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Medicare Beneficiaries' Out-of-Pocket Health Care Spending as a Share of Income Now and Projections for the Future

Prepared by:

Juliette Cubanski
Tricia Neuman
Kaiser Family Foundation

and
Karen E. Smith
The Urban Institute

Anthony Damico
Consultant

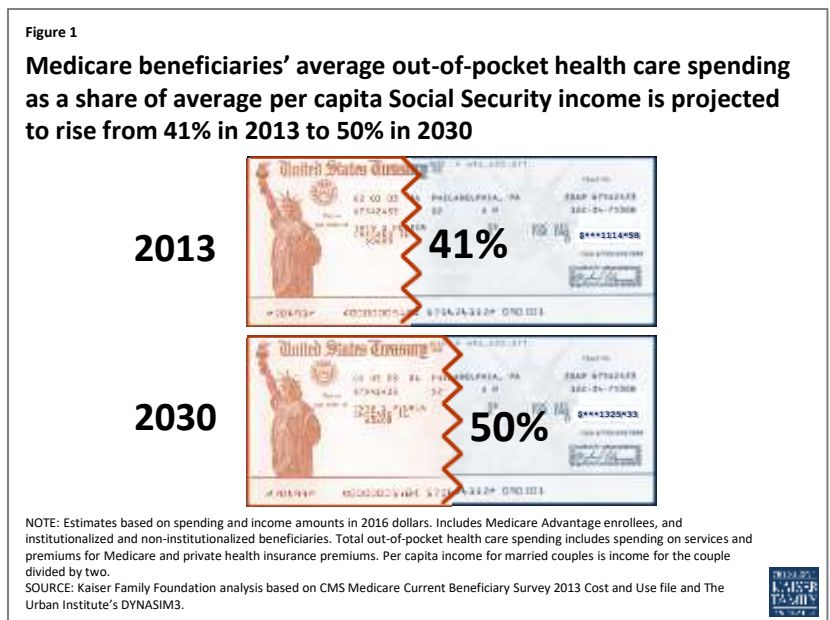
Executive Summary

Medicare helps pay for the health care needs of 59 million people, including adults ages 65 and over and younger adults with permanent disabilities. Even so, many people on Medicare incur relatively high out-of-pocket costs for their health care, including premiums, deductibles, cost sharing for Medicare-covered services, as well as spending on services not covered by Medicare, such as long-term services and supports and dental care. The financial burden of health care can be especially large for some beneficiaries, particularly those with modest incomes and significant medical needs. Understanding the magnitude of beneficiaries' current spending burden, and the extent to which it can be expected to grow over time, relative to income, provides useful context for assessing the implications of potential changes to Medicare or Medicaid that could shift additional costs onto older adults and younger people with Medicare.

In this report, we assess the current and projected out-of-pocket health care spending burden among Medicare beneficiaries using two approaches. First, we analyze average total per capita out-of-pocket health care spending as a share of average per capita Social Security income, building upon the analysis conducted [annually by the Medicare Trustees](#). Second, we estimate the median ratio of total per capita out-of-pocket spending to per capita total income, an approach that addresses the distortion of average estimates by outlier values for spending and income. Under both approaches, we use a broad measure of Medicare beneficiaries' total out-of-pocket spending that includes spending on health insurance premiums, cost sharing for Medicare-covered services, and costs for services not covered by Medicare, such as dental and long-term care. We present estimates of the out-of-pocket spending burden for Medicare beneficiaries overall, and by demographic, socioeconomic, and health status measures, for 2013 and projections for 2030, in constant 2016 dollars.

KEY FINDINGS

- In 2013, Medicare beneficiaries' average out-of-pocket health care spending was 41 percent of average per capita Social Security income; the share increased with age and was higher for women than men, especially among people ages 85 and over.
- Medicare beneficiaries' average out-of-pocket health care spending is projected to rise as a share of average per capita Social Security income, from 41 percent in 2013 to 50 percent in 2030 (**Figure 1**).
- Half of beneficiaries in traditional Medicare spent at least 14 percent of their per capita total income on out-of-pocket health care costs in 2013. The spending burden was higher for people ages 85 and over, in poor health, and with modest incomes.
- More than one-third (36 percent) of beneficiaries in traditional Medicare, and half of those with incomes below \$20,000, spent at least 20 percent of their per capita total income on out-of-pocket health care costs in 2013. By 2030, more than 4 in 10 (42 percent) traditional Medicare beneficiaries are projected to spend at least 20 percent of their total income on health-related out-of-pocket costs.



Introduction

Medicare helps pay for the health care needs of 59 million people ages 65 and over and younger people living with permanent disabilities. Yet, people with Medicare can face significant health-related out-of-pocket costs, including premiums, deductibles, cost sharing for Medicare-covered services, and costs for services Medicare does not cover, such as long-term services and supports and dental services. With half of all Medicare beneficiaries living on annual per capita income of [less than \\$26,200](#), out-of-pocket health care costs can pose a challenge, particularly for beneficiaries with modest incomes and those with significant medical needs.

As one way of measuring health care affordability for people with Medicare, each year [the Medicare Trustees estimate](#) Medicare Part B and Part D premiums and cost sharing as a share of average Social Security benefits. This estimate, however, does not include other health-related costs, such as out-of-pocket spending on hospital and skilled nursing facility stays, supplemental insurance premiums, and costs for services not covered by Medicare. The estimate also does not include income from sources other than Social Security.

In this analysis, we assess the current and projected out-of-pocket health care spending burden among Medicare beneficiaries using a broad definition of health care expenses, and in relation to both per capita Social Security and total income. Our results suggest that rising health care costs pose significant affordability challenges for many people on Medicare today, particularly those with relatively low incomes who derive most of their income from Social Security, and that this burden can be expected to grow in the future. This analysis sets the context for understanding the implications of potential changes to Medicare, Medicaid, or Social Security that could shift more health care costs onto beneficiaries or reduce their future retirement income.

Overview of Methods

This analysis of Medicare beneficiaries' out-of-pocket health care spending burden uses two different approaches. First, we calculate average total per capita out-of-pocket spending as a share of average per capita Social Security income for all Medicare beneficiaries and by subgroup, which enables us to compare our results to the Medicare Trustees' estimates. Second, we calculate a ratio of out-of-pocket spending to total income at the individual level for beneficiaries in traditional Medicare, and then estimate the median—an approach that addresses the distortion of averages by outlier values for both spending and income.

Under both approaches, we use a broad measure of Medicare beneficiaries' total out-of-pocket health care spending that includes health insurance premiums, cost sharing for Medicare-covered services, and costs for services not covered by Medicare, such as dental and long-term care. We use data on out-of-pocket spending from the Medicare Current Beneficiary Survey (MCBS), a nationally representative survey of Medicare beneficiaries, and income data from The Urban Institute's Dynamic Simulation of Income Model (DYNASIM3), a predictive microsimulation model that takes into account income from all sources, including Social Security, wages, pensions, and asset income including withdrawals from IRAs.¹ We calculate per capita Social Security and total income for married couples by dividing income for the couple in half, which recognizes that couples share resources and facilitates comparisons of the spending burden for married and unmarried individuals on a per capita basis. We present estimates of the out-of-pocket health care spending burden for beneficiaries overall, and by demographic, socioeconomic, and health status measures, for 2013 and projections for 2030, in constant 2016 dollars.

The out-of-pocket health care spending burden projections are based on current law; that is, we assume no changes in Medicare and Medicaid policies that would affect out-of-pocket costs and no changes to Social Security and tax policy that would affect retirement income between 2013 and 2030. For additional details on the data and methods and limitations of this analysis, see the Methodology appendix.

Findings

In Section 1, we present findings from our analysis of average per capita out-of-pocket spending as a share of average per capita Social Security income in 2013 for all Medicare beneficiaries (including beneficiaries in traditional Medicare and Medicare Advantage plan enrollees), followed by projections for 2030. In Section 2, we present the results of the analysis of median per capita out-of-pocket spending as a share of per capita total income for beneficiaries in traditional Medicare (excluding Medicare Advantage enrollees), and estimates of the share of beneficiaries who spent at least 10 percent and 20 percent of their per capita total income on out-of-pocket health care costs, in 2013 and projections for 2030. In both sections, we discuss variations in the financial burden by demographics, such as income and gender, and by health status.

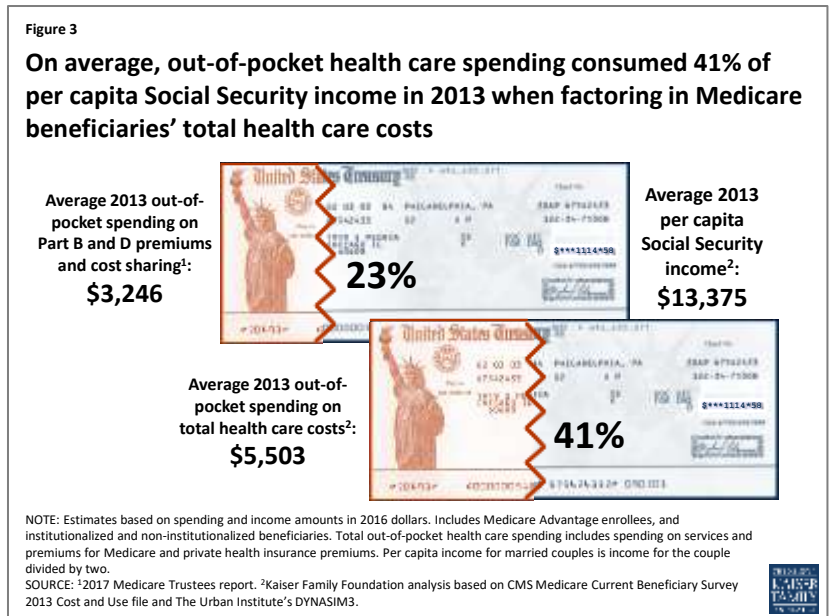
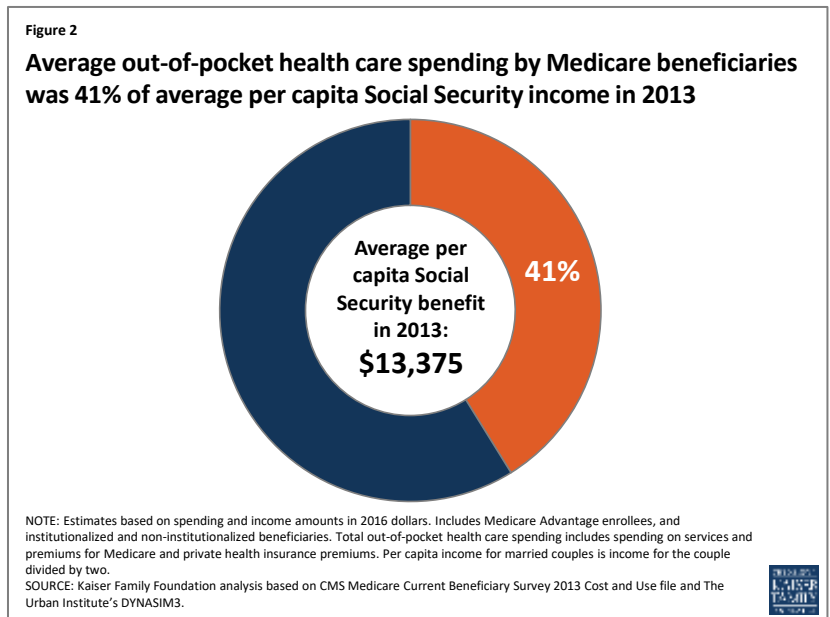
SECTION 1: MEDICARE BENEFICIARIES' OUT-OF-POCKET HEALTH CARE SPENDING AS A SHARE OF PER CAPITA SOCIAL SECURITY INCOME

OUT-OF-POCKET SPENDING AS A SHARE OF PER CAPITA SOCIAL SECURITY INCOME IN 2013

Across all Medicare beneficiaries, average out-of-pocket spending on health-related expenses consumed 41 percent of average per capita Social Security income in 2013 (**Figure 2**). As expected, this is substantially higher than the share reported by the Medicare actuaries for the same year (23 percent) because it takes into account the full array of out-of-pocket health expenses that people on Medicare face (**Figure 3**).² In contrast, the Medicare Trustees looked at the financial burden associated with Medicare Part B and Part D premiums and cost sharing, but not other health expenses.

Average out-of-pocket health care spending as a share of average per capita Social Security income in 2013 varied by demographic, socioeconomic, and health status indicators, reflecting differences in both average out-of-pocket spending and average Social Security income across different groups.

