the price for dental services under current law, and total dental spending under current law. Specifically, dental spending under the policy can be calculated using the following formula:

$$Q_1 = Q_0\left(\frac{P_1(1-\epsilon) + P_0(1+\epsilon)}{P_0(1-\epsilon) + P_1(1+\epsilon)}\right)$$

Where Q_0 and Q_1 represent total dental spending under current law and under the policy, respectively, P_0 and P_1 represent the price for dental services under current law and under the policy, respectively, and ϵ represents the price elasticity of demand for dental services.

[4] The policy we consider incorporates dental services under Part B. Under current law, Part B provides coverage for physician and outpatient-based services. Thus, further including dental service in Part B could have a spillover effect on the use and spending for Part B services covered under current law (hereafter referred to as traditionally covered services). For example, given that a share of out-of-pocket spending for dental services would now apply toward the overall Part B deductible, a larger share of spending for traditionally covered services are beyond the deductible range and exposed to the 20 percent cost-share, thus resulting in a lower average price for these services. We model the spillover behavioral response to these services, but note here that we estimate very small effects spillover effects on the use traditionally covered services under the policy. Therefore we focus only on changes in dental spending in the tables reported herein.

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