

MEDICARE SPENDING TRENDS 2010–2016:

Increase in Prescription Drug Spending More Than Offsets Lower Beneficiary Costs for Other Services

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ABSTRACT

ISSUE: From 2010 through 2016, total Medicare spending per beneficiary was remarkably stable. We know less about how beneficiaries fared in terms of out-of-pocket spending for health care services.

GOAL: To inform discussions of Medicare cost-control efforts and potential benefit design reforms, this data brief examines the trend in total and out-of-pocket spending from 2010 to 2016, with a focus on mix of expenditures by type of service as well as total spending per beneficiary.

METHODS: Analyzes the Medicare Current Beneficiary Survey and Cost Supplement for 2010 to 2016.

FINDINGS: Stability in total and out-of-pocket spending masks a marked shift in spending by service. There was a sharp increase in total and out-of-pocket spending on prescription drugs; total spending was up by \$1,000 per person, a 38 percent increase. Out-of-pocket spending on drugs increased by 16 percent. Increased total spending on drugs was partially offset by a 22 percent decrease spending on hospital services and a 30 percent decrease on skilled nursing home care. Notably, Medicare beneficiaries spent more out-of-pocket on prescription drugs in 2016 than on doctors' visits and hospital care combined.

CONCLUSION: Findings highlight a need for policy changes that will lower drug prices and costs and provide a more protective benefit design.

TOPLINES

- ▶ While total Medicare spending per person remained relatively stable from 2010 to 2016, there are still differential trends in spending by service type.
- ▶ Average total spending per beneficiary on inpatient hospital care declined by 22 percent and spending on skilled nursing homes decreased by 30 percent, but spending on prescription medications increased by 38 percent.
- ▶ Increased out-of-pocket costs for retail drugs more than offset declines in out-of-pocket spending on hospital and skilled nursing home care. By 2016, beneficiary average out-of-pocket drug costs exceeded what they spent on doctors and hospitals.



OVERVIEW

Since it was enacted in 1965, Medicare has aimed to protect its beneficiaries — almost 60 million older adults and people with long-term disabilities — from the high costs of medical care.¹ The program initially covered hospitals stays and physician’s care and then expanded to prescription drugs in 2003, with the advent of Part D.

Beneficiaries, however, are responsible for cost-sharing for physician, hospital, and skilled nursing home services and there is no limit on their cost exposure. The Part D program has a gap in benefits in which beneficiaries pay a substantial share of their drug costs, with no overall limit. And while many beneficiaries purchase supplemental coverage or opt for Medicare Advantage plans for financial protection, few have coverage for long-term care, and dental, hearing, and vision services not covered by Medicare, except for those with incomes low enough to qualify for Medicaid.

This data brief examines changes from 2010 to 2016 in Medicare’s total spending and in out-of-pocket spending per beneficiary. This period was characterized

by remarkable stability in total Medicare spending per beneficiary.² Instead, our analysis focuses on changes by type of service. This discussion can inform the adequacy of Medicare’s benefit package and to highlight areas of concern.