- **Age:** Out-of-pocket spending as a share of per capita Social Security income increased steeply with age, more than doubling from 34 percent for beneficiaries ages 65 to 74 to 74 percent among beneficiaries ages 85 and over, on average. This increase is likely



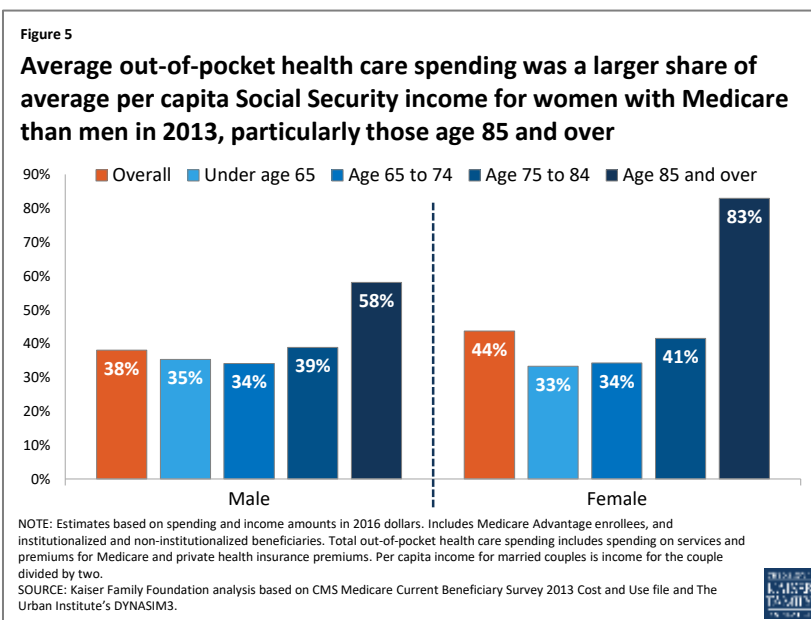
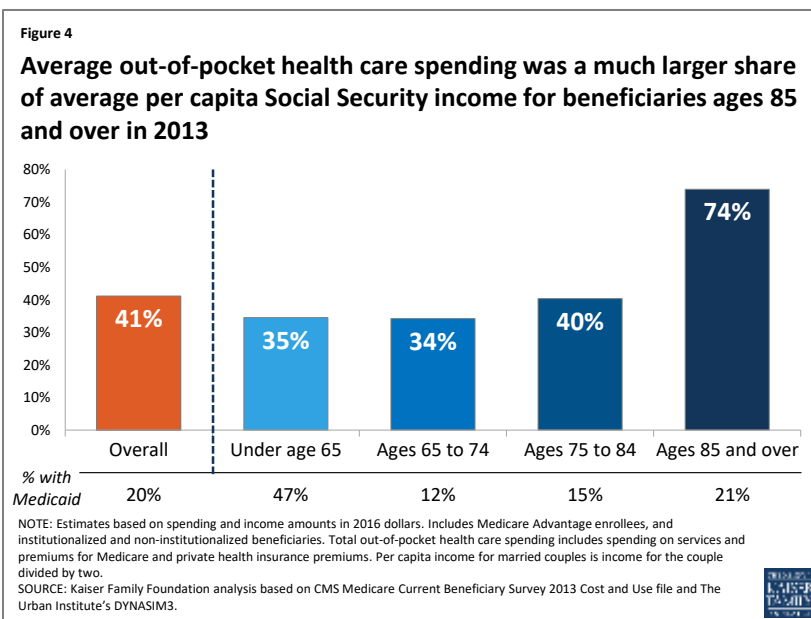
related to much higher out-of-pocket spending on long-term care services and supports among the oldest beneficiaries,³ along with the fact that older Social Security beneficiaries also have lower per capita benefits than younger beneficiaries (**Figure 4**).⁴

Beneficiaries under age 65 with disabilities faced average out-of-pocket health care costs that equaled 35 percent of their average per capita Social Security income in 2013, roughly the same share as for those ages 65 to 74. Although average per capita Social Security income was lower for beneficiaries under age 65, they also incurred lower out-of-pocket costs, on average, likely due to a higher rate of Medicaid coverage, which helps pay Medicare cost sharing and premiums and helps cover the cost of services not covered by Medicare, such as nursing home care and home and-community based services.

- **Gender:** Average out-of-pocket spending as a share of average per capita Social Security income was higher for women (44 percent) than men (38 percent), particularly among those ages 85 and over (83 percent and 58 percent, respectively) (**Figure 5**). After adjusting for marital status (dividing Social Security benefits in half for married couples), average per capita Social Security income was similar for women and men in 2013,⁵ but women on Medicare spent more out of pocket on health care costs than men, on average.

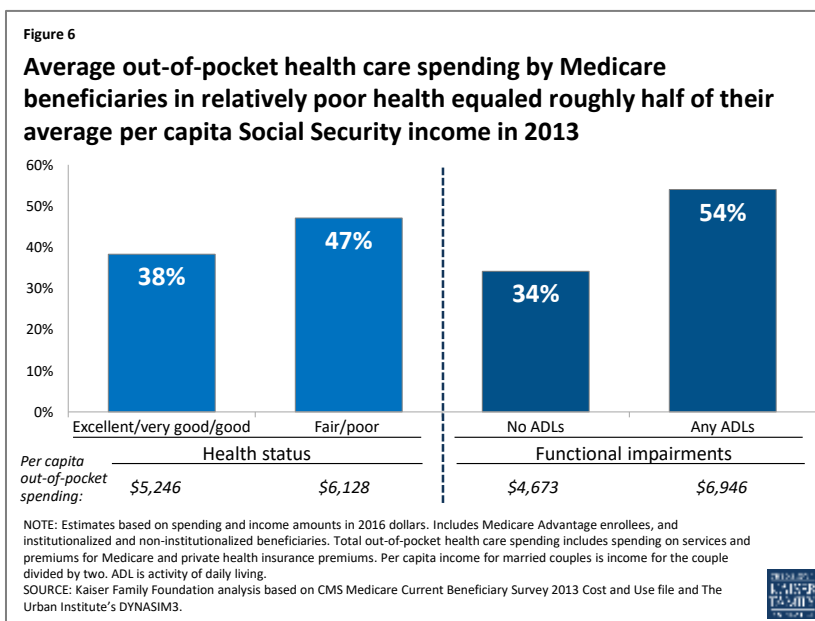
- **Race/ethnicity:** Black beneficiaries faced lower average out-of-pocket health care costs as a share of average per capita Social Security income than whites or Hispanics in 2013 (31 percent, 43 percent, and 40 percent, respectively) (**Table 1**). The relatively low burden for black beneficiaries compared to white and Hispanic beneficiaries is a function of both lower average out-of-pocket spending by black beneficiaries than white beneficiaries and higher average per capita Social Security income for black beneficiaries than Hispanic beneficiaries. Lower average per capita Social Security income among Hispanic beneficiaries is related to immigration trends and fewer years of earnings that qualify them for Social Security.⁶

Lower out-of-pocket spending by black Medicare beneficiaries compared to white beneficiaries is related to the fact that a larger percentage of black beneficiaries have relatively low incomes, meaning that a larger



share of them qualify for both Medicaid and the Part D Low-Income Subsidy (LIS), programs that help cover Medicare premiums and cost sharing, and in the case of Medicaid, other services not covered by Medicare.⁷

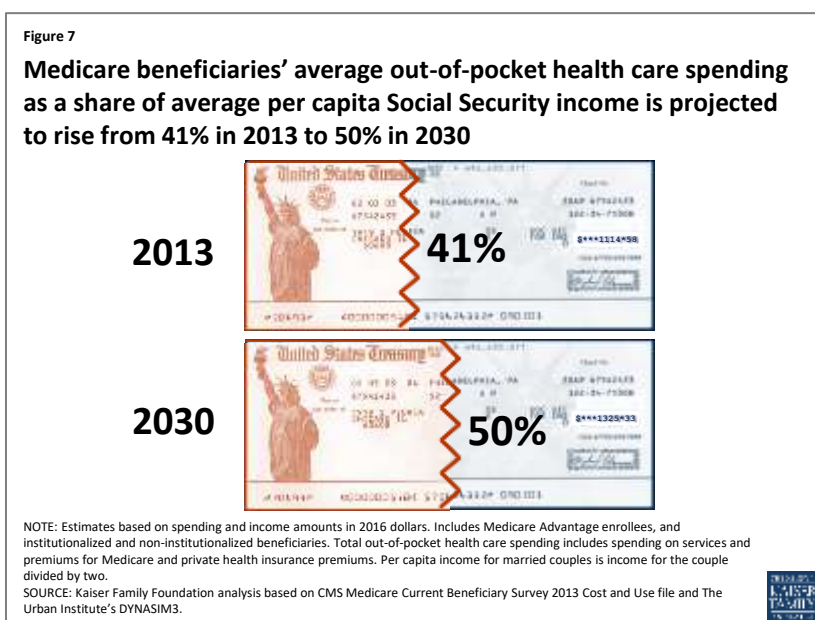
- **Income:** Average out-of-pocket spending rises with income as higher-income beneficiaries are more likely to purchase supplemental health insurance and are less likely to be covered by Medicaid than lower-income beneficiaries. Higher-income beneficiaries can also afford more expensive forms of health care. While out-of-pocket spending rises with income, spending as a share of per capita Social Security income is higher for lower-income beneficiaries. For example, average out-of-pocket spending by beneficiaries with per capita income below \$10,000 (\$3,563) equaled 78 percent of average per capita Social Security income in 2013, compared to 37 percent for those with income between \$20,000 and \$30,000 (who spent \$5,836 on out-of-pocket health care costs in 2013, on average) and 42 percent for those with income above \$50,000 (\$6,993 out of pocket).
- **Health status:** Average out-of-pocket spending by beneficiaries in relatively fair or poor health equaled a larger share of their average per capita Social Security income in 2013, relative to those in better health (**Figure 6**). For example, average out-of-pocket spending by those in fair or poor self-reported health (\$6,128) equaled 47 percent of their average per capita Social Security income in 2013, compared to 38 percent for those in good or better self-reported health. For beneficiaries with any functional impairments, with average out-of-pocket spending of \$6,946 in 2013, their out-of-pocket health care costs equaled 54 percent of their average per capita Social Security income, compared to 34 percent for those with no functional impairments.



PROJECTED OUT-OF-POCKET SPENDING AS A SHARE OF PER CAPITA SOCIAL SECURITY INCOME IN 2030

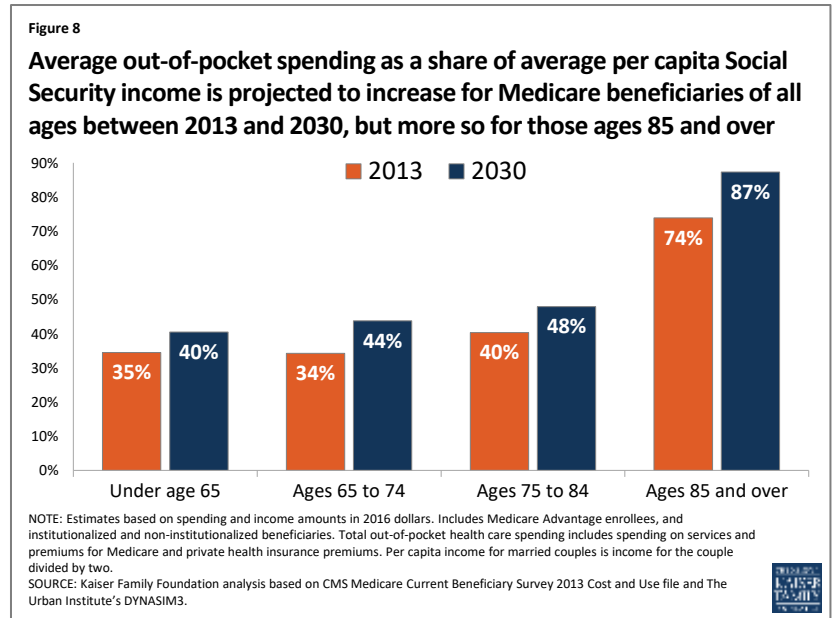
Average out-of-pocket health care spending is projected to consume a larger share of per capita Social Security income over time, increasing from 41 percent in 2013 to 50 percent in 2030 (**Figure 7**). In other words, Medicare beneficiaries are projected to spend fully half of their per capita Social Security benefit on out-of-pocket health care costs in 2030, on average.

