

## **Savings Medicare Beneficiaries Need for Health Expenses: Some Couples Could Need as Much as \$400,000, Up From \$370,000 in 2017**

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

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### AT A GLANCE

Since 2011, the amount of savings Medicare beneficiaries are projected to need to cover program premiums, deductibles, and certain other health expenses in retirement has risen as much as 9 percent, according to EBRI's estimates. Since 2017, the amount has risen 2–13 percent. This includes the savings needed to pay for premiums for Medicare Parts B and D, premiums for Medigap Plan F, and out-of-pocket spending for outpatient prescription drugs.

The data used in EBRI's analysis come from a variety of sources. EBRI employed a Monte Carlo simulation model for this evaluation that simulated 100,000 observations, allowing for the uncertainty related to individual mortality and rates of return on assets in retirement.

The analysis reveals:

- In 2018, a 65-year-old man needs \$75,000 in savings and a 65-year-old woman needs \$99,000 for a 50 percent chance of having enough to cover premiums and median prescription drug expenses in retirement. For a 90 percent chance of having enough savings, the man needs \$148,000 and the woman needs \$161,000.
- For a 50 percent chance of having enough to cover health care expenses in retirement, a couple with median prescription drug expenses needs \$174,000 in savings. For a 90 percent chance of having enough, the couple needs \$296,000 in savings.
- At the extreme — a couple with drug expenses at the 90<sup>th</sup> percentile throughout retirement who want a 90 percent chance of having enough money for health care expenses in retirement by age 65 — targeted savings are \$399,000 in 2018.
- From 2011 to 2018, projected savings targets increased as much as 9 percent for some Medicare beneficiaries — savings targets declined between 2011 and 2014, before increasing from 2014 to 2018. Savings targets are up between 2 percent and 13 percent since 2017.
- However, for those with drug expenses at the 90<sup>th</sup> percentile throughout retirement, savings targets fell 2 percent between 2011 and 2018.

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**Suggested citation:** Paul Fronstin and Jack VanDerhei. "Savings Medicare Beneficiaries Need for Health Expenses: Some Couples Could Need as Much as \$400,000, Up From \$370,000 in 2017." *EBRI Issue Brief*, no. 460 (Employee Benefit Research Institute, October 8, 2018).

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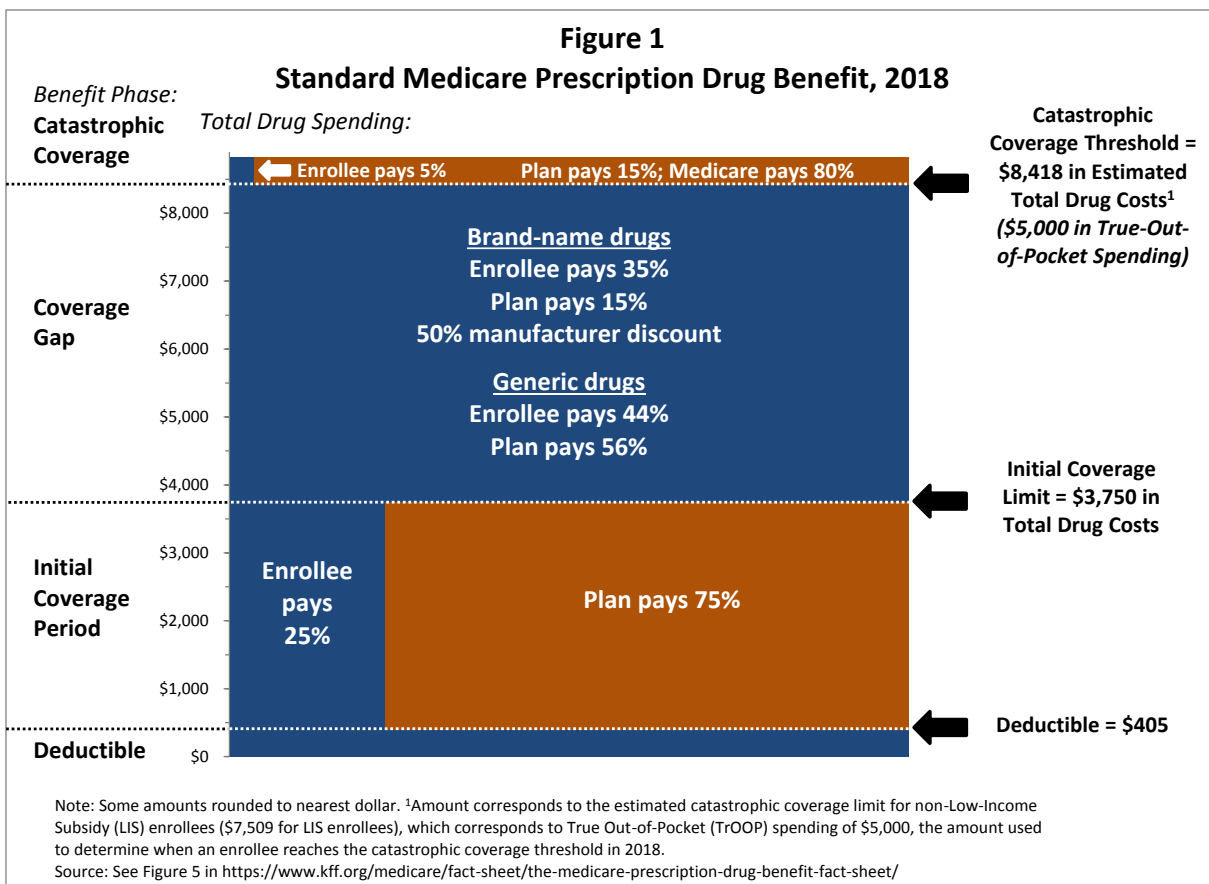
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## Introduction