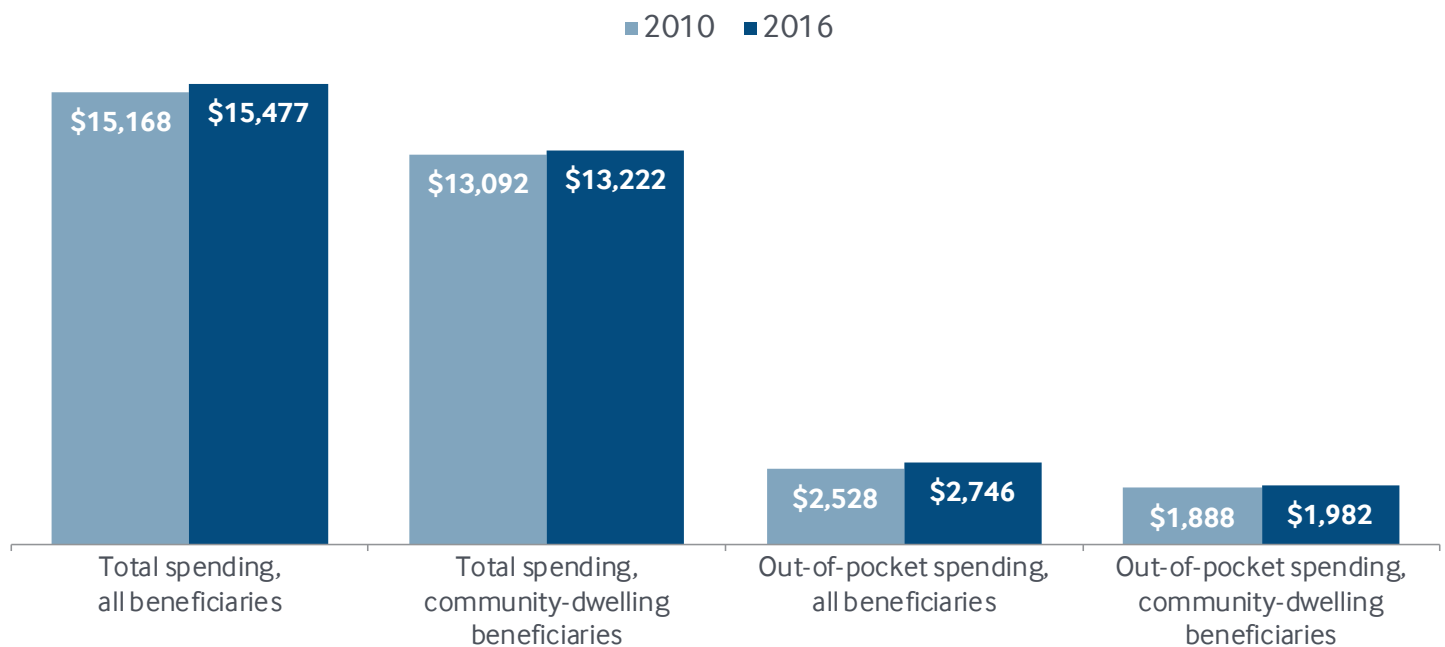
Total spending per beneficiary and exposure to out-of-pocket costs vary depending on whether the analysis includes beneficiaries in long-term care institutions or beneficiaries living in the community. Accordingly, we examine trends in average spending per beneficiary for: 1) total beneficiaries, including an estimated 3 million living in institutions; and 2) community-dwelling beneficiaries.

FINDINGS

Overall Spending Is Relatively Stable

Total spending per person by all Medicare beneficiaries and community-dwelling beneficiaries remained relatively stable from 2010 to 2016 (Exhibit 1). On average, spending increased 2 percent over six years for all beneficiaries and 1 percent for community-dwelling beneficiaries.

Exhibit 1. Medicare Trends in Total and Out-of-Pocket Spending per Beneficiary, 2010–2016



Data: Authors’ analysis of Medicare Current Beneficiary Survey, 2010 and 2016.

Although still relatively stable, out-of-pocket spending per beneficiary increased more rapidly than total spending. It was up 9 percent on average for all beneficiaries and 5 percent for community-dwelling beneficiaries over the six-year period. By 2016, despite the slow growth in total spending, one of five (20%) beneficiaries — an estimated 12 million people, roughly equivalent to the entire population of Ohio — spent 10 percent or more of their incomes on out-of-pocket costs for health care.

Prescription Drug Spending Is Up, Inpatient Care Down

The relative stability in total and out-of-pocket spending masks substantial shifts and marked differences in the rate of growth in spending by service. On average, total spending per beneficiary on inpatient hospital care declined by 22 percent while total spending per person on prescription medications increased by more than \$1,000, a 38 percent increase from 2010 to 2016 (Exhibit 2). In fact,

by 2016, total spending on drugs exceeded total spending on medical providers or hospitals: \$3,896 on drugs per person, compared to \$2,716 inpatient care and \$3,244 for medical providers.

For beneficiaries, the rise in prescription drug spending resulted in a substantial increase in out-of-pocket drug costs, more than offsetting declines in spending on hospital and skilled nursing home care. By 2016, beneficiaries spent more out-of-pocket for retail prescription drugs than for the combined cost of physician and inpatient care.