While all demographic subgroups are projected to face an increase in their out-of-pocket health care spending as a share of per

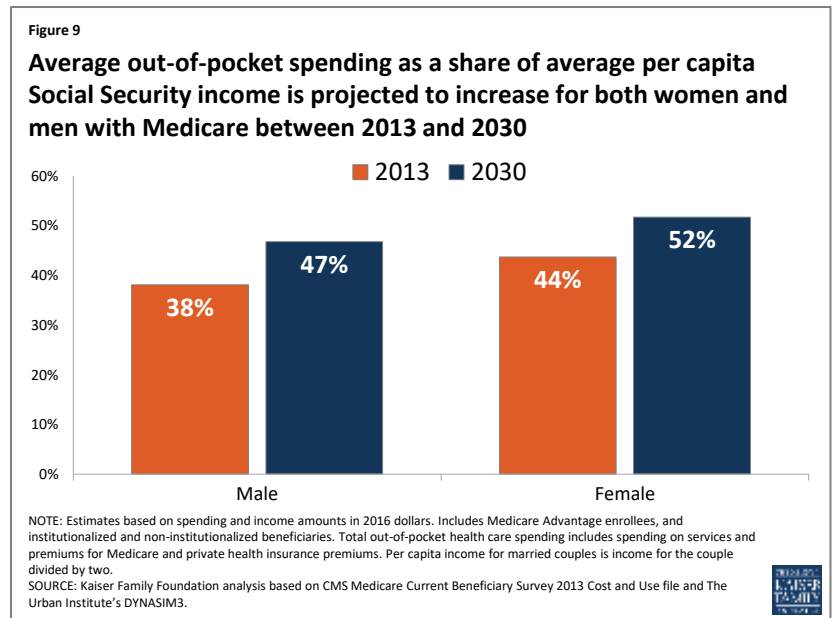


capita Social Security income between 2013 and 2030, some demographic groups are expected to see a larger increase than others.

- **Age:** Between 2013 and 2030, Medicare beneficiaries ages 85 and over are projected to experience a larger percentage point increase in their average out-of-pocket spending as a share of average per capita Social Security income (from 74 percent to 87 percent) than beneficiaries ages 65 to 74 (34 percent to 44 percent) (**Figure 8**). Older beneficiaries are projected to spend \$4,400 more out of pocket for health care, on average, in 2030 than 2013, while those ages 65 to 74 are projected to spend \$2,000 more, on average (**Table 1**).



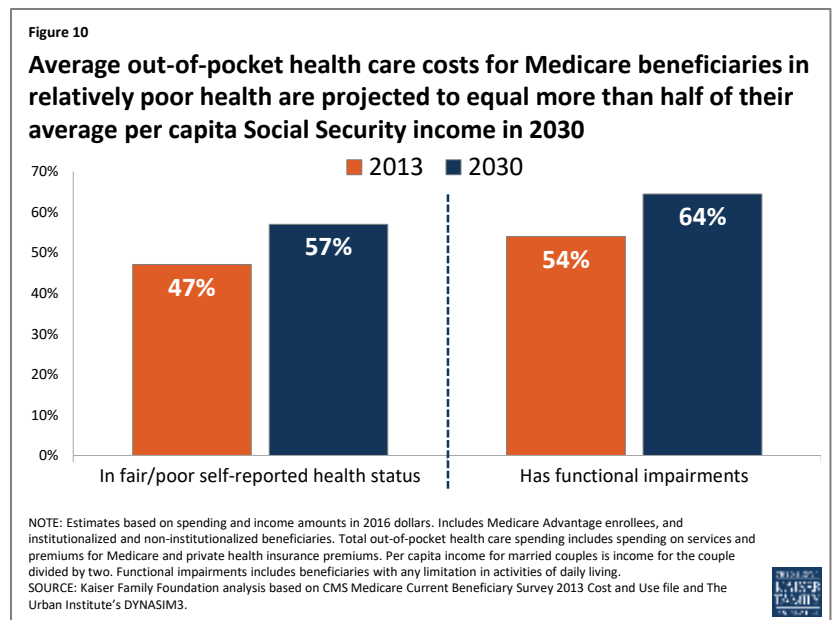
- **Gender:** In 2030, average out-of-pocket health care costs are projected to equal a larger share of per capita Social Security income for both women and men on Medicare than in 2013 (**Figure 9**). In 2030, average out-of-pocket costs are projected to consume more than half (52 percent) of average per capita Social Security income for women on Medicare and nearly half (47 percent) for men.



- **Race/ethnicity:** Average out-of-pocket health care spending as a share of average per capita Social Security income is projected to be higher for white and Hispanic beneficiaries in 2030 than black beneficiaries (**Table 1**). White beneficiaries' average out-of-pocket health care costs are projected to equal half of their average Social Security income in 2030, compared to 47 percent for Hispanic beneficiaries and 37 percent for black beneficiaries.

- **Income:** Average out-of-pocket spending is projected to rise with income in 2030, but out-of-pocket health care spending as a share of per capita Social Security income is expected to be highest for those with the lowest incomes. Average out-of-pocket health care costs are projected to exceed (118 percent) average per capita Social Security income in 2030 for beneficiaries with real per capita income below \$10,000, compared to 48 percent for beneficiaries with real income between \$20,000 and \$30,000 and 50 percent for beneficiaries with income over \$50,000.

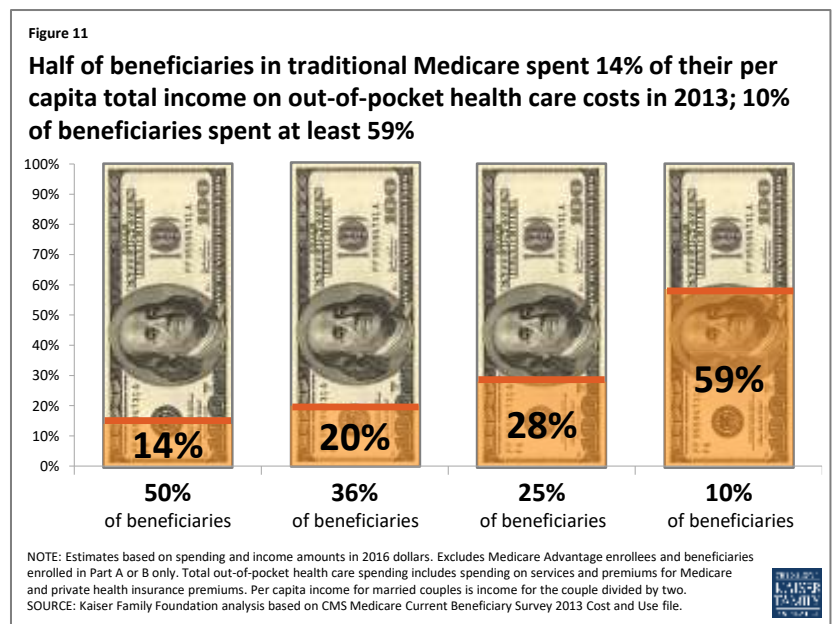
- Health status: Average out-of-pocket health costs for beneficiaries in relatively poor health are projected to equal more than half of their average per capita Social Security income in 2030: increasing from 47 percent in 2013 to 57 percent in 2030 for beneficiaries in fair or poor self-reported health, and from 54 percent in 2013 to 64 percent in 2030 for beneficiaries with any functional impairments (Figure 10).



SECTION 2: TRADITIONAL MEDICARE BENEFICIARIES' OUT-OF-POCKET HEALTH CARE SPENDING AS A SHARE OF PER CAPITA TOTAL INCOME

OUT-OF-POCKET SPENDING AS A SHARE OF PER CAPITA TOTAL INCOME IN 2013

At the median, beneficiaries in traditional Medicare spent 14 percent of their total income (including income from Social Security and all other sources) on out-of-pocket health care costs in 2013 (Figure 11). In other words, half of traditional Medicare beneficiaries spent 14 percent (or more) of their total income on out-of-pocket costs in 2013. The spending burden was even larger for some beneficiaries: one-fourth of traditional Medicare beneficiaries spent nearly 30 percent or more of their total income on out-of-pocket costs in 2013, while 10 percent of beneficiaries in traditional Medicare spent nearly 60 percent or more.

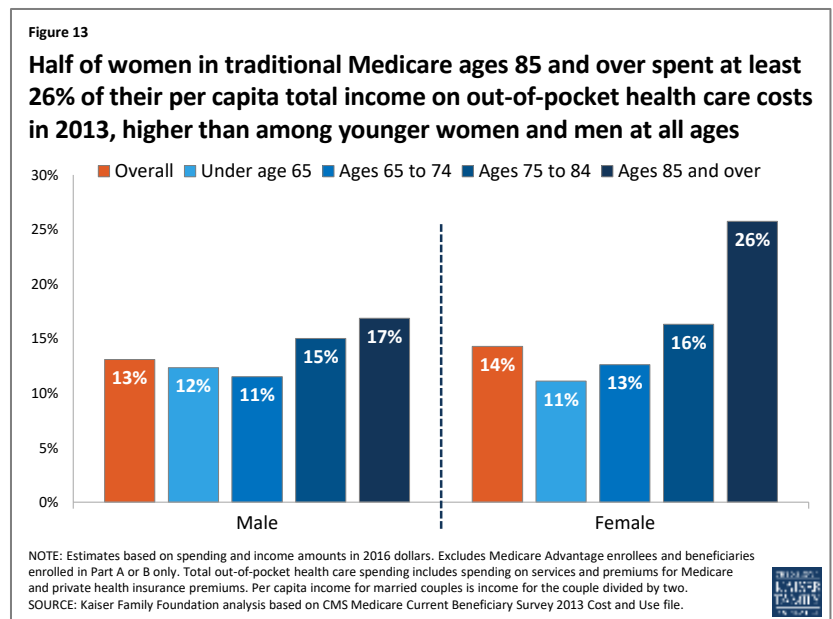
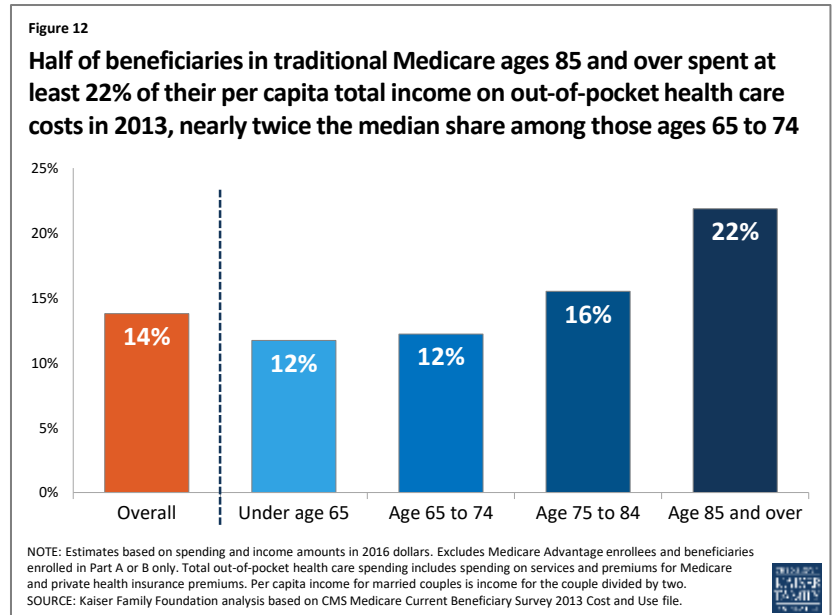


Not surprisingly, the health care spending burden measured as a share of total income is lower than when measured as a share of Social Security income because most beneficiaries receive income from other sources in addition to Social Security. Based on income data from DYNASIM3, average per capita Social Security income for all Medicare beneficiaries in 2013 was \$13,375 (in 2016 dollars), while total per capita income was 2.5 times more (\$35,317). In other words, average per capita Social Security income accounted for 38 percent of average total per capita income. But for those with relatively low incomes, who are less likely to have defined benefit pensions and other investment income, Social Security represents a higher share of their total income, meaning that their out-of-pocket health care spending burden would be similar whether measured as a share of Social Security income or total income. For example, per capita Social Security income is 73 percent of total income of

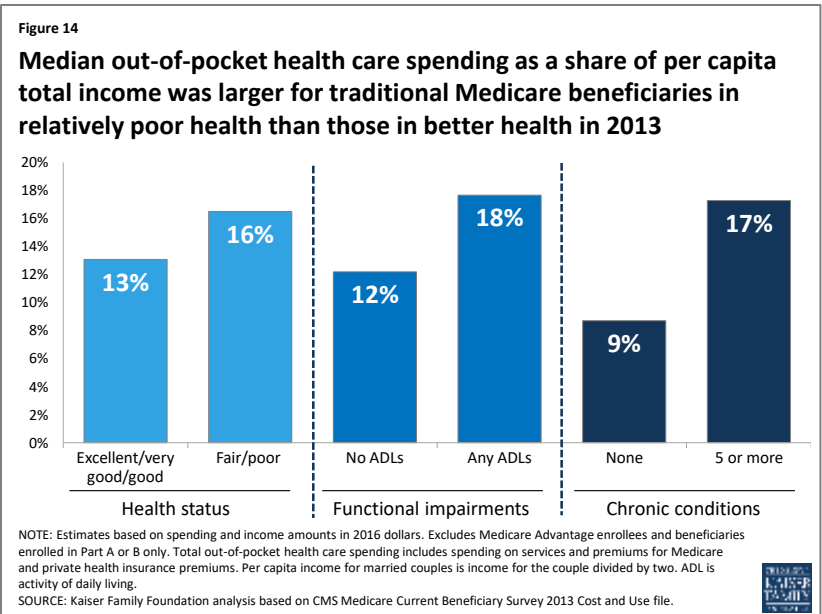
Medicare beneficiaries in 2013 with total income below \$10,000, but only 19 percent of total income for beneficiaries with income above \$50,000 (in 2016 dollars). Social Security is also a large share of total income for beneficiaries without a high school diploma (57 percent), beneficiaries ages 85 and over (56 percent), and beneficiaries of color (48 percent for blacks and 44 percent for Hispanics).

