Savings Medicare Beneficiaries Need for Health Expenses: Some Couples Could Need as Much as $350,000, p. 2

A T A G L A N C E

This *EBRI Notes* article examines the amount of savings Medicare beneficiaries are projected to need to cover program deductibles, premiums and other health expenses in retirement. For the purposes of this study, health expenses include premiums for Medicare Parts B and D, premiums for Medigap Plan F, and out-of-pocket spending for outpatient prescription drugs.

Data come from a variety of sources and are used in a Monte Carlo simulation model that simulates 100,000 observations, allowing for the uncertainty related to individual mortality and rates of return on assets in retirement.

Here are the key findings:

- In 2016, a 65-year-old man would need $72,000 in savings and a 65 year-old woman would need $93,000 if each had a goal of having a 50 percent chance of having enough savings to cover health care expenses in retirement. If they wanted a 90 percent chance of having enough savings, the man would need $127,000 and the woman would need $143,000.

- A couple with median prescription drug expenses would need $165,000 if they had a goal of having a 50 percent chance of having enough savings to cover health care expenses in retirement. If they wanted a 90 percent chance of having enough savings, they would need $265,000.

- For a couple with drug expenses at the 90th percentile throughout retirement who wanted a 90 percent chance of having enough money saved for health care expenses in retirement by age 65, targeted savings would be $349,000 in 2016.

- From 2015 to 2016, projected savings targets increased between 0 percent and 6 percent. In contrast, savings targets declined between 2011 and 2014, but then they increased from 2014 to 2015 as well. Despite the increase in savings targets since 2014, the 2016 savings targets continue to be lower than they were in 2012 almost across the board.
Savings Medicare Beneficiaries Need for Health Expenses: Some Couples Could Need as Much as $350,000

By Paul Fronstin, Ph.D., and Jack VanDerhei, Ph.D., Employee Benefit Research Institute

Introduction

Medicare was never designed to cover health care expenses in full. Deductibles for inpatient and outpatient services were part of the program when it was established in 1965. For example, in 2003, when outpatient prescription drugs were added as an optional benefit, the program included a then-controversial coverage gap known as the so-called “donut hole” in which beneficiaries had to pay 100 percent of the cost of prescription drugs (Figure 1). While the Patient Protection and Affordable Care Act of 2010 (ACA) included provisions to reduce the size of this coverage gap, ACA did not eliminate it. By 2020, enrollees will pay 25 percent of the cost of prescription drugs when they are in the donut hole for both generic and brand-name drugs.

More recently, in 2013, Medicare covered 62 percent of the cost of health care services for Medicare beneficiaries ages 65 and older, while out-of-pocket spending accounted for 13 percent, and private insurance covered 13 percent (Figure 2). In the future, individuals are likely to have to pay greater shares of their overall costs because of the financial condition of the Medicare program and cutbacks to employment-based retiree health programs (Fronstin and Adams, 2012).

This study updates previous estimates by the Employee Benefit Research Institute (EBRI) on the savings needed to cover health insurance premiums and health care expenses in retirement (Fronstin, Salisbury, and VanDerhei, 2015). Like EBRI’s 2015 report, this analysis finds that the savings targets for a 65-year-old retiring in 2016 increased, with the increase as high as 6 percent, relative to the targets for a 65-year-old retiring in 2015. This Notes article discusses the model, the savings targets, and reasons for the increase in savings targets.

Health Expenses in Retirement

For the purposes of this study, health expenses include premiums for Medicare Parts B and D and for Medigap Plan F, as well as out-of-pocket spending for outpatient prescription drugs. Modeling premiums takes away the uncertainty related to use of health care services over one’s lifetime. Instead of trying to predict when a Medicare beneficiary may use health care services and thus incur health expenses, which are highly dependent on whether the individual reaches their Medicare Part A and/or Part B deductibles, this analysis assumes that beneficiaries have

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### Figure 1
Medicare Part D Cost Sharing Information