Total spending and out-of-pocket spending per person on inpatient care and skilled nursing home care declined from 2010 to 2016. This reflects reduced use of inpatient and postacute care by Medicare beneficiaries. Other studies suggest that the patterns are a result of more effective treatment and shifts in the delivery of care, which includes a greater emphasis on primary care and home-based care.⁵

Exhibit 2. Trends in Total and Out-of-Pocket Spending on Health Care per Medicare Beneficiary by Type of Service

	Total	Inpatient	ED	Outpatient	Medical providers	Drugs	SNF	Home health	Hospice	LTC	Dental	Vision	Hearing
All beneficiaries													
Total spending													
2010	\$15,168	\$3,468	\$69	\$1,520	\$3,268	\$2,833	\$808	\$463	\$255	\$1,956	\$381	\$90	\$57
2016	\$15,010	\$2,716	\$105	\$1,637	\$3,244	\$3,896	\$567	\$373	\$262	\$1,391	\$593	\$120	\$106
Out-of-pocket spending													
2010	\$2,528	\$121	\$9	\$93	\$481	\$522	\$87	\$52	\$0	\$775	\$287	\$52	\$49
2016	\$2,600	\$58	\$8	\$124	\$449	\$603	\$60	\$37	\$0	\$644	\$465	\$75	\$77
Community-dwelling (not institutionalized) beneficiaries													
Total spending													
2010	\$13,092	\$3,299	\$71	\$1,496	\$3,243	\$2,956	\$518	\$452	\$158	\$347	\$398	\$94	\$60
2016	\$13,078	\$2,426	\$109	\$1,602	\$3,191	\$4,053	\$302	\$345	\$132	\$65	\$618	\$125	\$110
Out-of-pocket spending													
2010	\$1,888	\$103	\$9	\$90	\$479	\$545	\$29	\$55	\$0	\$174	\$299	\$54	\$51
2016	\$1,977	\$54	\$9	\$122	\$443	\$628	\$15	\$38	\$0	\$25	\$485	\$78	\$80

Note: ED = emergency department; SNF = skilled nursing facility; LTC = nursing home or other long-term-care facility.
 Data: Authors' analysis of Medicare Current Beneficiary Survey, 2010 and 2016.

The differential trends in spending by service type for community-dwelling Medicare beneficiaries were even more pronounced. Between 2010 and 2016, total and out-of-pocket spending per beneficiary decreased for long-term care facilities not covered by Medicare, skilled nursing facilities, and hospitals. The marked decreases across the board in inpatient care may reflect successful efforts to help older adults “age in place” rather than move to a nursing home or in and out of hospitals.⁴

Low- and Modest-Income Beneficiaries at Risk

Lower-income beneficiaries were at the greatest risk of spending a high proportion of their income out of pocket on medical care. Despite relatively slow increases in total out-of-pocket spending from 2010–16, one-third of beneficiaries with incomes near or below the federal poverty level and 26 percent of beneficiaries with incomes between 150 percent and 199 percent of poverty spent 10 percent or more of their incomes on medical care. These rates have changed little since 2010 (Exhibit 3).⁵

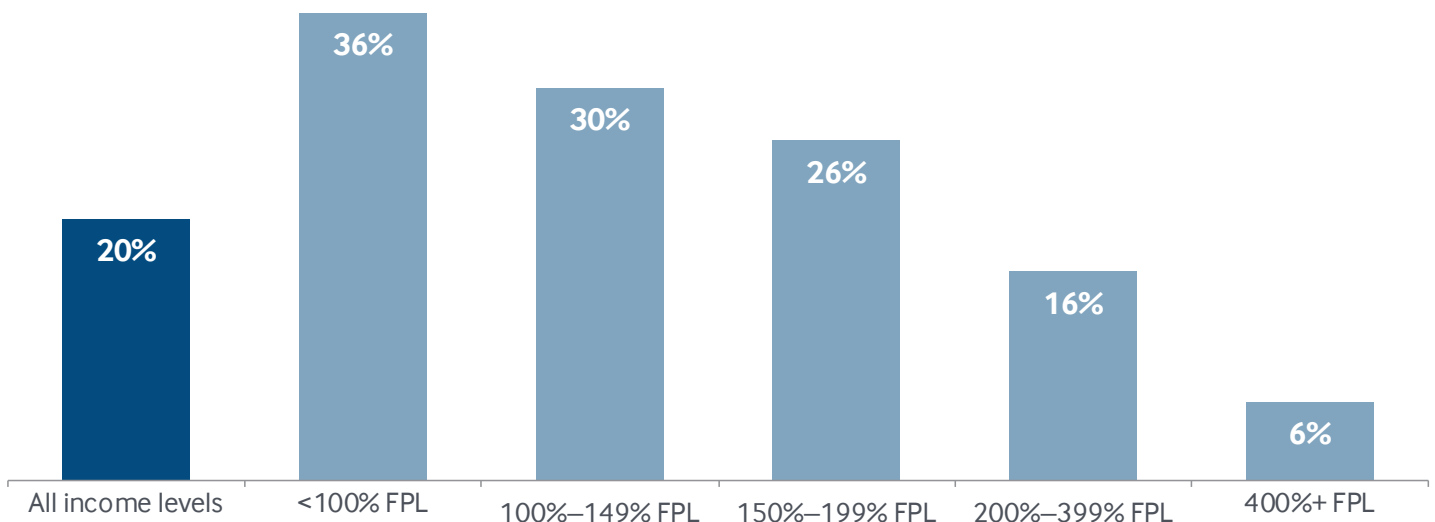
These costs do not include spending on premiums for Medicare, Part D, or supplemental coverage. On average, premiums added another \$1,900 to annual costs. If we add premiums to medical care spending, one-fifth of all beneficiaries —12 million people— spent 20 percent or more of their incomes on coverage and care (data not shown).