The median ratio of per capita out-of-pocket health care spending to per capita total income varied by demographic group in 2013, reflecting similar patterns in out-of-pocket spending as a share of Social Security income.

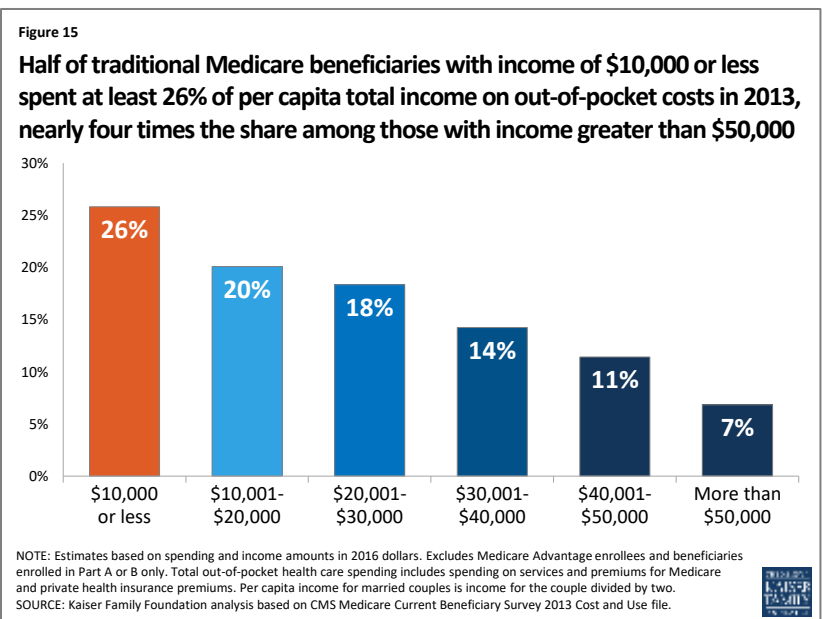
- **Age:** In 2013, half of traditional Medicare beneficiaries ages 85 and over spent at least 22 percent of their per capita total income on out-of-pocket health care costs, nearly twice the median share among beneficiaries ages 65 to 74 (12 percent) **(Figure 12)**.
- **Gender:** While men and women in traditional Medicare spent about the same share of per capita total income on out-of-pocket health care costs at the median (13 percent and 14 percent, respectively), the spending burden was higher for women at older ages. Half of women in traditional Medicare ages 85 and over spent at least 26 percent of their per capita total income on out-of-pocket health care costs in 2013, higher than the median share among younger women and men at all ages **(Figure 13)**.
- **Race/ethnicity:** Median out-of-pocket spending as a share of per capita total income for beneficiaries in traditional Medicare did not vary substantially by race/ethnicity in 2013: 14 percent for white beneficiaries, 13 percent for Hispanic beneficiaries, and 12 percent for black beneficiaries **(Table 2)**. Although white beneficiaries had substantially higher out-of-pocket costs than black or Hispanic beneficiaries in 2013, they also had substantially higher per capita total income, on average: \$39,208, which was \$15,000 more than black beneficiaries and nearly \$20,000 more than Hispanic beneficiaries. These estimates support the idea that people with higher incomes may spend more on health care because affordability is less of a concern for them than for people with lower incomes.



- **Health status:** Median out-of-pocket health care spending as a share of total income was larger for traditional Medicare beneficiaries in relatively poor health than those in better health in 2013. For example, half of beneficiaries with five or more chronic conditions spent at least 17 percent of their per capita total income on out-of-pocket health care costs, compared to 9 percent for those with no chronic conditions. The median ratio of spending to income was 18 percent for those with any functional impairments, versus 12 percent for those with none (**Figure 14**).

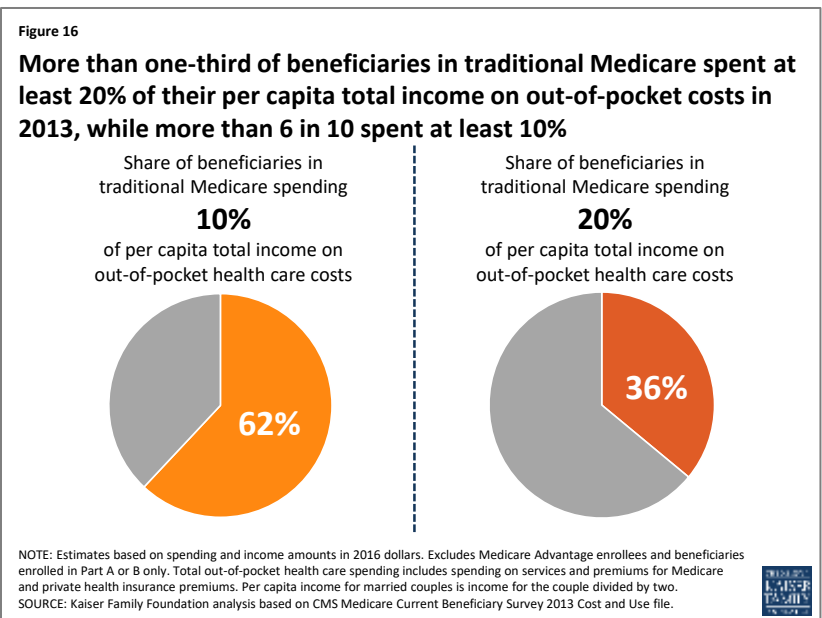


- **Income:** The median ratio of out-of-pocket spending to total income was significantly larger for beneficiaries in traditional Medicare with low incomes than for those with higher incomes in 2013, even though those with higher incomes spent more out of pocket on health care costs in absolute terms. Half of traditional Medicare beneficiaries with annual per capita total income of \$10,000 or less spent at least 26 percent of their total income on out-of-pocket costs in 2013, nearly four times the share among those with income greater than \$50,000 (7 percent) (**Figure 15**).



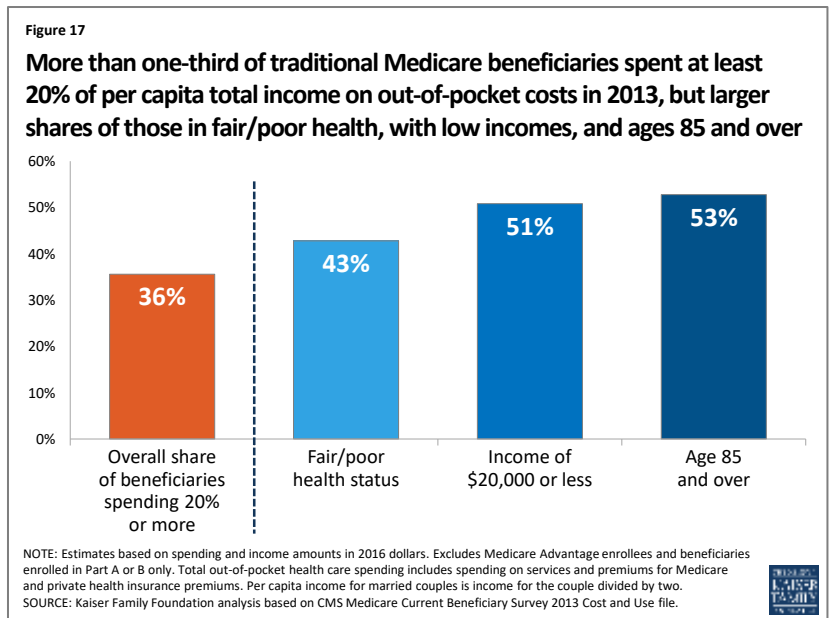
What Share of Beneficiaries in Traditional Medicare Spent At Least 10 Percent/20 Percent of Per Capita Total Income on Health Care in 2013?

Our analysis of individual-level out-of-pocket spending as a share of per capita total income allows us to answer the question: what share of traditional Medicare beneficiaries spent at least 10 percent or 20 percent of their total income on out-of-pocket health care costs in 2013? We find that more than six in 10 people in traditional Medicare (62 percent) spent at least 10 percent of their total income on out-of-pocket costs in 2013 (**Figure 16**).



This estimate is substantially higher than the percent of nonelderly adults with out-of-pocket health care spending at this level.⁸

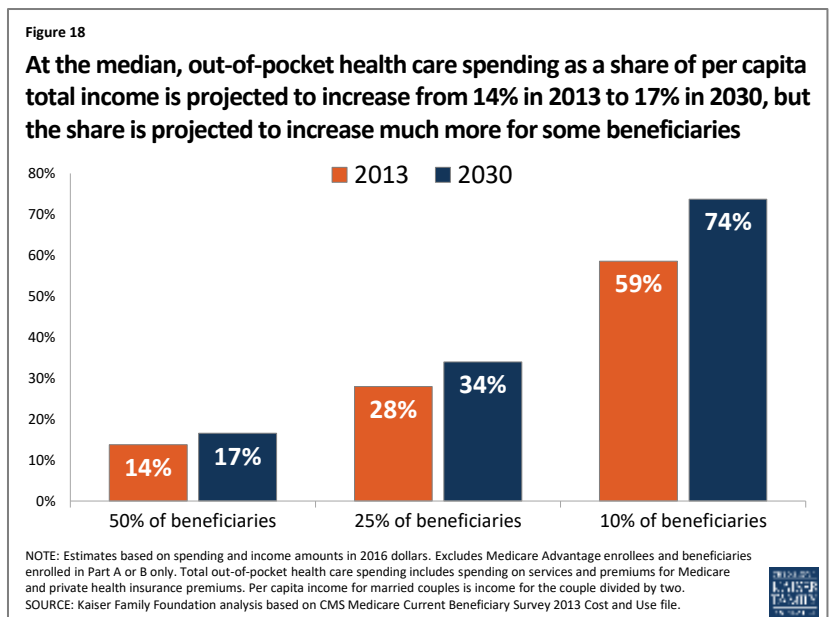
More than one-third (36 percent) of beneficiaries in traditional Medicare spent at least 20 percent of their per capita total income on out-of-pocket health care costs in 2013. But a disproportionate share of some groups of beneficiaries spent at least 20 percent of per capita total income on out-of-pocket costs in 2013, including 43 percent of beneficiaries in fair/poor health, 51 percent of beneficiaries with low incomes (\$20,000 or less), and 53 percent of those ages 85 and over (**Figure 17, Table 3**).



PROJECTED OUT-OF-POCKET SPENDING AS A SHARE OF PER CAPITA TOTAL INCOME IN 2030

Between 2013 and 2030, the median out-of-pocket health care spending burden for beneficiaries in traditional Medicare is projected to increase modestly from 14 percent to 17 percent (**Figure 18, Table 2**). But for some beneficiaries, the ratio of out-of-pocket spending to per capita total income is projected to increase more: for 10 percent of beneficiaries in traditional Medicare, their out-of-pocket health care spending is projected to grow from at least 59 percent of total income in 2013 to 74 percent in 2030.

The 2030 projections of median out-of-pocket health care spending as a share of per capita total income for traditional Medicare beneficiaries by demographic group reflect a similar pattern as for Social Security income, although the projected increases generally are not as large.