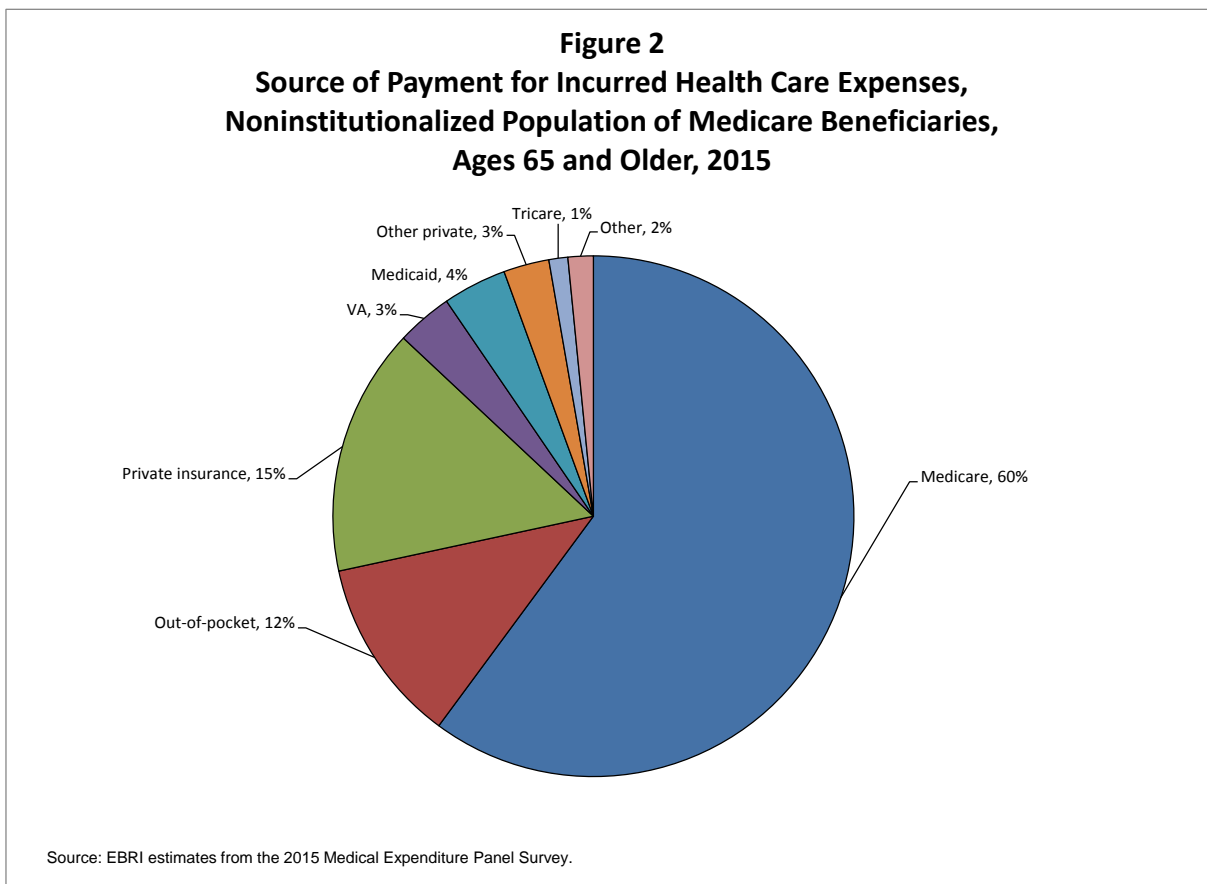
Medicare was not designed to cover health care expenses in full. Deductibles for inpatient and outpatient services were part of the program when it was established in 1965. In addition, when outpatient prescription drugs were added as an optional benefit in 2003, the program included a then-controversial coverage gap known as the “donut hole” in which beneficiaries must pay out of pocket to cover the cost of prescriptions once they’ve reached their initial benefit limit until they reach the out-of-pocket catastrophic coverage threshold, when the drug plan again helps pay for covered drugs (Figure 1). While the Patient Protection and Affordable Care Act of 2010 (ACA) included provisions to reduce the size of this coverage gap, the 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 2015, Medicare covered 60 percent of the cost of health care services for Medicare beneficiaries ages 65 and older, while out-of-pocket spending accounted for 12 percent of incurred costs and private insurance covered 15 percent (Figure 2).