<table>
<thead>
<tr>
<th>Year</th>
<th>Deductible</th>
<th>Initial Benefit</th>
<th>Catastrophic Threshold</th>
<th>Amount of Donut Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>$250</td>
<td>$2,250</td>
<td>$5,100</td>
<td>$2,850</td>
</tr>
<tr>
<td>2007</td>
<td>265</td>
<td>2,400</td>
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<td>3,051</td>
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<td>275</td>
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<td>5,726</td>
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<td>2,700</td>
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<td>2010</td>
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<td>6,440</td>
<td>3,610</td>
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<tr>
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<td>2,840</td>
<td>6,448</td>
<td>3,608</td>
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<td>2,930</td>
<td>6,658</td>
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<tr>
<td>2013</td>
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<td>2,970</td>
<td>6,734</td>
<td>3,764</td>
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<td>2014</td>
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<td>6,455</td>
<td>3,605</td>
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<tr>
<td>2015</td>
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<td>6,680</td>
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<tr>
<td>2016</td>
<td>360</td>
<td>3,310</td>
<td>7,063</td>
<td>3,753</td>
</tr>
</tbody>
</table>

Source: EBRI calculations from Table V.E2 in 2016 Medicare Trustees Report.
health insurance that is supplemental to Medicare and therefore pay premiums on a regular basis, thus reducing the uncertainty of incurring out-of-pocket expenses.

While it is possible to purchase Medigap insurance to completely avoid deductibles and other cost sharing associated with Medicare Parts A and B, it is not possible to avoid the deductible and other cost sharing associated with Part D outpatient prescription drugs. Under Part D, for expenses above the deductible, beneficiaries are responsible for 25 percent coinsurance on expenses between the deductible and the initial benefit limit. Once the initial benefit limit is reached, beneficiaries are in the donut hole until they reach the catastrophic limit, above which they pay 5 percent coinsurance. When outpatient prescription drug coverage was added to Medicare in 2006, beneficiaries in the donut hole paid 100 percent coinsurance. When ACA was enacted, it included a provision to phase in a reduction in the donut hole to 25 percent coinsurance by 2020. This model includes estimates on out-of-pocket spending for prescription drugs based on data from the Medical Expenditure Panel Survey (MEPS).

It does not include as health expenses any expenses associated with long-term care, or spending for health care services not traditionally covered by Medicare, such as dental care.

**Modeling Technique and Data**

Determining how much money an individual or couple needs in retirement to cover health insurance premiums and expenses is a complicated process that depends on numerous variables. The amount of money a person needs will depend on the age at which he or she retires; length of life after retirement; the availability and source of health insurance coverage to supplement Medicare; health status and out-of-pocket expenses; the rate at which health care
costs increase; and interest rates and other rates of return on investments. In addition, public policy that changes any of the above factors will also affect spending on health care in retirement. While it is possible to come up with a single number that an individual can use to set retirement savings goals, a number based on averages will be too small for approximately one-half of the population.

This analysis uses a Monte Carlo simulation model that treats health insurance premiums and out-of-pocket health care expenses in retirement as known values but deals with the uncertainty of how long the individual or couple will survive and what rate of return they would achieve on their savings in retirement by simulating 100,000 observations for each source of supplemental coverage. In some of the simulated outcomes, the individual or couple will only survive a few years and thus would only have a relatively small aggregate value for health expenses in retirement. In other cases, they may live far longer than the life expectancy for an individual or couple at age 65 and generate a correspondingly larger aggregate value.

Because the aggregate value of savings for health expenses in retirement would be spent gradually over time in retirement, the proceeds available at age 65 could be invested until such time that each annual expenditure takes place. The simulation model used in this analysis assumes rates of return with a median nominal value of 7.32 percent were earned during retirement. In most cases, this results in present values of funds needed at age 65 that are smaller than the aggregate values mentioned above.

These observations were used to determine targets for adequate savings to cover an individual's health costs 50 percent, 75 percent, and 90 percent of the time. Estimates are also jointly presented for a stylized opposite-sex couple, both of whom are assumed to retire simultaneously at age 65.

The data for this study came from a variety of sources. Data on Part B and Part D premiums, and Part D deductibles, initial benefit limits, and catastrophic thresholds come from 2016 Medicare trustees report. Medigap Plan F premiums were generated for new Medicare enrollees aged 65 in 2016 by standard metropolitan statistical area. Out-of-pocket spending on outpatient prescription drugs was derived from the 2013 Medical Expenditure Panel Survey (MEPS), the most recent year of data available.