- **Age:** For traditional Medicare beneficiaries in different age groups, the median spending burden is projected to increase somewhat for all age groups (**Table 2**). For example, for half of beneficiaries ages 65 to 74, out-of-pocket spending as a share of per capita total income is projected to increase from 12 percent in 2013 to 14 percent in 2030. For beneficiaries ages 85 and over, the median spending burden is projected increase from 22 percent to 26 percent, meaning that half of traditional Medicare beneficiaries ages 85 and over are projected to spend more than one-quarter of their income on health care costs in 2030.

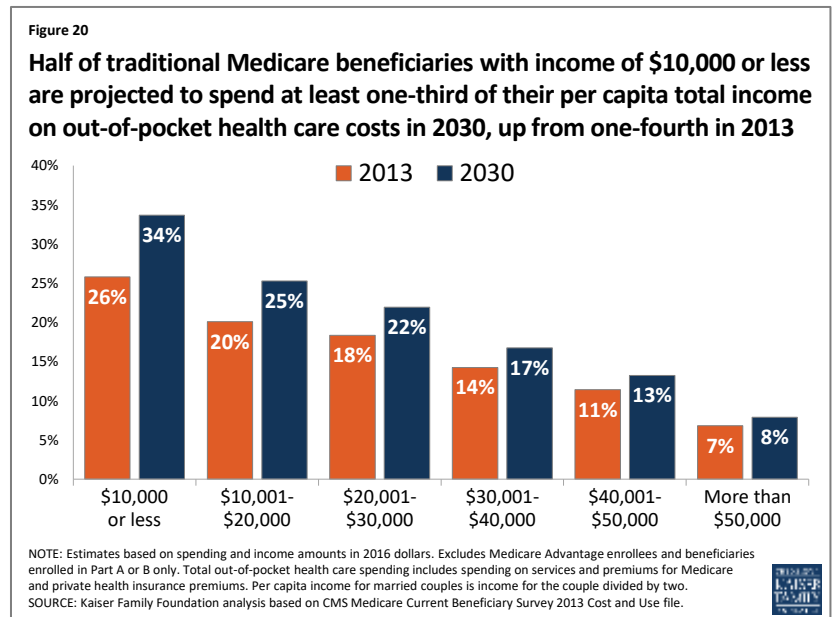
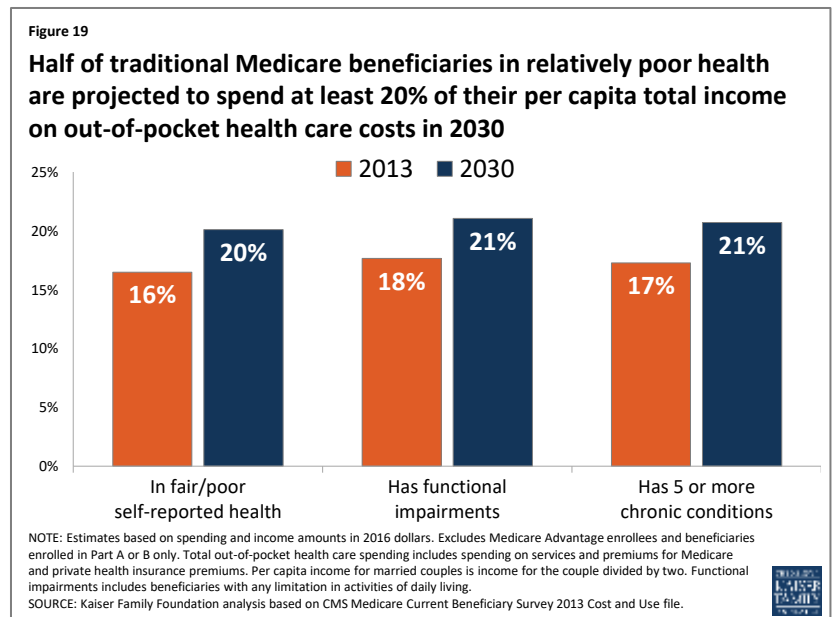
- **Gender:** For women in traditional Medicare, median out-of-pocket spending is projected to increase as a share of per capita total income from 14 percent in 2013 to 17 percent in 2030; for men, the corresponding amounts are 13 percent and 16 percent (**Table 2**).

- **Race/ethnicity:** For traditional Medicare beneficiaries in different racial/ethnic groups, median out-of-pocket spending as a share of per capita total income in 2030 is projected to be 3 percentage points higher than their 2013 levels (**Table 2**).

- **Health status:** Half of traditional Medicare beneficiaries in relatively poor health are projected to spend at least 20 percent of their per capita total income on out-of-pocket health care costs in 2030 (**Figure 19**). The projected ratio of spending to total income in 2030 for those in relatively poor health is four percentage points higher than those in better health (**Table 2**).

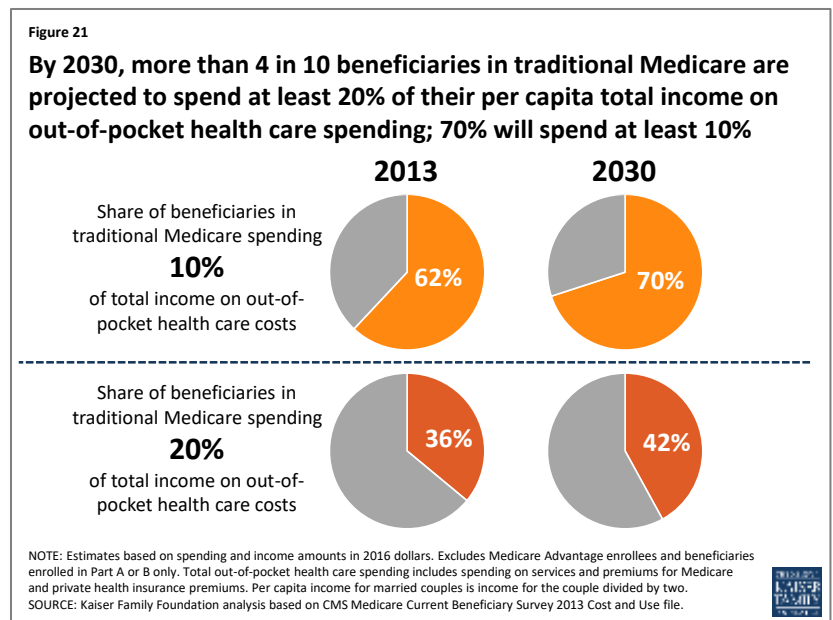
For example, half of beneficiaries with five or more chronic conditions are projected to spend 21 percent of per capita total income on out-of-pocket costs in 2030, while the median spending burden is projected to be 17 percent among those with 3 or 4 chronic conditions, 13 percent among those with 1 or 2 chronic conditions, and 10 percent among those with no chronic conditions.

- **Income:** In 2030, half of traditional Medicare beneficiaries with annual per capita total income of \$10,000 or less are projected to spend at least one-third (34 percent) of their total income on out-of-pocket health care costs in 2030, up from one-fourth in 2013 (**Figure 20**). In contrast, the median spending burden for beneficiaries with incomes greater than \$50,000 is projected to rise by just one percentage point between 2013 and 2030 (from 7 percent to 8 percent).



What Share of Beneficiaries in Traditional Medicare Are Projected to Spend At Least 10 Percent/20 Percent of Per Capita Total Income on Health Care in 2030?

Our analysis shows that by 2030, 70 percent of beneficiaries in traditional Medicare are projected to spend at least 10 percent of their per capita total income on out-of-pocket health care spending (**Figure 21**). More than 4 in 10 (42 percent) beneficiaries in traditional Medicare are projected to spend at least 20 percent that year, but a disproportionate share of certain groups of beneficiaries, including those in fair/poor health (50 percent), ages 85 and over (59 percent), and those with low incomes (58 percent of those with per capita total incomes of \$10,000 or less and 57 percent of those with total incomes of \$10,001 to \$20,000) (**Table 3**).



Policy Implications

This analysis shows that out-of-pocket health care costs are a substantial and growing burden for many people with Medicare, consistent with other recent research.⁹ We found that out-of-pocket health care spending represented a sizable share (41 percent) of Medicare beneficiaries' per capita Social Security income, on average, in 2013, and is expected to consume half of Social Security income in 2030. Some beneficiaries face greater average out-of-pocket spending as a share of average per capita Social Security income than others, including older women and beneficiaries ages 85 and over. For other beneficiaries, average out-of-pocket health care spending represents a relatively lower share of their average per capita Social Security income, likely due in part to coverage from Medicaid and the Part D Low-Income Subsidy program, which reduces the spending burden, including black beneficiaries and those under age 65. Using a different measure of the out-of-pocket spending burden based on per capita total income, we found that half of beneficiaries in traditional Medicare spent at least 14 percent of their total income on out-of-pocket health care costs in 2013, while more than one-third of beneficiaries spent at least 20 percent. By 2030, more than 4 in 10 traditional Medicare beneficiaries are projected to spend at least 20 percent of their total income on out-of-pocket health care costs.

Our results have implications for recurring budget and policy discussions that focus on reductions in Medicare and Medicaid spending and Social Security benefits that could adversely affect older adults living on tight budgets. The findings suggest that rising health care costs could pose affordability concerns for those beneficiaries who derive most of their income from Social Security, while proposals that would shift additional health care costs onto beneficiaries could increase the burden of out-of-pocket spending even more than it is already projected to rise. Such proposals would have a disproportionate impact on those groups with the lowest amount of disposable income, who can least afford to bear additional costs for health care. These changes could also reduce the value of Medicare coverage in terms of the financial protections it provides to older Americans and those with permanent disabilities. Furthermore, proposed changes to Medicaid eligibility and benefits that

were included in Republican proposals to repeal and replace the Affordable Care Act could translate to higher out-of-pocket costs or skipping care altogether due to lack of affordability for certain groups of Medicare beneficiaries who rely on Medicaid for help paying their Medicare costs. Our results suggest that efforts to strengthen and improve the protections offered by Medicare, Medicaid, and Social Security may be needed to ensure greater retirement security for future generations of older Americans.

This report was funded in part by the AARP Public Policy Institute.

Methodology

OVERVIEW

Our analysis of Medicare beneficiaries' out-of-pocket spending burden—that is, out-of-pocket health care spending as a share of income—is based on estimates from both the MCBS and DYNASIM3. The MCBS is a nationally representative survey of Medicare beneficiaries and an ideal source of data on beneficiaries' out-of-pocket spending on premiums and health and long-term care services because these amounts are based on both actual survey-reported data and actual administrative data, where available. As such, the survey is well suited for estimating per capita out-of-pocket spending at the individual and subgroup level.

The analysis was conducted separately for Social Security income and total income, using different approaches to account for differences in the available data. To analyze the spending burden based on Social Security income, we calculate average total out-of-pocket spending (from the MCBS) as a share of average per capita Social Security income (from DYNASIM3) for all beneficiaries and by subgroup, which enables us to compare our results to the Medicare Trustees' estimates. To analyze the spending burden based on total income, we use the MCBS to calculate a ratio of out-of-pocket spending to per capita total income for each respondent, and then estimate the median—an approach that addresses the distortion of averages by outlier values for both spending and income. We measure the out-of-pocket health care spending burden for Medicare beneficiaries overall and by demographic, socioeconomic, and health status indicators, in 2013 and projections for 2030, in constant 2016 dollars.

DATA

Out-of-pocket health care spending

The analysis of out-of-pocket spending is based on data from the Centers for Medicare & Medicaid Services (CMS) Medicare Current Beneficiary Survey (MCBS) Cost and Use file, 2013 (the most recent year of data available). The MCBS is a survey of a nationally-representative sample of the Medicare population, including both aged and disabled enrollees who are living in the community as well as long-term facility residents. The Cost and Use file integrates survey information reported directly by beneficiaries with Medicare administrative data. Survey-reported data includes the demographics of respondents (e.g., sex, age, race, living arrangements, income), health indicators (e.g., self-reported health status, chronic conditions, and physical functioning), the use and costs of health care services, and supplementary health insurance arrangements. The dataset includes detailed information on Medicare-covered and non-covered services, utilization, and spending, including spending by Medicare, Medicaid, third-party payers, and out-of-pocket payments by beneficiaries. The survey collects information on inpatient and outpatient hospital care, physician and other medical provider services, home health services, durable medical equipment, long-term and skilled nursing facility services, hospice services, dental services, and prescription drugs.

