CareQuest Institute for Oral Health™

RESEARCH REPORT

The Burden of Out-of-Pocket Expenditures

for dental care on Medicare-enrolled elderly and disabled

PART 3 of 3

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Key Findings

- The lack of a mandated dental benefit in Medicare **significantly contributes to poor health among America's elderly and disabled populations.**
- Among all Medicare or Medicare Advantage recipients, **at least 75% of total dental costs were paid for out-of-pocket** — contributing to financial strain that can force older adults to choose between dental care and other health services they need.
- **Only 4 percent** of those covered by traditional Medicare **had dental costs covered by Medicare.**

Medicaid and Health Care Access

More than half (53%) of seniors in the United States have either moderate or severe periodontal (gum) disease and another fifth have no remaining natural teeth (1). Partial or complete loss of teeth (edentulism) and poor oral health are associated with chronic disease exacerbation (2-5). Poor oral health can increase loneliness and social isolation and reduce quality of life (6-9).

Traditional, fee-for-service Medicare does not offer any mandated dental benefits to its more than 59 million recipients in the country (10). Nineteen million recipients are enrolled in Medicare Advantage plans that operate through an HMO delivery model[1] (10). In 2016, roughly 60 percent of Medicare Advantage enrollees, or 10.2 million beneficiaries, were able to access some form of dental coverage, but benefits vary, with some plans providing only preventive services and others offering broader benefits (11). As Medicare Advantage plans allow recipients to keep their existing employer-sponsored health plan through retirement, the rise in Medicare Advantage enrollment is probably driven by increasing demand from younger users seeking to continue coverage under programs that resemble those of employer-sponsored plans (12).

To qualify for Medicare, patients are either disabled or aged 65+ and are subject to employment limitations in order to maintain benefits. Almost one in five persons in traditional Medicare have no additional supplemental coverage (13). These enrollees are uniquely subject to cost-sharing schemes and their benefit plans lack annual out-of-pocket limits on medical spending, compared to the $6,700 limit for recipients with Medicare Advantage plans (13). Cost is cited as the primary reason that Medicare enrollees, especially those aged 55 or older, postpone care. Most research has focused on the direct costs of dental care paid by insurance programs, private or public; very little has addressed the burden when patients bear the brunt of these costs.

This report, the last in a three-part series addressing utilization of dental services and out-of-pocket costs for dental care, focuses on those costs for dental care paid by patients on Medicare. This report compares the out-of-pocket costs associated with Medicare-only, fee-for-service benefits, to those costs for patients with Medicare Advantage plans, some of which do provide limited dental coverage to the out-of-pocket costs for patients with single coverage of other types.

[1] According to the Centers for Medicare and Medicaid Services (CMS), Medicare Part A (inpatient coverage) will pay for some dental services if they are provided in an inpatient setting for emergent or complicated need. Dental services are considered non-covered, which means the associated costs for that are 100% patient responsibility. Some Medicare Advantage plans, also known as Medicare Part C, offer dental benefits within their capitated payment system, however, these are optional at the plan level, often offered as an add-on or supplemental benefit to drive recipient uptake of these plans and are subject to variability and change year-by-year. For more information, please see: https://www.cms.gov/coverage/dental-services.

Findings

This report uses the Medicare Expenditure Panel Survey (MEPS) from 2011 through 2016 to measure the utilization of dental services and their cost for individuals enrolled in Medicare or a Medicare Advantage Plan. We then compared these costs and utilization to other insurance types during the study period (14). On average, 34% of those in traditional Medicare utilize dental services, compared to 43% of those in Medicare Advantage plans (Figure 1). However, among those who do utilize dental care in each type of Medicare plan, the average is 2.5 visits per year, potentially reflecting high need in this population. Average utilization is 35% among those enrolled in Medicaid, but 49% of those in private insurance plans. In recent years, dental visits have risen slightly. In 2011, 33.8% and 36.9% of patients with traditional Medicare and Medicare Advantage plans visited the dentist, respectively. This rose through 2016 to 35.1% for those with traditional Medicare and to 42.1% for those with Medicare Advantage (Appendix 1). This change for Medicare may be attributable to changing patient demographic and employment characteristics.