In the future, individuals are likely to have to pay greater shares of their overall health costs in retirement because of the financial condition of the Medicare program and cutbacks to employment-based retiree health programs (Fronstin and Adams, 2012). They will also be likely to have to pay greater shares, because starting in 2020, new Medicare beneficiaries will no longer be allowed to purchase Medigap Plan C or Plan F, which are the most comprehensive Medigap plans available and are the only ones that cover the Medicare Part B deductible.

This study updates previous estimates by the Employee Benefit Research Institute on the savings needed to cover health insurance premiums and health care expenses in retirement. Like EBRI's study of individuals retiring in 2017 (Fronstin and VanDerhei, 2018), this analysis finds that savings targets for a retiring 65-year-old increased, with the increase as high as 13 percent in 2018, relative to the targets for a 65-year-old retiring in 2017. This *Issue Brief* discusses the model, the savings targets, and reasons for the recent increase in savings targets.



## Health Expenses in Retirement

For the purposes of this study, the health expenses for which savings would be accumulated are (i) premiums for Medicare Parts B<sup>1</sup> and D<sup>2</sup>, (ii) premiums for Medigap Plan F<sup>3</sup>, and (iii) out-of-pocket spending for outpatient prescription drugs.

The study assumes that all individuals and couples have Medigap Plan F coverage in retirement — and thus treats all individuals and couples as having the Plan F premium as an expense — because this approach takes away the uncertainty related to actual use of specific health care services over one's lifetime. That is, 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 has reached their Medicare Part A<sup>4</sup> and/or Part B deductibles, this study assumes that beneficiaries have the most comprehensive health insurance coverage available that is supplemental to Medicare (i.e., Plan F) and thus pay premiums for this coverage on a regular basis.

This study includes estimates on out-of-pocket spending for prescription drugs based on data from the Medical Expenditure Panel Survey (MEPS). While it is currently possible for new Medicare beneficiaries to purchase Medigap insurance (e.g., Plan F) to completely avoid deductibles and other cost sharing associated with Medicare Parts A and B, it is not possible to avoid the deductibles and other cost sharing associated with Part D outpatient prescription drugs. Thus, 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. And 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.

Finally, this study does not include as health expenses any expenses associated with long-term care or any spending for health care services not traditionally covered by Medicare, such as dental care.<sup>5</sup>

## **Modeling Technique and Data**

Determining how much money an individual or couple will need in retirement to cover health insurance premiums and out-of-pocket expenses is a complicated process that depends on numerous variables. The amount of money a person will need 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 savings goals, a number based on average expenses will be too small for approximately one-half of the population.

Thus, 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 will 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 will 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 in this analysis assumes rates of return with a median nominal value of 7.32 percent during retirement. In most cases, this results in present values of funds needed at age 65 that are smaller than the aggregate values in this paper.

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, Part D premiums, and Part D deductibles, initial benefit limits, and catastrophic thresholds came from the 2018 Medicare trustees report.<sup>6</sup> Medigap Plan F premiums

were generated for new Medicare enrollees aged 65 in 2018 by Metropolitan Statistical Area. Out-of-pocket spending on outpatient prescription drugs was derived from the 2015 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 2018 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 will be 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 uncertainty related to health status and outpatient prescription drug use.