Survey-reported out-of-pocket payments are those payments made by the beneficiary or their family, including direct cash payments and Social Security or Supplemental Security Income (SSI) checks paid directly to nursing homes. Out-of-pocket spending on premiums is derived from administrative data on Medicare Part A, Part B, Part C (Medicare Advantage), and Part D premiums paid by each sample person along with survey-reported estimates of premium spending for other types of health insurance beneficiaries may have (including Medigap, employer-sponsored insurance, and other public and private sources). Survey-reported information is matched to and supplemented by administrative records and billing and claims-level data when possible. Extensive efforts are made to verify the accuracy of survey reports and to reconcile discrepancies using administrative bill data (primarily for traditional Medicare beneficiaries) to produce a more complete and

reliable dataset. Out-of-pocket spending amounts are net of payments by any third-party payers, such as payments by Medicaid, Medigap, or employer-sponsored insurance.

Out-of-pocket spending amounts used in this analysis based on the 2013 MCBS are inflation adjusted to 2016, (based on the Consumer Price Index for All Urban Consumers, or CPI-U), projected to 2030, and presented in constant 2016 dollars.

Beneficiary population

We analyze out-of-pocket spending among all Medicare beneficiaries and by specific beneficiary subgroups, including age (under 65, 65-74, 75-84, 85 and over), gender (female, male), age by gender, race (white, black, Hispanic, other), marital status (married, divorced/separated, widowed, single (never married)), education level (less than high school, high school graduate, some college, college graduate), per capita income categories (increments of \$10,000), self-reported health status (excellent, very good, good, fair, poor), number of chronic conditions (none, 1-2, 3-4, 5 or more), and functional limitations (having no or any limitations in activities of daily living, or ADLs).

For the analysis of out-of-pocket spending as a share of total income, we exclude beneficiaries enrolled in Part A or Part B only and beneficiaries enrolled in Medicare Advantage plans from the MCBS analysis of out-of-pocket spending. For Medicare Advantage enrollees, it is not possible to verify survey-reported events in the MCBS with administrative claims data, as is done for beneficiaries in traditional Medicare. This has the effect of biasing downward survey-reported out-of-pocket spending amounts for Medicare Advantage enrollees compared to beneficiaries with traditional Medicare. According to our 2013 MCBS estimates, nominal average per capita out-of-pocket health care spending on premiums and services by Medicare Advantage enrollees was 26 percent less than out-of-pocket spending by beneficiaries in traditional Medicare in 2013 (\$4,316 versus \$5,817); the overall average per capita amount for all Medicare beneficiaries (including both groups) was \$5,341. It is not possible to determine whether the observed differences are real or due to underlying differences in the data collection, verification, and imputation process for out-of-pocket spending by beneficiaries in traditional Medicare and Medicare Advantage.

To evaluate the effect of including or excluding Medicare Advantage enrollees, we estimated average out-of-pocket spending as a share of average income for all beneficiaries, including both traditional Medicare and Medicare Advantage, and for traditional Medicare beneficiaries only. Not surprisingly, including the Medicare Advantage population produces somewhat lower estimates of out-of-pocket spending as a share of income relative to estimates based on the traditional Medicare population alone (*results not shown*). This is because the numerator in the spending burden calculation (average per capita out-of-pocket spending) is lower as a result of the lower average out-of-pocket costs among Medicare Advantage enrollees.

To avoid introducing bias associated with under-reporting of utilization events and associated spending among Medicare Advantage enrollees, for whom claims data are not available, our analysis of spending as a share of total income excludes these beneficiaries. We excluded beneficiaries who were coded as being enrolled in a Medicare Advantage or Medicare Advantage drug plan in any given month in the 2013 calendar year, based on administrative variables in the data file; this equaled 3,450 unweighted survey respondents (17.1 million weighted) of the 11,049 Medicare beneficiaries (53.9 million weighted) represented in the 2013 MCBS Cost and Use file.

For the analysis of spending as a share of total income, we also excluded beneficiaries who were enrolled in only Part A or Part B for the duration of their Medicare enrollment in 2013 (unweighted n=561). Because Medicare is typically not the primary payer for those who are enrolled in only Part A or Part B but not both programs, beneficiaries with Part A or Part B only also have significantly lower average total out-of-pocket

spending relative to those enrolled in both Part A and B, which is the rationale for excluding them from the analysis of out-of-pocket spending as a share of total income. After excluding these enrollees, our sample for the analysis of spending as a share of total income included 7,038 respondents in traditional Medicare (32.4 million weighted) for the duration of their Medicare enrollment in 2013.

We can identify and exclude Medicare Advantage enrollees and beneficiaries enrolled in Part A or Part B only from our analysis of the MCBS for out-of-pocket spending as a share of total income, because that part of the analysis relies exclusively on individual-level data in the MCBS. However, it is not possible to exclude these subgroups from DYNASIM3 because the model does not specifically identify Medicare Advantage coverage or type of Medicare enrollment. Therefore, for the analysis of out-of-pocket spending as a share of Social Security income, which uses data from both the MCBS and DYNASIM3, we included both Medicare Advantage enrollees and those in Part A or Part B only in the analysis of out-of-pocket spending from the MCBS, because we wanted a uniform definition of the underlying population in the populations included in both datasets for analysis of out-of-pocket spending as a share of Social Security income. This decision means we erred on the side of producing more conservative results by including these enrollees (since they have lower out-of-pocket spending than their counterparts), rather than exclude them and potentially overstate the spending burden.

Social Security income

Although the MCBS is an ideal source of out-of-pocket spending data for this analysis, income in the MCBS is reported at the aggregate level for each respondent and does not allow for analysis of specific components of income, such as Social Security income. Therefore, for our analysis of out-of-pocket spending as a share of average per capita Social Security income, we used income estimates and projections from DYNASIM3, a predictive microsimulation model designed by The Urban Institute that draws upon multiple sources of data.

DYNASIM3 projects the population and analyzes the long-run distributional consequences of retirement and aging issues. The model starts with a representative sample of individuals and families and ages the data year by year, simulating demographic and economic events and including all key components of retirement income. The model uses parameters estimated from macroeconomic and demographic assumptions about the future from the Social Security Trustees, and from longitudinal data sources including the U.S. Census Bureau Survey of Income and Program Participation (SIPP), Pension Benefit Guaranty Corporation's (PBGC) Pension Insurance Modeling System (PIMS), Health and Retirement Study (HRS), and the Panel Study of Income Dynamics (PSID). The model also incorporates administrative data from the Social Security Administration (SSA) and elements from the SSA's Modeling Income in the Near Term (MINT) microsimulation model, and aligns projections of assets to the Survey of Consumer Finance (SCF).

DYNASIM3 projects the major sources of income and wealth annually from age 15 until death, including earnings, Social Security benefits, benefits from employer-sponsored defined benefit (DB) pensions, Supplemental Security Income (SSI), interest, dividends, rental income, home equity, retirement accounts (defined contribution (DC) plans, individual retirement accounts (IRAs), and Keoghs), and other assets (saving, checking, money market, certificate of deposit (CD), stocks, bonds, equity in businesses, vehicles, and non-home real estate, less unsecured debt). Reported total income includes withdrawals from retirement accounts but excludes capital gains.

DYNASIM3 generates average and percentiles of per capita Social Security and total income, both historical (in this analysis, back to 2013) and projected (in this analysis, through 2030), for specific demographic groups and health status indicators. DYNASIM3 calculates average per capita Social Security and total income for married couples by dividing income for the couple by two. All income amounts for 2013 and 2030 are presented in constant 2016 dollars.

Total income

The MCBS includes a measure of total income for individual respondents and their spouses, if applicable. However, the MCBS does not report all sources of income that some beneficiaries may have. As in many other surveys, income is self-reported, with beneficiaries asked to report total annual income for themselves and their spouses (where applicable) from all sources, including earnings, Social Security, pensions, and asset income. However, beneficiaries are not asked to report specific income amounts by source, and some types of income may go unreported or may be underestimated. Therefore, this measure results in an overall underreporting of income, particularly for those with relatively high incomes. This conclusion is based on a comparison of MCBS income estimates to income estimates from DYNASIM3, in which we measured the divergence of MCBS and DYNASIM income estimates at each percentile of per capita income.

We used the results of this comparison to derive adjustment factors for each percentile with which to rescale each MCBS respondent's per capita total income. In general, this produced estimates of MCBS respondents' income that are higher than self-reported values and that we believe are a more accurate representation of income among people on Medicare. We then combined this adjusted income estimate with per capita out-of-pocket spending estimates in the MCBS to derive a more reliable estimate of Medicare beneficiaries' per capita out-of-pocket health care spending as a share of total income (described below) than one based on MCBS self-reported income data alone.

METHODS

Our analysis was conducted in two parts using two separate methods, as described below: one for the analysis of out-of-pocket spending as a share of Social Security income and another for the analysis of spending as a share of total income.

Analysis of per capita out-of-pocket spending as a share of per capita Social Security income

To estimate Medicare beneficiaries' out-of-pocket spending as a share of Social Security income, we combined estimates from both the MCBS and DYNASIM3. The basic calculation of spending burden for this part of the analysis is average per capita total out-of-pocket spending for premiums and services from the MCBS divided by average per capita Social Security income from DYNASIM3. We calculated this estimate for the total beneficiary population, including beneficiaries in traditional Medicare and Medicare Advantage enrollees, and beneficiaries enrolled in Part A or Part B only, and separately for subgroups by gender, age, gender by age, race/ethnicity, marital status, education level, income categories, and health status indicators. Using this approach, we calculated estimates of average out-of-pocket spending as a share of average Social Security income, overall and by subgroup, for 2013 and projected into the future (through 2030).

Analysis of per capita out-of-pocket spending as a share of per capita total income

For analysis of out-of-pocket spending as a share of total income, we revised our methodology in several ways: (1) we excluded from the analysis beneficiaries enrolled in only Part A or Part B, who do not have coverage of all Medicare-covered benefits and therefore incur lower out-of-pocket costs (as reported in the MCBS) than beneficiaries who are enrolled in both parts of the program; (2) we excluded from the analysis beneficiaries enrolled in Medicare Advantage plans, because utilization and spending data for these enrollees in the MCBS are based on survey responses only and are not reconciled with administrative claims data, which leads to underestimates of out-of-pocket spending; and (3) we used individual-level data on out-of-pocket spending and total income from the MCBS to create a ratio of spending to income for each individual. Because the MCBS does not ask about all sources of income that some beneficiaries may have, leading to underreporting of total income, we used DYNASIM3 to adjust the self-reported estimate of total income for each respondent in the MCBS (as described above), divided this estimate by two for married couples to derive a per capita income

estimate, and used this estimate for total income in the analysis of out-of-pocket spending as a share of total income.

To measure per capita out-of-pocket health care spending as a share of per capita total income, we arrayed the individual ratios of annual out-of-pocket spending to annual income from low to high and computed the median (and other percentiles, e.g., 75th and 95th) for the entire group of traditional Medicare beneficiaries, and by demographic subgroups.¹⁰ We also calculated what percent of Medicare beneficiaries (overall and by subgroup) spent at least 10 percent or 20 percent of their per capita total incomes on out-of-pocket health care costs in 2013 and projected for 2030, measures that are commonly used to convey health care spending burdens.¹¹

Spending burden projections for 2030

The 2030 projections are based on the assumption that nominal health care costs grow at an average annual rate of 4.3 percent, which equals the average annual rate of growth in nominal per capita out-of-pocket spending on premiums and services for all Medicare beneficiaries between 2000 and 2013 (2.1 percent in constant 2016 dollars).¹² We applied this growth rate to the 2013 out-of-pocket spending estimates for each respondent in the MCBS to project their out-of-pocket spending in 2030.

Social Security income projections for 2030 are generated by DYNASIM3. The income projections from the DYNASIM3 microsimulation model are based on information from many different longitudinal data sources and are aligned to macroeconomic and demographic assumptions about the future from the Social Security Trustees. DYNASIM captures historic changes in labor force participation, earnings, marriage, disability, education, pension type, stock and bond market fluctuations, and benefit claiming. It includes important differentials by sex, age, education, marital status, race, nativity, and earnings level. DYNASIM3 projects an average annual growth rate of 3.6 percent in average nominal per capita Social Security income between 2013 and 2030 (1.0 percent in constant 2016 dollars). For total income projections in 2030, we measured the rate of total income growth between 2013 and 2030 at each percentile from DYNASIM3, and applied those growth rates to the corresponding percentiles of the DYNASIM-adjusted total income estimates for respondents in the MCBS.