**Savings Targets to Cover Health Insurance Premiums and Out-of-Pocket Costs in Retirement**

Figure 3 contains the savings estimates for a person who turns age 65 in 2016 and who purchases both Medigap Plan F to supplement Medicare and Medicare Part D outpatient drug benefits. It also includes EBRI prior-year estimates. As discussed above, there is uncertainty related to a number of variables, such as health care costs, longevity, and interest rates. Among people with Medicare Part D, there is also the uncertainty related to health status and outpatient prescription drug use.

Projections of savings needed to cover out-of-pocket expenses for prescription drugs are highly dependent on the assumptions used for drug utilization. There are three sets of columns of estimates in Figure 3: In the first, prescription drug use is at the median throughout retirement; in the second set, prescription drug use is at the 75th percentile throughout retirement; and in the third set, prescription drug use is at the 90th percentile throughout retirement. Under each set of columns, a comparison of the savings targets is presented for 2011–2016.

Separate estimates are presented for men and women. Because women have longer life expectancies than men, women will generally need larger savings than men to cover health insurance premiums and health care expenses in retirement regardless of the savings targets. Also, women will need greater savings than men even when both set the same goal—for example, of having a 90 percent chance of having enough money to cover health expenses in retirement.
Median Drug Expenses: As shown in Figure 3 in 2016 a man would need $72,000 in savings and a woman would need $93,000 if each had a goal of having a 50 percent chance of having enough money saved to cover health expenses in retirement. If either instead wanted a 90 percent chance of having enough savings, $127,000 would be needed for a man and $143,000 would be needed for a woman.
A couple both with median drug expenses would need $165,000 to have a 50 percent chance of having enough money to cover health expenses in retirement. They would need $221,000 to have a 75 percent chance of covering their expenses and $265,000 to have a 90 percent chance of covering their expenses. These estimates are 2–6 percent higher than the savings targets estimated in 2015.

**75th Percentile in Drug Expenses:** Needed savings in 2016 for a man with drug expenditures at the 75th percentile throughout retirement would be $79,000 if he wanted a 50 percent chance of having enough savings to cover health care expenses in retirement. For a woman, the savings target would be $102,000 at the 50-percent target. If either instead wanted a 90 percent chance of having enough savings, $139,000 would be needed for a man, and $156,000 would be needed for a woman.

An couple both with drug expenses at the 75th percentile would need $181,000 to have a 50 percent chance of having enough money to cover health care expenses in retirement. They would need $241,000 to have a 75 percent chance of covering those expenses, and $289,000 to have a 90 percent chance of covering their expenses. These estimates are 0–4 percent higher than the savings targets estimated in 2015.

**90th percentile in Drug Expenses:** Individuals at the 90th percentile in drug spending at and throughout retirement experienced a 1–4 percent increase in needed savings in the EBRI model. In 2016, a man would need $97,000 in savings and a woman would need $124,000 if each had a goal of having a 50 percent chance of having enough money saved to cover health care expenses in retirement. If either instead wanted a 90 percent chance of having enough savings, $168,000 would be needed for a man and $187,000 would be needed for a woman.

A couple both with median drug expenses would need $221,000 to have a 50 percent chance of having enough money to cover health care expenses in retirement. They would need $293,000 to have a 75 percent chance of covering their expenses and $349,000 to have a 90 percent chance of covering their expenses.

**Explaining the Increase in Savings Targets between 2015 and 2016**

As Figure 3 shows, savings targets declined between 2011 and 2014, and then they increased from 2014 to 2015. The savings targets increased again from 2015 to 2016, with increases as large as 6 percent in some cases. For a married couple both with drug expenses at the 90th percentile throughout retirement who wanted a 90 percent chance of having enough money saved for health care expenses in retirement by age 65, the targeted savings increased from $342,000 in 2014 to $349,000 in 2016, a 2 percent increase.

The EBRI model includes several factors that could result in an increase or decrease in targeted savings, but the main reason for the increase in needed savings from 2013 to 2016 is related to the adjustment that is made each year to re-establish the baseline for out-of-pocket spending associated with prescription drug use. Out-of-pocket spending is tied to the Medical Expenditure Panel Survey (MEPS) and 2013 data is now the most recent year of data available. Actual out-of-pocket spending at the median, 75th and 90th percentiles were higher than projected for 2013 when projections were based on pre-2013 data. As a result of the re-baselining, data on out-of-pocket spending for prescription drugs for 2013 and beyond increased.