On average, traditional Medicare enrollees who used dental services spent $856 (CI: $756 to $956) of which $679 (CI: $557 to $801) or 79%, was out-of-pocket. Only 4% of their costs were covered by Medicare, 5% by other federal or state programs, and 10% by private supplemental plans (Figure 2). Those with Medicare Advantage spent more at $880 in total (CI: $745 to $1,016) but slightly less out-of-pocket $659 or 75% (CI: $545 to $772) and the Medicare plan covered most of the rest.

Unlike Medicare or Medicare Advantage plans, Medicaid gives most of its enrolled adults some access to dental care, with 47 states offering at least emergency coverage (15). The share of Medicaid adults reporting at least one dental service utilization rose from 31% in 2011 to 35% in 2016 (Appendix 1). However, out-of-pocket costs in Medicaid are much lower than those in Medicare, averaging $91 (CI: $76 to $107), or 22% of total costs (Figure 3). Not surprisingly, the privately insured have better access to dental care than their publicly-insured counterparts. On average, almost half of privately insured adults utilized a dental service. About 40% of total costs are out-of-pocket, almost half of that in Medicare, but nearly doubling in Medicaid.

Figure 1: **Average utilization of dental services by insurance type, 2011-2016**

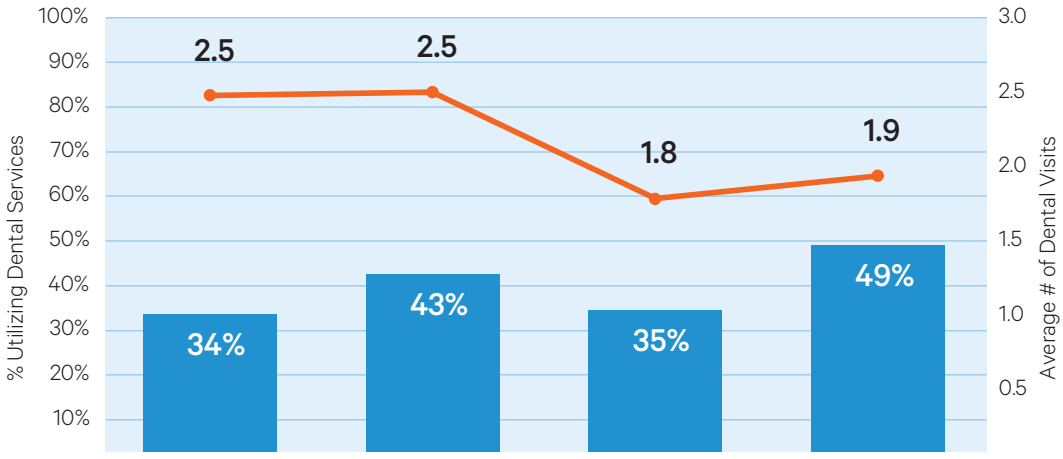
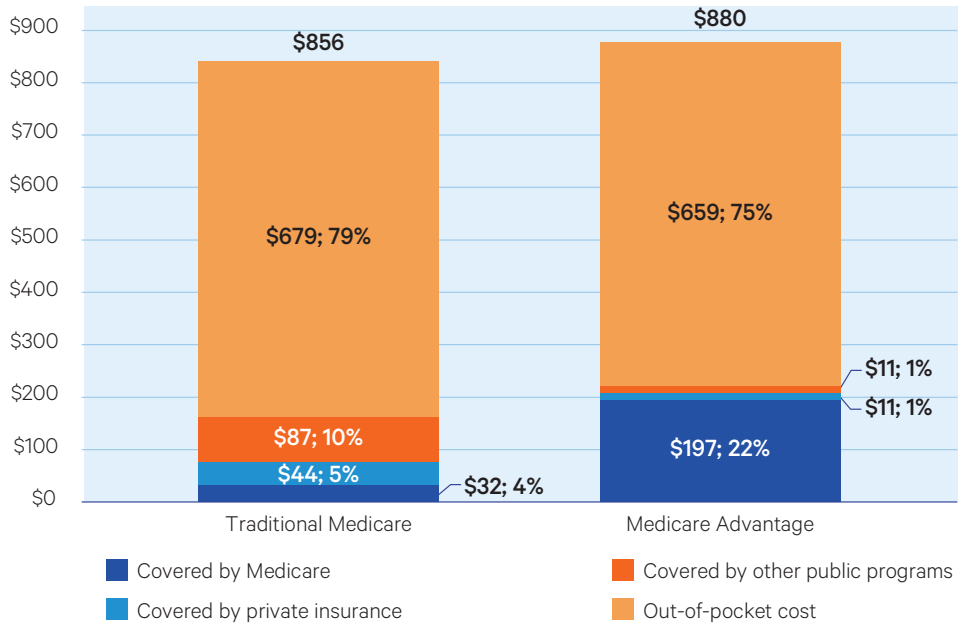
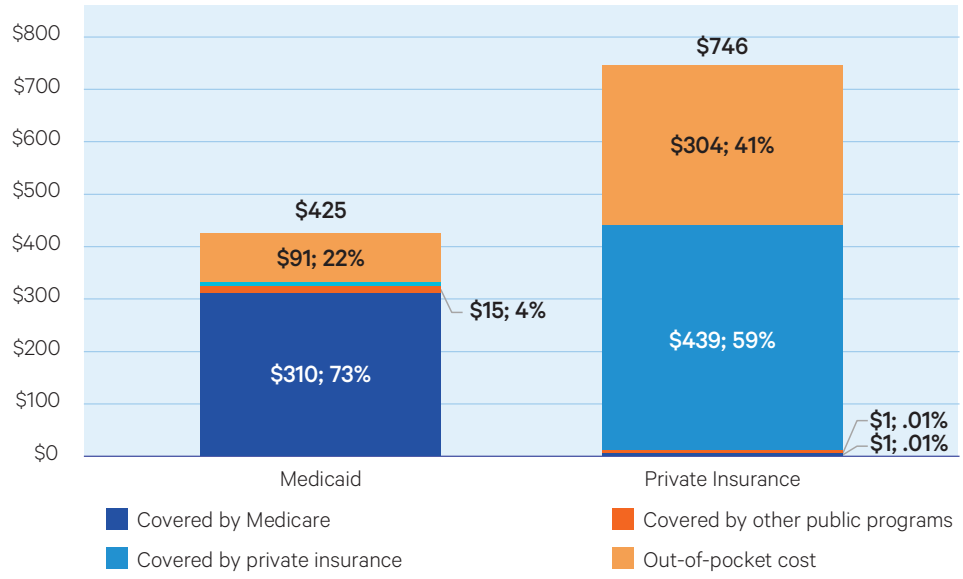