Alternative out-of-pocket health care spending growth projections

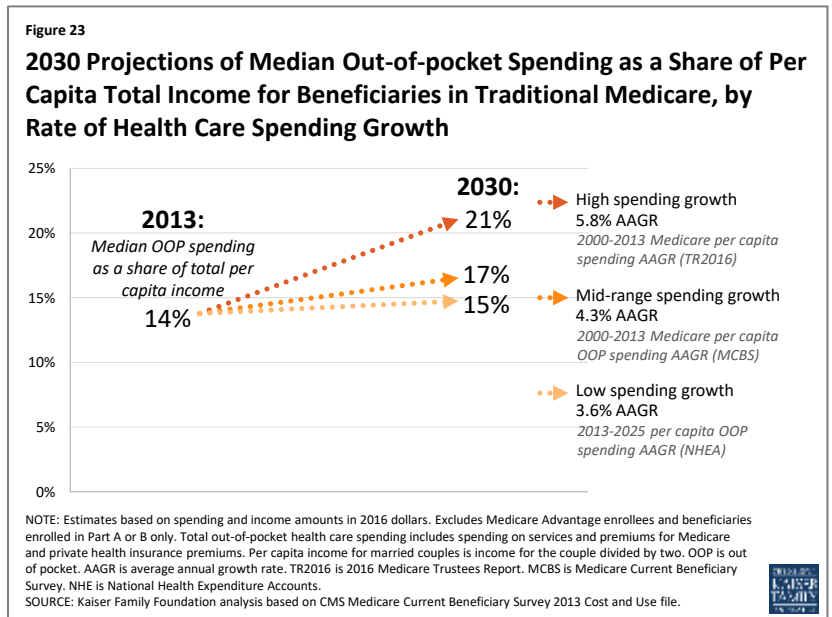
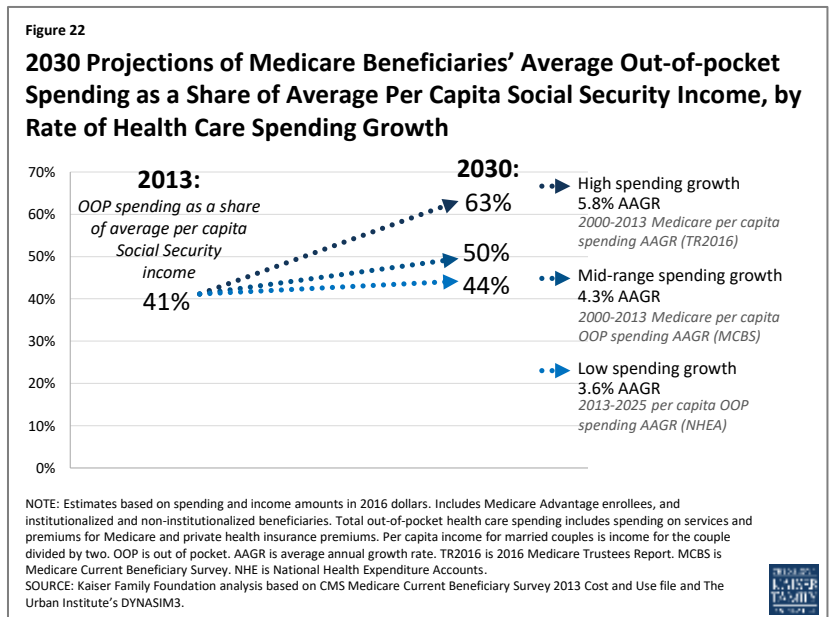
To project growth in out-of-pocket spending, we considered three growth rates to approximate different scenarios for the path of future spending:

- **3.6 percent average annual growth (low spending growth rate):** this rate equals the [National Health Expenditure Accounts projections](#) of the average annual growth rate in average nominal per capita out-of-pocket spending between 2013 and 2025; this translates to a 1.4 percent growth rate in constant 2016 dollars.
- **4.3 percent average annual growth (mid-range spending growth rate):** this rate equals the average annual growth rate in average nominal per capita out-of-pocket spending on premiums and services for all beneficiaries between 2000 and 2013, based on historical spending data from the MCBS; this translates to a 2.1 percent growth rate in constant 2016 dollars.
- **5.8 percent average annual growth (high spending growth rate):** this rate equals the average annual growth rate in total average nominal costs per Medicare beneficiary between 2000 and 2013, based on historical data published in the [2016 Medicare Trustees report](#); this translates to a 3.6 percent growth rate in constant 2016 dollars.

The out-of-pocket spending burden projections in this analysis are based on the mid-range spending growth rate. Because the actual trajectory of future spending is unknown, we measured the sensitivity of our spending burden results to the assumed 4.3 percent health care spending growth rate by calculating results for the projection of average out-of-pocket spending as a share of average Social Security and median out-of-pocket spending as a share of total income between 2013 and 2030 applying the low-spending (3.6 percent) and high-spending (5.8 percent) growth rates to the 2013 out-of-pocket spending estimates from the MCBS to depict a range of alternative outcomes.

Under the mid-range health care spending growth rate assumption of 4.3 percent, average out-of-pocket spending as a share of average income is projected to increase by 9 percentage points between 2013 and 2030, from 41 percent to 50 percent. The corresponding increase for total income is 3 percentage points, from 14 percent to 17 percent, at the median. As expected, the magnitude of this increase would be larger or smaller if out-of-pocket health care spending grows faster or slower than the mid-range projection used for this analysis:

- If out-of-pocket spending grows at a slower rate of 3.6 percent (based on per capita out-of-pocket spending growth between 2013 and 2025 from NHEA), average out-of-pocket spending as a share of average per capita Social Security income would increase by 3 percentage points between 2013 and 2030, from 41 percent to 44 percent (**Figure 22**). For median spending as a share of per capita total income, the share would be relatively flat under a low-spending growth scenario: 14 percent in 2013 and 15 percent in 2030 (**Figure 23**).
- Conversely, if average out-of-pocket spending grows at a relatively high rate of 5.8 percent (based on Medicare per capita spending growth between 2000 and 2013 from Medicare Trustees), spending as a share of per capita Social Security income would increase by 22 percentage points, from 41 percent to 63 percent. Looking at out-of-pocket spending as a share of per capita total income at the median, the share would increase by 7 percentage points under a high-spending growth scenario, from 14 percent in 2013 to 21 percent in 2030.



LIMITATIONS

Data limitations

The ideal dataset for this analysis would have, at the level of an individual Medicare beneficiary, out-of-pocket spending on premiums and services reconciled with claims data, such as is available in the MCBS, and total income for the individual reported separately for all sources, including Social Security, earnings, pensions, asset income, and IRA distributions. With this ideal dataset, we would be able to calculate for each individual two ratios: 1) their out-of-pocket health care spending as a share of Social Security income and 2) out-of-pocket spending as a share of total income. We could then array the individual-level results from low to high and calculate the median ratio to present an undistorted measure of the individual health care spending burden, and by subgroup.

Unfortunately, this ideal dataset does not exist. MCBS does not report Social Security income for each respondent, while DYNASIM3 is a microsimulation model that reports income for all beneficiaries, but does not include out-of-pocket spending reconciled with claims data. Although the DYNASIM3 microsimulation model has recently been [updated](#) to project out-of-pocket medical spending and premiums, these projections are predicted based on certain demographic parameters in the model (e.g., age, sex, education, health status, insurance type), some of which are themselves predicted in the model (e.g., health status, insurance type). The MCBS is a more valid and reliable source of data on Medicare beneficiaries' out-of-pocket spending on premiums and other health spending including and long-term care services because MCBS amounts are based on both survey-reported data and actual administrative data, where available. MCBS is better suited for deriving per capita estimates of out-of-pocket spending at the individual and subgroup level. While the MCBS provides the best estimate of out-of-pocket medical spending for Medicare beneficiaries, DYNASIM's projected distributions of out-of-pocket medical spending as a share of Social Security and total income closely match values included in this report in all subgroups.

The Health and Retirement Study (HRS) includes out-of-pocket spending, Social Security income, and total income at the individual level, but health insurance premiums are missing for many respondents. Since premiums account for nearly half of Medicare beneficiaries' total out-of-pocket spending, the HRS significantly underreports total out-of-pocket spending as compared to estimates from the MCBS.

Method for calculating out-of-pocket spending as a share of income

Faced with these data limitations, we used two methods for computing the ratio of out-of-pocket spending to income in this analysis (as described in detail above). For the spending burden analysis based on total income, we used per capita out-of-pocket spending and the DYNASIM3-adjusted per capita income measure in the MCBS to calculate a ratio of out-of-pocket spending to total income for each individual, and then presented the median ratio. As stated above, we were unable to follow this same approach in the spending burden analysis based on Social Security income, because MCBS does not report separate components of total income for each respondent. Because we could not use individual-level data on spending and Social Security income from one dataset, we could not array estimates in such a way as to calculate the median ratio of out-of-pocket spending as a share of income. Therefore we calculated average out-of-pocket spending as a share of average per capita Social Security income, in the aggregate and by subgroup.

We recognize that using average out-of-pocket spending and average Social Security income is prone to bias since averages are affected by outlier values and the resulting spending burden calculations may be distorted. Although averages for both spending and income are more affected by outlier values than medians, there was no rationale to support dividing median out-of-pocket spending from the MCBS with median estimates of income in DYNASIM3. Moreover, we note that Social Security income is not as affected by outlier values as

total income since there is a maximum Social Security retirement benefit payable in any given year; for 2017, the amount was \$3,538 per month for a person retiring at age 70, or \$42,456 per year.

Despite the data limitations inherent in both the MCBS and DYNASIM3 precluding us from using the same methodology for both parts of this analysis, we believe that the approach we have adopted here is a reasonable and straightforward alternative to calculating the out-of-pocket spending burden for Social Security income, while enabling us to use our preferred approach (calculating the individual-level ratio of spending to income and then calculating the median value) for spending as a share of total income. Both parts of the analysis use the best-available sources of data for Medicare beneficiaries' total out-of-pocket health care spending and per capita Social Security and total income. Moreover, the approach we use for the Social Security analysis is consistent with the approach used by the Medicare actuaries in their calculation of average per capita costs for Medicare Part B and Part D as a share of the average Social Security benefit. This facilitates a comparison of our results with the actuaries' analysis as shown in the Medicare Trustees report each year, but also highlights the importance of other out-of-pocket health care spending that is not included in the Trustees' calculations. Dividing couple incomes in half recognizes that couples share resources and facilitates comparisons of the spending burden for married and unmarried individuals on a per capita basis.

Projecting income growth

For this analysis, we relied on income projections generated by the DYNASIM3 model. We did not model variation in the rate of Social Security or income growth between 2013 and 2030. According to the predictive DYNASIM3 microsimulation model, the rate of average annual growth in average nominal per capita Social Security income for Medicare beneficiaries is projected to be 3.6 percent (1.0 percent in constant 2016 dollars); the corresponding amounts for average per capita total income are 3.7 percent and 1.2 percent. The model allows for variation in the rate of income growth by demographic group, taking into account such factors as changing patterns in employment, earnings, marriage histories, Social Security full retirement age, pension type, and asset returns.

Modifying these income projections would affect our spending burden projections. For example, if the rate of average per capita income growth is higher than the DYNASIM3 model projects, out-of-pocket spending would consume a smaller share of income. Conversely, if the rate of per capita income growth is slower than the model projects, the out-of-pocket spending burden would be larger than the projections in this analysis.