IMPLICATIONS

In the period between 2010 and 2016, we saw substantial shifts in overall Medicare spending and out-of-pocket spending by type of service, indicating a mix of positive news and concern about the future. The slowdown in spending and the decline in spending on core Medicare services (including physician and inpatient care) likely reflect a combination of delivery system changes, increased effectiveness of medical care, and strategic payment policy reforms enacted with the Affordable Care Act (ACA). These policies included limiting payment increases per service, as well as incentives to deliver improved care at lower costs by holding providers more accountable.

Exhibit 3. Low- and Modest-Income Medicare Beneficiaries at Risk Despite Slowdown in Total Spending, 2016

Percent of Medicare beneficiaries spending 10% or more of income out of pocket for medical care



Note: FPL = federal poverty level.
Data: Authors’ analysis of Medicare Current Beneficiary Survey, 2016.

The ACA also included reforms to bring cost relief and better protection to beneficiaries in the Medicare Part D program for prescription drugs. This included gradually improving coverage in the “donut hole” — the gap in coverage that occurs in Part D. Congress then accelerated improvements in the Bipartisan Budget Act of 2018; in 2019 beneficiaries will be responsible for 25 percent of the cost of brand-name drugs rather than 35 percent.⁶ Studies that examined Part D spending beyond 2016 find that reforms initially decreased out-of-pocket costs for those in the coverage gap but costs have continued to rise as a result of rapid increases in prices.⁷ MedPAC finds that growth in program spending on drugs was driven almost entirely by increases in the average price per prescription.⁸

Prices for specialty drugs and even key generic drugs have been rising rapidly for private payers, as well as Medicare. Although a recent study suggests that some of the new medications have helped contribute to reduced use of expensive inpatient and other medical care services,⁹ the United States continues to pay substantially more than other countries do for new drugs as well as those that have been on the market for years.

In 2016, Medicare spent an estimated \$128.6 billion on Part D plus Part B drugs — this amounts to nearly 20 percent of total Medicare spending. Given its substantial market share, Medicare could use its purchasing and pricing leverage to yield cost relief for the program as well as beneficiaries. But without effective policies aimed at prices, Medicare and beneficiaries will remain at financial risk.

Care Systems

The data also highlight progress in keeping beneficiaries out of nursing homes and hospitals. This conclusion is supported by other studies that find the total number of hospitalizations and the number of beneficiaries having at least one hospitalization have declined among Medicare beneficiaries since the early 2000s.¹⁰ Hospital readmissions also have declined.¹¹

Beneficiaries continue to face costs for meeting their needs at home. Approximately one-fifth of Medicare beneficiaries have severe functional or cognitive impairment that requires long-term services and supports.¹² Medicare beneficiaries who receive paid help for personal care at home spend an average \$9,100 annually out-of-pocket.¹⁵ These costs are not accounted for in this analysis because the data are not included in the Medicare Current Beneficiary Survey.

Uncovered Services and Limits on Out-of-Pocket Costs

Uncovered services pose financial and health risks for beneficiaries. Dental, vision, and hearing services represents a quarter of out-of-pocket spending for community-dwelling beneficiaries. Insurance coverage of these services is relatively limited, and varies even among state Medicaid programs. Because of the high costs of care, many Medicare beneficiaries go without these important services.¹⁴ Untreated oral health issues and vision and hearing loss are associated with poor health outcomes and higher health care use and spending.¹⁵

CONCLUSION

Persistently high cost burdens and the sharp increase in spending on drugs, despite slower growth in total spending, underscore the need for policies to address both payments and benefits to ensure Medicare can help protect the health and financial independence of its nearly 60 million beneficiaries. Without more direct policy intervention through price regulation and improved benefit coverage, Medicare beneficiaries will remain at risk for high out-of-pocket costs and potentially going without needed care.