Figure 2: **Average per user annual spending on dental care,by type of Medicare coverage, 2011 to 2016**



Note: Percentages do not add to 100% due to missing data

Figure 3: **Average per user annual spending on dental care, by insurance type, 2011 to 2016**



Implications

For patients with fixed incomes, out-of-pocket spending on healthcare presents challenges for patients. These are not easily overcome. When patients are forced to choose between paying for health care services, prescriptions, housing and groceries, additional spending for dental services becomes impossible. The lack of a dental benefit within Medicare contributes to poor oral health and the inability to obtain needed dental treatment, increasing costs for patients and Medicare.

Additionally, a recent analysis reveals Medicare recipients spend 41% of their available Social Security income on health care costs (16). This study also showed that as patients age, their health care spending increases with those aged 85 or more spending a full 74% of their income on health care services (16). While the study did not evaluate dental services separately, our report does.

Our results show remarkably similar findings with very high proportions of out-of-pocket spending for oral health care. Our study revealed high levels of out-of-pocket spending, whether the patient utilized a Medicare Advantage plan or traditional Medicare. Patients with Medicare Advantage plans tend to be healthier overall and are more likely to receive these plans as part of employer-sponsored retirement packages (17-18).

Given the increasing use of value-based programs within the federal healthcare delivery framework and regulation, inclusion of dental and oral health services within those models could provide valuable incentives for payers and providers to improve individual and population health. At the same time, provision of dental services would lower costs for hospital systems, payers, but, and more importantly, for the patients using these services.

The differences presented in this report are only likely to increase with the growing retirement of baby boomers and the tightening of state funding for supplemental coverage through state-based public insurance programs. Given the fundamental connection between oral and overall health, these kinds of disparities must be addressed by policy makers and regulatory bodies to not only improve but to sustain the improvement for the health of the community.

Methods

The proportion of individuals who utilized dental services was estimated by dividing the number of Medicare members reporting a visit to a dental provider in each year by the total number of Medicare recipients for that year. To better understand the economic burden of this dental care on Medicare recipients, we estimated the number of visits, average total, expenditure by insurance source and out-of-pocket (OOP) expenditures. We also estimated the proportion of OOP to the overall payment per Medicare member who used at least one dental service during the study year. All expenditures were then inflation-adjusted to 2016 U.S. dollars.

Finally, the Medicare results are compared to patients with only Medicaid coverage or those patients with only private health insurance coverage. Those with multiple insurance types were excluded from the results to mitigate any confounding factors related to OOP expenditures for patients. Finally, the Medicare results are compared to patients with only Medicaid coverage or those patients with only private health insurance coverage. Those with multiple insurance types were excluded from the results to mitigate any confounding factors related to OOP expenditures for patients.

Limitations

There are some limitations associated with the findings in this report. It is a retrospective analysis of survey data only. Therefore, it lacks complete contextual information and cannot fully articulate the scope or breadth of reasons, or the decision-making processes undertaken by patients for choosing to attend or decline necessary preventive care. Dental care is also not the only service postponed by patients; prescription costs, preventive medical, and other services in lieu of other, more prioritized living expenses, are also commonly delayed.

References

1. Raphael C. *Oral health and aging.* American Journal of Public Health. 2017;107(S1):s44-s45. DOI: https://doi.org/AJPH.2017.303835.
2. Oakes D, Monopoli M. *"Medicare Dental Benefit Will Improve Health and Reduce Health Care Costs,"* Health Affairs Blog. February 28, 2019. DOI: 10.1377/hblog/20190227.354079. Accessed from: https://www.healthaffairs.org/10.1377/jblog20190227.354079/full/.
3. Fish-Parcham C, Burroughs M, Tranby EP, Brow AR. *"Addressing Rural Seniors' Unmet Needs For Oral Health Care,"* Health Affairs Blog. May 6, 2019. DOI: 10.1377/hblog20190501.797365. Accessed from: https://www.healthaffairs.org/do/10.1377/hblog20190501.797365/full/.
4. Van de Rijt LJM, Stoop CC, Weijenberg RAF, de Vries R, Feast AR, Sampson EL, Lobbezoo F. *The influence of oral health factors on the quality of life in older people: a systematic review,* The Gerontologist. Gnz105. DOI: https://doi.org/10.1093/geront/gnz105.
5. Petersen PE, Ogawa H. *The global burden of periodontal disease: towards integration with chronic disease prevention and control.* Periodontology 2000. 2012;60:15-39. DOI: https://doi.org/10.1111/j.1600-0757.2011.00425.x.
6. Halasa-Rappel YA, Tschampl CA, Foley M, Dellapenna M, Shepard DS. *Broken smiles: the impact of untreated dental caries and missing anterior teeth on employment*. Journal of Public Health Dentistry. 2019;79(3):231-237. https://doi.org/10.1111/jphd.12317.
7. Rouxel P, Heilmann A, Demakakos P, Aida J, Tsakos G, Watt RG. *Oral health-related quality of life and loneliness among older adults*, European Journal of Aging. 2017;14(2):101-109. DOI: https://doi.org/10.1007/s10433-016-0392-1.
8. Ortiz-Barrios LB, Granados-Garcia V, Cruz-Hervert P, Moreno-Tamayo K, Heredia-Ponce E, Sanchez-Garcia S. *The impact of poor oral health on the oral health-related quality of life (OHRQoL) in older adults: the oral health status through a latent class analysis.* BMC Oral Health. 2019;141, https://doi.org/10.1186/s12903-019-0840-3.
9. Tan H, Peres KG, Peres MA. *Retention of teeth and oral health-related quality of life.* Journal of Dental Research. 2016;95(12):1350-1357. DOI: https://doi.org/10.1177/0022034516657992.
10. Kaiser Family Foundation. *"Total Number of Medicare Beneficiaries, State Health Facts, 2019."* Kaiser Family Foundation: Washington, DC. Accessed from: https://www.kff.org/medicare/state-indicator/total-medicare-beneficiaries/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.
11. Freed M, Neuman T, Jacobson G. *"Drilling Down on Dental Coverage and Costs for Medicare Beneficiaries."* Kaiser Family Foundation: Washington DC. March 13, 2019. Accessed from: https://www.kff.org/medicare/issue-brief/drilling-down-on-dental-coverage-and-costs-for-medicare-beneficiaries/.
12. Patel YM, Guterman S. *The evolution of private plans in Medicare.* The Commonwealth Fund: Washington, DC. December 8, 2017. Accessed from: https://www.commonwealthfund.org/publications/issue-briefs/2017/dec/evolution-private-plans-medicare.
13. Kaiser Family Foundation. *"An Overview of Medicare."* Kaiser Family Foundation: Washington, DC. February 13, 2019. Accessed from: https://www.kff.org/medicare/issue-brief/an-overview-of-medicare/.
14. Agency for Healthcare Research and Quality. *Medical Expenditure Panel Survey. 2019.* AHRQ: Rockville, MD. Accessed from: https://meps.ahrq.gov/mepsweb/.
15. Center for Health Care Strategies, Inc. *"Medicaid Adult Dental Benefits: An Overview: Fact Sheet."* November 2018. CHCS: Hamilton, NJ. Accessed from: https://www.chcs.org/Medicaid-adult-dental-benefits-overview.
16. Cubanski J, Neuman T. *"Medicare Beneficiaries' Out-of-Pocket Health Care Spending as a Share of Income Now and Projections for the Future."* 2018. Kaiser Family Foundation: Washington, DC. Accessed from: https://www.kff.org/report-section/medicare-beneficiaries-out-of-pocket-health-care-spending-as-a-share-of-income-now-and-projections-for-the-future-report/.
17. Jacobson G, Damico A, Neuman T. *"A Dozen Facts about Medicare Advantage."* 2018. Kaiser Family Foundation: Washington, DC. Accessed from: https://www.kff.org/medicare/issue-brief/a-dozen-facts-about-medicare-advantage/.
18. Laise E. *Medicare vs. Medicare Advantage: Ill Health often leads to Plan Switch: The Drawbacks of Medicare Advantage Plans can become apparent when serious illness or injury strikes.* April 11, 2018. Kiplinger's Retirement Report. https://www.kiplinger.com/article/retirement/T039-C000-S004-medicare-vs-medicare-advantage-ill-health-switch.html.