Tables

Table 1: Medicare Beneficiaries' Average Per Capita Out-of-Pocket Health Care Spending and Average Per Capita Social Security Income, by Demographic Characteristics, 2013 and 2030

	2013			2030		
	Average per capita out-of-pocket spending	Average per capita Social Security income	Spending as a share of income	Average per capita out-of-pocket spending	Average per capita Social Security income	Spending as a share of income
All Medicare beneficiaries	\$5,503	\$13,375	41%	\$7,877	\$15,904	50%
Gender						
Female	\$5,864	\$13,421	44%	\$8,394	\$16,230	52%
Male	\$5,072	\$13,318	38%	\$7,261	\$15,526	47%
Age						
Under 65	\$3,647	\$10,564	35%	\$5,220	\$12,901	40%
65 to 74	\$4,767	\$13,934	34%	\$6,824	\$15,583	44%
75 to 84	\$5,745	\$14,238	40%	\$8,223	\$17,158	48%
85 and over	\$10,208	\$13,814	74%	\$14,612	\$16,731	87%
Race/ethnicity						
White	\$6,147	\$14,453	43%	\$8,799	\$17,431	50%
Black	\$3,573	\$11,484	31%	\$5,115	\$13,784	37%
Hispanic	\$3,533	\$8,937	40%	\$5,057	\$10,801	47%
Marital status						
Married	\$5,389	\$12,303	44%	\$7,715	\$14,830	52%
Divorced/separated	\$4,221	\$14,027	30%	\$6,043	\$16,619	36%
Widowed	\$7,059	\$16,056	44%	\$10,104	\$19,030	53%
Single (never married)	\$4,431	\$12,307	36%	\$6,342	\$15,116	42%
Education						
Less than high school	\$3,940	\$10,285	38%	\$5,640	\$10,149	56%
High school graduate	\$5,432	\$13,204	41%	\$7,776	\$14,931	52%
Some college	\$5,543	\$14,262	39%	\$7,935	\$17,016	47%
College graduate	\$6,421	\$15,439	42%	\$9,191	\$18,743	49%
Gender by age						
Female under 65	\$3,414	\$10,250	33%	\$4,886	\$12,855	38%
Female 65 to 74	\$4,847	\$14,141	34%	\$6,938	\$16,074	43%
Female 75 to 84	\$5,854	\$14,106	41%	\$8,380	\$17,434	48%
Female 85 and over	\$11,438	\$13,790	83%	\$16,373	\$16,657	98%
Male under 65	\$3,847	\$10,892	35%	\$5,507	\$12,954	43%
Male 65 to 74	\$4,673	\$13,701	34%	\$6,690	\$15,052	44%
Male 75 to 84	\$5,607	\$14,414	39%	\$8,026	\$16,828	48%
Male 85 and over	\$8,054	\$13,859	58%	\$11,529	\$16,841	68%
Health status						
Excellent/very good/good	\$5,246	\$13,701	38%	\$7,510	\$16,476	46%
Fair/poor	\$6,128	\$13,016	47%	\$8,772	\$15,388	57%
Functional impairments						
No ADLs	\$4,673	\$13,687	34%	\$6,689	\$16,184	41%
Any ADLs	\$6,946	\$12,863	54%	\$9,943	\$15,422	64%
Per capita total income						
\$10,000 or less	\$3,563	\$4,554	78%	\$5,101	\$4,341	118%
\$10,001-\$20,000	\$4,458	\$12,197	37%	\$6,382	\$12,717	50%
\$20,001-\$30,000	\$5,836	\$15,187	38%	\$8,354	\$17,227	48%
\$30,001-\$40,000	\$6,146	\$15,034	41%	\$8,797	\$18,095	49%
\$40,001-\$50,000	\$6,451	\$15,511	42%	\$9,235	\$18,293	50%
\$50,001 or more	\$6,993	\$16,710	42%	\$10,010	\$19,901	50%

NOTE: Spending and income amounts in 2016 dollars. Includes Medicare Advantage enrollees, those enrolled in Part A or Part B only, and institutionalized and non-institutionalized beneficiaries. Total out-of-pocket health care spending includes spending on services and premiums for Medicare and private health insurance premiums. Per capita income for married couples is income for the couple divided by two.

SOURCE: Kaiser Family Foundation analysis based on CMs Medicare Current Beneficiary Survey and The Urban Institute's DYNASIM3.

Table 2: Traditional **Medicare Beneficiaries' Out-**of-Pocket Health Care Spending as a Share of Per Capita Total Income, at the Median and 90th Percentiles, by Demographic Characteristics, 2013 and 2030

	Median out-of-pocket spending as a share of total income		90 th percentile of out-of-pocket spending as a share of total income	
	2013	2030	2013	2030
Traditional Medicare beneficiaries	14%	17%	59%	74%
Gender				
Female	14%	17%	64%	79%
Male	13%	16%	52%	64%
Age				
Under 65	12%	15%	57%	71%
65 to 74	12%	14%	42%	51%
75 to 84	16%	19%	56%	72%
85 and over	22%	26%	142%	176%
Race/ethnicity				
White	14%	17%	59%	74%
Black	12%	15%	57%	71%
Hispanic	13%	16%	57%	74%
Marital status				
Married	15%	17%	52%	66%
Divorced/separated	12%	14%	45%	55%
Widowed	15%	18%	84%	102%
Single (never married)	10%	12%	74%	92%
Education				
Less than high school	15%	19%	72%	93%
High school graduate	15%	18%	64%	80%
Some college	14%	17%	50%	64%
College graduate	11%	13%	41%	49%
Gender by age				
Female under 65	11%	14%	45%	59%
Female 65 to 74	13%	15%	43%	53%
Female 75 to 85	16%	20%	63%	78%
Female 85 and over	26%	31%	165%	204%
Male under 65	12%	15%	68%	86%
Male 65 to 74	11%	13%	42%	50%
Male 75 to 85	15%	18%	51%	63%
Male 85 and over	17%	20%	98%	123%
Health status				
Excellent/very good/good	13%	16%	47%	57%
Fair/poor	16%	20%	92%	114%
Functional impairments				
No ADLs	12%	14%	41%	50%
Any ADLs	18%	21%	99%	125%
Per capita total income				
\$10,000 or less	26%	34%	206%	269%
\$10,001-\$20,000	20%	25%	76%	95%
\$20,001-\$30,000	18%	22%	47%	56%
\$30,001-\$40,000	14%	17%	37%	44%
\$40,001-\$50,000	11%	13%	28%	32%
\$50,001 or more	7%	8%	18%	20%

NOTE: Estimates based on spending and income amounts in 2016 dollars. Excludes Medicare Advantage enrollees and those enrolled in Part A or Part B only. Total out-of-pocket health care spending includes spending on services and premiums for Medicare and private health insurance premiums. Per capita income for married couples is income for the couple divided by two.

SOURCE: Kaiser Family Foundation analysis based on CMS Medicare Current Beneficiary Survey.

Table 3: Share of Traditional Medicare Beneficiaries Spending At Least 10 Percent and 20 Percent of Per Capita Total Income on Out-of-Pocket Health Care Spending, by Demographic Characteristics, 2013 and 2030

	Share spending at least 10 percent of per capita total income on out-of-pocket health care spending		Share spending at least 20 percent of per capita total income on out-of-pocket health care spending	
	2013	2030	2013	2030
Traditional Medicare beneficiaries	62%	70%	36%	42%
Gender				
Female	64%	71%	37%	43%
Male	60%	68%	33%	40%
Age				
Under 65	56%	64%	30%	38%
65 to 74	58%	66%	30%	36%
75 to 84	67%	74%	39%	46%
85 and over	74%	80%	53%	59%
Race/ethnicity				
White	64%	71%	37%	43%
Black	55%	63%	30%	38%
Hispanic	60%	67%	34%	42%
Marital status				
Married	66%	73%	37%	44%
Divorced/separated	55%	64%	27%	36%
Widowed	65%	71%	40%	46%
Single (never married)	49%	57%	29%	34%
Education				
Less than high school	63%	71%	40%	47%
High school graduate	67%	75%	39%	46%
Some college	65%	71%	36%	43%
College graduate	54%	61%	27%	32%
Gender by age				
Female under 65	54%	63%	28%	35%
Female 65 to 74	61%	67%	30%	37%
Female 75 to 85	68%	74%	42%	48%
Female 85 and over	77%	82%	58%	63%
Male under 65	57%	65%	32%	40%
Male 65 to 74	56%	64%	29%	35%
Male 75 to 85	66%	73%	36%	44%
Male 85 and over	68%	75%	44%	50%
Health status				
Excellent/very good/good	61%	68%	36%	39%
Fair/poor	67%	74%	43%	50%
Functional impairments				
No ADLs	58%	66%	29%	36%
Any ADLs	69%	76%	45%	52%
Per capita total income				
\$10,000 or less	66%	75%	53%	58%
\$10,001-\$20,000	71%	78%	50%	57%
\$20,001-\$30,000	80%	86%	46%	55%
\$30,001-\$40,000	70%	76%	32%	38%
\$40,001-\$50,000	57%	66%	18%	26%
\$50,001 or more	30%	38%	7%	10%

NOTE: Estimates based on spending and income amounts in 2016 dollars. Excludes Medicare Advantage enrollees and those enrolled in Part A or B only. Total out-of-pocket health care spending includes spending on services and premiums for Medicare and private health insurance premiums. Per capita income for married couples is income for the couple divided by two.

SOURCE: Kaiser Family Foundation analysis based on CMS Medicare Current Beneficiary Survey.

Endnotes

¹ For a fuller description of DYNASIM3, see Karen E. Smith, “Projection Methods Used in the Dynamic Simulation of Income Model (DYNASIM3),” Program on Retirement Policy, The Urban Institute, February 2012, available at <http://www.urban.org/sites/default/files/publication/25131/412512-Projection-Methods-Used-in-the-Dynamic-Simulation-of-Income-Model-DYNASIM-.PDF>.

² In the 2013 Medicare Trustees Report, the actuaries estimated that Medicare Part B and Part D premiums and cost sharing equaled about 23 percent of the average Social Security Benefit. See Figure II.F2, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/TR2013.pdf>.

³ In 2013, out-of-pocket spending on long-term care facility services was \$5,131 for beneficiaries ages 85 and over, compared to \$928 for those ages 75 to 84 and only \$154 for those ages 65 to 74 (estimates in nominal 2013 dollars); based on Kaiser Family Foundation analysis of the MCBS 2013 Cost and Use file.

⁴ Initial Social Security benefits are indexed to wage growth, but they are price indexed after initial receipt.

⁵ While average benefits are similar for women and men on a per capita basis after adjusting for marital status, women 65 years and older receive lower Social Security benefits than men, on average, in part due to lower pre-retirement earnings. In 2014, average annual Social Security income received by women age 65 and over was \$13,150, compared to \$17,106 for men 65 and over; see “Social Security is Important to Women,” Fact Sheet, Social Security Administration, November 2016, available at <https://www.ssa.gov/news/press/factsheets/ss-customer/women-ret.pdf>.

⁶ See Purvi Sevak and Lucie Schmidt, “Perspectives: Immigrants and Retirement Resources,” *Social Security Bulletin*, Vol. 74, No. 1, 2014, available at <https://www.ssa.gov/policy/docs/ssb/v74n1/v74n1p27.html>.

⁷ In 2013, 44 percent of black beneficiaries received either full or partial Medicaid benefits, compared to 15 percent of white beneficiaries; 50 percent of black beneficiaries received Part D Low-Income Subsidies, compared to 18 percent of white beneficiaries (estimates exclude Medicare Advantage enrollees and those enrolled in Part A or Part B only); based on Kaiser Family Foundation analysis of the MCBS 2013 Cost and Use file).

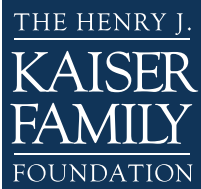
⁸ In 2011, 19 percent of people under age 65 spent more than 10 percent of their family income on out-of-pocket expenses for health care. While this estimate is not directly comparable to our 2013 estimate, it indicates the magnitude of the difference in the out-of-pocket spending burden for people over 65 compared to younger adults. See Peter Cunningham, “The Share of People with High Medical Costs Increased Prior to Implementation of the Affordable Care Act,” *Health Affairs*, January 2015 34(1):117-24.

⁹ Melissa McInerney, Matthew Rutledge, and Sara Ellen King, “How Much Does Out-of-Pocket Medical Spending Eat Away at Retirement Income?” Center for Retirement Research at Boston College Working Paper, October 2017; Laura Hatfield, Melissa Favreault, Thomas McGuire, and Michael Chernew, “Modeling Health Care Spending Growth of Older Adults,” *Health Services Research*, December 2016.

¹⁰ This approach is the same as that which we used in previous analysis of Medicare beneficiaries’ out-of-pocket health care spending as a share of total income, with the exception of excluding enrollees in Part A or Part B only.

¹¹ See, for example, Peter Cunningham, “The Share of People With High Medical Costs Increased Prior to Implementation of the Affordable Care Act,” *Health Affairs*, Vol. 34, No. 1, January 2015; Peter Cunningham, “The Growing Financial Burden of Health Care: National and State Trends, 2001-2006,” *Health Affairs*, Vol. 29, No. 5, May 2010; Jessica Banthin and Didem Bernard, “Changes in Financial Burdens for Health Care: National Estimates for the Population Younger than 65 Years, 1996 to 2003,” *JAMA*, Vol. 296, No. 22, 2006.

¹² Kaiser Family Foundation analysis of the MCBS 2013 Cost and Use file.



THE HENRY J. KAISER FAMILY FOUNDATION

Headquarters

2400 Sand Hill Road
Menlo Park, CA 94025
Phone 650-854-9400

Washington Offices and Barbara Jordan Conference Center

1330 G Street, NW
Washington, DC 20005
Phone 202-347-5270

www.kff.org

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