The increase in targeted savings resulting from higher out-of-pocket spending on prescription drugs was offset by other factors. This EBRI model uses Congressional Budget Office (CBO) and Centers for Medicare & Medicaid Services (CMS) projections for premium and health care cost increases in the future, and their projections of spending growth have slowed in recent years (Congressional Budget Office, 2014) (Levine and Buntin, 2013). There have been slight improvements in the cost of Medicare Part D and CMS-projected growth rates in Part D premiums. In addition, using a person age 65 in 2016 instead of in 2015 means one less year until the coverage gap in Part D phases down to 25 percent coinsurance.
So, while savings targets increased between 2015 and 2016, the 2016 savings targets continue to be lower than they were in 2012 almost across the board.

**Conclusion**

Individuals should be concerned about saving for health insurance premiums and out-of-pocket expenses in retirement for a number of reasons. Medicare generally covers only about 62 percent of the cost of health care services for Medicare beneficiaries ages 65 and older, while out-of-pocket spending accounts for 13 percent. Furthermore, the percentage of private-sector establishments offering retiree health benefits has been falling. This is also true in the public sector.

This *Notes* article estimates the targeted savings to cover health insurance premiums to supplement Medicare and out-of-pocket expenses for health care services in retirement. ACA is reducing cost sharing in the Part D coverage gap, or so-called “donut hole.” By 2020, coinsurance in the coverage gap will be phased in to 25 percent. This year-to-year reduction in coinsurance will continue to reduce the savings needed for health care expenses in retirement, all else equal, for individuals with the highest drug use, which is one reason why this analysis finds reductions in needed savings for health care expenses in retirement. Improvements in the outlook for growth in premiums related to the Medicare program also contributed to the decline in savings targets. However, these declines were offset by larger increases in out-of-pocket spending on prescription drugs as a result of re-baselining.

It is important to note that many individuals are likely to need more than the amounts cited in this report. This analysis does not factor in the savings needed to cover long-term care expenses and other expenses not covered by Medicare, nor does it take into account the fact that many individuals retire prior to becoming eligible for Medicare. However, some workers will need to save less than what is reported if they choose to work past age 65, thereby postponing enrollment in Medicare Parts B and D if they receive health benefits as active workers.

Finally, issues surrounding retirement income security are certain to become an even greater challenge in the future, as policymakers begin to realistically address financial issues in the Medicare program with solutions that may shift more responsibility for health care costs to Medicare beneficiaries.
References


______. “Employee Benefits, Retirement Patterns, and Implications for Increased Work Life.” *EBRI Issue Brief*, no. 184 (Employee Benefit Research Institute, April 1997).


______. “Savings Needed to Fund Health Insurance and Health Care Expenses in Retirement.” *EBRI Issue Brief*, no. 295 (Employee Benefit Research Institute, July 2006).


______. “Funding Savings Needed for Health Expenses for Persons Eligible for Medicare” *EBRI Issue Brief*, no. 351 (Employee Benefit Research Institute, December 2010).


______. “Savings Needed for Health Expenses for People Eligible for Medicare: Some Rare Good News” *EBRI Notes*, Vol. 33, no. 10 (Employee Benefit Research Institute, October 2012).


### Endnotes

1. Medicare Part B covers outpatient medical services as well as preventive services, lab tests, x-rays, and durable medical equipment.


3. Medigap Plan F covers Part A and Part B deductibles, Part B excess charges, Part B coinsurance for preventive care, Part A hospital and coinsurance costs for an extra year after Original Medicare benefits run out, Part B coinsurance and copayments, three pints of blood for approved procedures, Part A copayments or coinsurance for hospice care, coinsurance for a skilled nursing facility (SNF), and emergency coverage during foreign travel.

4. Medicare Part A covers inpatient services, skilled nursing facility care, certain nursing home care, hospice care, and home health services.


6. EBRI also created a simulation model (the EBRI Retirement Security Projection Model®) with both a stochastic accumulation and decumulation module that includes long-term care expenses. See VanDerhei and Copeland (2003) for additional detail.

7. See VanDerhei (2006) for estimates of the impact of long-term care expenses on the amounts needed for sufficient retirement income at the 50th, 75th, and 90th percentiles.
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