Chance of Having Enough Savings	Median Prescription Drug Expenses Throughout Retirement								Percent Change Between 2017-2018
	2011	2012	2013	2014	2015	2016	2017	2018	
<b>Men</b>									
50%	\$71,000	\$70,000	\$65,000	\$64,000	\$68,000	\$72,000	\$73,000	\$75,000	3%
75%	107,000	105,000	96,000	93,000	99,000	103,000	106,000	111,000	5%
90%	136,000	135,000	122,000	116,000	124,000	127,000	131,000	148,000	13%
<b>Women</b>									
50%	95,000	93,000	86,000	83,000	89,000	93,000	95,000	99,000	4%
75%	124,000	122,000	111,000	106,000	114,000	118,000	121,000	129,000	7%
90%	156,000	154,000	139,000	131,000	140,000	143,000	147,000	161,000	10%
<b>Couple</b>									
50%	166,000	163,000	151,000	147,000	158,000	165,000	169,000	174,000	3%
75%	231,000	227,000	207,000	199,000	213,000	221,000	226,000	240,000	6%
90%	287,000	283,000	255,000	241,000	259,000	265,000	273,000	296,000	8%
Chance of Having Enough Savings	75th Percentile of Prescription Drug Expenses Throughout Retirement								Percent Change Between 2017-2018
	2011	2012	2013	2014	2015	2016	2017	2018	
<b>Men</b>									
50%	\$80,000	\$79,000	\$74,000	\$72,000	\$76,000	\$79,000	\$81,000	\$83,000	2%
75%	120,000	119,000	108,000	104,000	110,000	113,000	116,000	123,000	6%
90%	154,000	153,000	137,000	129,000	138,000	139,000	144,000	156,000	8%
<b>Women</b>									
50%	107,000	106,000	97,000	93,000	99,000	102,000	105,000	110,000	5%
75%	140,000	139,000	125,000	119,000	127,000	128,000	133,000	143,000	8%
90%	176,000	176,000	156,000	146,000	156,000	156,000	162,000	178,000	10%
<b>Couple</b>									
50%	187,000	186,000	170,000	165,000	175,000	181,000	186,000	193,000	4%
75%	260,000	258,000	233,000	222,000	237,000	241,000	249,000	266,000	7%
90%	323,000	321,000	286,000	270,000	288,000	289,000	300,000	328,000	9%
Chance of Having Enough Savings	90th Percentile of Prescription Drug Expenses Throughout Retirement								Percent Change Between 2017-2018
	2011	2012	2013	2014	2015	2016	2017	2018	
<b>Men</b>									
50%	\$106,000	\$102,000	\$96,000	\$88,000	\$93,000	\$97,000	\$100,000	\$103,000	3%
75%	154,000	147,000	137,000	126,000	133,000	137,000	143,000	151,000	6%
90%	194,000	185,000	172,000	156,000	164,000	168,000	177,000	191,000	8%
<b>Women</b>									
50%	138,000	132,000	124,000	114,000	120,000	124,000	129,000	135,000	5%
75%	178,000	170,000	158,000	144,000	152,000	155,000	163,000	174,000	7%
90%	221,000	210,000	195,000	176,000	185,000	187,000	198,000	217,000	10%
<b>Couple</b>									
50%	244,000	234,000	220,000	202,000	213,000	221,000	229,000	238,000	4%
75%	332,000	317,000	295,000	270,000	284,000	293,000	306,000	325,000	6%
90%	407,000	387,000	360,000	326,000	342,000	349,000	368,000	399,000	8%

Source: Author simulations based on assumptions described in the text.

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 75<sup>th</sup> percentile throughout retirement; and in the third set, prescription drug use is at the 90<sup>th</sup> percentile throughout retirement. Under each set of columns, a comparison of the savings targets is presented for 2011–2018.

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 2018 a man would need \$75,000 in savings and a woman would need \$99,000 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, \$148,000 would be needed for a man and \$161,000 would be needed for a woman.

A couple both with median drug expenses would need \$174,000 to have a 50 percent chance of having enough money to cover health expenses in retirement. They would need \$240,000 to have a 75 percent chance of covering their expenses and \$296,000 to have a 90 percent chance of covering their expenses. These estimates are 3–13 percent higher than the savings targets estimated in 2017.