HOW WE CONDUCTED THIS STUDY

All estimates are based on analysis of the 2010 and 2016 Medicare Current Beneficiary Survey (MCBS) and Cost Supplement. Estimates of total and out-of-pocket spending are not inflated and represent average spending per beneficiary for each year. The 2010 and 2016 MCBS include a nationally representative sample of 10,741 and 14,778 Medicare beneficiaries, respectively. By design, the database enables analysis of 58.6 million beneficiaries in 2016 and 48.3 million in 2010. This data brief reports average total spending and out-of-pocket spending for population-weighted data.

The Cost Supplement component of the MCBS reports spending based on administrative data as well as survey-reported spending, allowing for an assessment of both Medicare covered and noncovered services. Spending by service types use categories provided and adjudicated by the MCBS team at the Centers for Medicare and Medicaid Services.

A limitation of these data is that they do not include spending for home and community-based services which are required and paid for by many Medicare beneficiaries with functional or cognitive impairment.

NOTES

1. Medicare covered 59.7 million beneficiaries as of 2018. This includes 51 million age 65 or older and 8.6 million under age 65. See “[CMS Fast Facts](#),” Centers for Medicare and Medicaid Services, Jan. 2019.
2. Based on the National Health Expenditures report, total Medicare spending (not including beneficiary spending) increased just 9% over the six years, averaging just over 1% a year. See Centers for Medicare and Medicaid Services, “[NHE Historical Table 21](#),” CMS, n.d. See also Melinda B. Buntin, testimony before the Senate Health, Education, Labor, and Pensions Committee, hearing on “[How to Reduce Health Care Costs: Understanding the Costs of Health Care in America](#),” June 27, 2018.
3. David M. Cutler et al., “[Explaining the Slowdown in Medical Spending Growth Among the Elderly, 1999–2012](#),” *Health Affairs* 38, no. 2 (Feb. 2019): 222–29.
4. Kumar Dharmarajan et al., “[Declining Admission Rates and Thirty-Day Readmission Rates Positively Associated Even Though Patients Grew Sicker over Time](#),” *Health Affairs* 35, no. 7 (July 2016): 1294–1302; Harlan M. Krumholz et al., “[Mortality, Hospitalizations, and Expenditures for the Medicare Population Aged 65 Years or Older, 1999–2013](#),” *JAMA* 314, no. 4 (July 28, 2015): 355–65; Carol V. Irvin et al., *Money Follows the Person 2015 Annual Evaluation Report* (Mathematica Policy Research, May 11, 2017); and Quincy M. Samus et al., “[A Multidimensional Home-Based Care Coordination Intervention for Elders with Memory Disorders: The Maximizing Independence at Home \(MIND\) Pilot Randomized Trial](#),” *American Journal of Geriatric Psychiatry* 22, no 4 (Apr. 2014): 398–414.
5. The share of beneficiaries spending 10 percent or more of income on medical care in 2010 were: <100% of the federal poverty level (FPL), 35.3 percent; 100%–149% FPL, 32 percent; 150%–199% FPL, 26.4 percent; 200%–399% FPL, 15.2 percent; and 400% FPL or higher, 6.4 percent.
6. Henry J. Kaiser Family Foundation, “[An Overview of Medicare Part D Prescription Drug Benefit](#),” fact sheet, Oct. 12, 2018.

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15. Kamyar Nasseh, Marko Vujcic, and Michael Glick, “[The Relationship Between Periodontal Interventions and Healthcare Costs and Utilization: Evidence from an Integrated Dental, Medical, and Pharmacy Commercial Claims Database](#),” *Health Economics* 26, no. 4 (Apr. 2017): 519–27; Jennifer A. Deal et al., “[Incident Hearing Loss and Comorbidity: A Longitudinal Administrative Claims Study](#),” *JAMA Otolaryngology — Head and Neck Surgery* 145, no. 1 (Jan. 2019): 36–43; N S. Reed et al., “[Trends in Health Care Costs and Utilization Associated with Untreated Hearing Loss Over 10 Years](#),” *JAMA Otolaryngology — Head and Neck Surgery* 145, no. 1 (Jan. 2019): 27–34.

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