Appendix

Appendix 1: Utilization and Expenditure on Dental Care by Insurance Type							
	2011	2012	2013	2014	2015	2016	Average
Traditional Medicare Only							
Proportion of Individuals Utilizing Dental Services	34%	34%	33%	33%	34%	35%	34%
Average Dental Visit per User	2.5	2.5	2.5	2.5	2.6	2.4	2.5
Average per User Payment for Dental Services	$760.3	$1,043.5	$826.3	$766.3	$890.9	$849.6	$856.2
Average per User OOP on Dental Services	$569.3	$924.4	$662.4	$612.4	$613.3	$692.4	$679.0
Proportion of per User OOP to Overall Payment for Dental Services	75%	89%	80%	80%	69%	81%	79%
Managed Medicare Only							
Proportion of Individuals Utilizing Dental Services	37%	43%	43%	45%	44%	42%	43%
Average Dental Visit per User	2.5	2.3	2.7	2.7	2.3	2.5	2.5
Average per User Payment for Dental Services	$1,012.3	$740.1	$758.4	$868.4	$813.7	$1,088.6	$880.3
Average per User OOP on Dental Services	$832.1	$573.0	$571.6	$603.3	$585.0	$785.9	$658.5
Proportion of per User OOP to Overall Payment for Dental Services	82%	77%	75%	69%	72%	72%	75%
Medicaid Only							
Proportion of Individuals Utilizing Dental Services	31%	33%	36%	36%	36%	35%	35%
Average Dental Visit per User	1.7	1.7	1.8	1.8	1.8	1.8	1.8
Average per User Payment for Dental Services	$441.7	$400.4	$370.9	$397.2	$467.3	$473.4	$425.1
Average per User OOP on Dental Services	$74.6	$107.4	$71.9	$86.6	$102.0	$106.3	$91.5
Proportion of per User OOP to Overall Payment for Dental Services	17%	27%	19%	22%	22%	22%	22%
Private Insurance Only							
Proportion of Individuals Utilizing Dental Services	49%	49%	50%	50%	49%	48%	49%
Average Dental Visit per User	1.9	1.9	2.0	2.0	1.9	1.9	1.9
Average per User Payment for Dental Services	$782.6	$732.4	$791.5	$726.6	$701.0	$745.7	$746.6
Average per User OOP on Dental Services	$320.7	$310.4	$317.0	$289.3	$280.1	$303.9	$303.6
Proportion of per User OOP to Overall Payment for Dental Services	41%	42%	40%	40%	40%	41%	41%

CareQuest Institute for Oral Health

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