**75<sup>th</sup> Percentile in Drug Expenses:** Needed savings in 2018 for a man with drug expenditures at the 75<sup>th</sup> percentile throughout retirement would be \$83,000 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 \$110,000 at the 50-percent target. If either instead wanted a 90 percent chance of having enough savings, \$156,000 would be needed for a man and \$178,000 would be needed for a woman.

A couple both with drug expenses at the 75<sup>th</sup> percentile would need \$193,000 to have a 50 percent chance of having enough money to cover health care expenses in retirement. They would need \$266,000 to have a 75 percent chance of covering those expenses and \$328,000 to have a 90 percent chance of covering their expenses. These estimates are 2–10 percent higher than the savings targets estimated in 2017.

**90<sup>th</sup> percentile in Drug Expenses:** Individuals at the 90<sup>th</sup> percentile in drug spending at and throughout retirement experienced a 3–10 percent increase in needed savings in the EBRI model. In 2018, a man would need \$103,000 in savings and a woman would need \$135,000 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, \$191,000 would be needed for a man and \$217,000 would be needed for a woman.

A couple both with drug expenses at the 90<sup>th</sup> percentile would need \$238,000 to have a 50 percent chance of having enough money to cover health care expenses in retirement. They would need \$325,000 to have a 75 percent chance of covering their expenses and \$399,000 to have a 90 percent chance of covering their expenses.

## **Explaining the Increase in Savings Targets Between 2017 and 2018**

As Figure 3 shows, savings targets declined between 2011 and 2014, and then increased from 2014 to 2017. Savings targets increased again from 2017 to 2018, with increases as large as 13 percent in some cases. For a couple both with drug expenses at the 90<sup>th</sup> 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 \$368,000 in 2017 to \$399,000 in 2018, an 8 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 2015 to 2018 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 MEPS and 2015 data are now the most recent year of data available. Actual out-of-pocket spending at the median, 75<sup>th</sup>, and 90<sup>th</sup> percentiles was higher than projected for 2015 when projections were based on pre-2015 data. As a result of the re-baselining, data on out-of-pocket spending for prescription drugs increased for 2015 and beyond.

The increase in targeted savings resulting from higher out-of-pocket spending on prescription drugs was partially offset by other factors. This EBRI model<sup>7</sup> uses Congressional Budget Office (CBO) and Centers for Medicare & Medicaid Services (CMS) projections for premium and health care cost increases in the future, and those projections of spending growth have slowed in recent years (Congressional Budget Office, 2014) (Levine and Buntin, 2013). There have been slight improvements in CMS-projected growth rates in Part D premiums as well as projections for Part D deductibles, initial coverage limits, and catastrophic thresholds. In addition, simulating expenses for a person age 65 in 2018 instead of in 2017 means one year fewer until the coverage gap in Part D phases down to 25 percent coinsurance.

## 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 two-thirds of the cost of health care services for Medicare beneficiaries ages 65 and older, while out-of-pocket spending accounts for 12 percent. Furthermore, the percentage of private-sector establishments offering retiree health benefits has been falling. This is also true in the public sector.

This *Issue Brief* estimates the targeted savings to cover (i) premiums for Medicare Parts B and D, (ii) premiums for Medigap Plan F, and (iii) out-of-pocket spending for outpatient prescription drugs.

Going forward, the 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 study 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 contribute to the decline in savings targets.

However, in the study, these declines are offset by larger increases in out-of-pocket spending on prescription drugs as a result of re-baselining. And the declines will be further offset in the future when Medigap Plan C and Plan F are no longer available for new Medicare beneficiaries.

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 total savings needed to cover long-term care expenses and other health expenses not covered by Medicare,<sup>8</sup> nor does it take into account the fact that many individuals retire before 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.



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## Endnotes

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

<sup>2</sup> Medicare Part D covers outpatient prescription drugs.

<sup>3</sup> Medigap Plan F covers Medicare 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.

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

<sup>5</sup> See Banerjee (2018) for a discussion on the possible cost implications of long-term care.

<sup>6</sup> See Table V.E2 in <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/TR2018.pdf>

<sup>7</sup> EBRI also created a simulation model (the EBRI Retirement Security Projection Model<sup>®</sup>) with both a stochastic accumulation and decumulation module that includes long-term care expenses. See VanDerhei and Copeland (2003) for additional detail.

<sup>8</sup> See VanDerhei (2006) for estimates of the impact of long-term care expenses on the amounts needed for sufficient retirement income at the 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentiles.