A Bit of Good News During the Pandemic: Savings Medicare Beneficiaries Need for Health Expenses Decrease in 2020
But Some Couples Could Need as Much as $325,000 in Savings

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

AT A GLANCE

In 2020, the predicted saving targets for Medicare beneficiaries to cover health premiums, deductibles, and certain other health expenses in retirement have fallen between 8 and 10 percent since 2019. These are the biggest declines we have seen since 2012, with the exception of 2013, when needed savings declined between 6 and 11 percent. Savings are needed to pay for premiums for Medicare Parts B and D, the Part B deductible, premiums for Medigap Plan G, and out-of-pocket spending for outpatient prescription drugs.

The data used in EBRI's analysis come from a variety of sources. EBRI employs 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 2020, a 65-year-old man needs $73,000 in savings and a 65-year-old woman needs $95,000 in savings 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 $130,000 and the woman needs $146,000. This is down 10 percent from 2019.

- For a 50 percent chance of having enough to cover health care expenses in retirement, a couple with median prescription drug expenses needs $168,000 in savings. For a 90 percent chance of having enough, the couple needs $270,000 in savings. This is down 10 percent from 2019.

- At the extreme — a couple with drug expenses at the 90th percentile throughout retirement who wants a 90 percent chance of having enough money for health care expenses in retirement by age 65 — targeted savings are $325,000 in 2020.

- This $325,000 amount is lower than the nearly $363,000 required in 2019 but continues to represent a significant amount of money.

- The declines identified in this paper are due to a number of reasons. The Medicare Trustees reduced projected costs for Medicare Part D premiums and out-of-pocket expenses. The change in our model from Medigap Plan F to Plan G also accounted for a portion of the decline in needed savings.
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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 prescription drugs once they have 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. This year, 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, though other forms of cost sharing increased (Figure 2).

Figure 1
Standard Medicare Prescription Drug Benefit, 2020

Source: Kaiser Family Foundation, based on Part D benefit parameters for 2020,
Figure 2
Medicare Part D Cost Sharing, 2006–2029*

* 2021–2029 are based on Medicare Trustees projections using intermediate estimates.
More recently, in 2017, Medicare covered 61 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 3).

**Figure 3**

*Source of Payment for Incurred Health Care Expenses, Noninstitutionalized Population of Medicare Beneficiaries, Ages 65 and Older, 2017*

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).

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 going back to 2011. Continuing a trend that started with EBRI’s more recent estimates (Fronstin and VanDerhei 2019), this analysis finds that savings targets for a retiring 65-year-old decreased between 8 and 10 percent in 2020 relative to the targets for a 65-year-old retiring in 2019. These are the biggest declines we have seen since 2012, with the exception of 2013, when needed savings declined between 6 and 11 percent. This *Issue Brief* discusses the model, the savings targets, and reasons for the recent decrease 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 and D, (ii) the Part B deductible, (iii) premiums for Medigap Plan G, and (iv) out-of-pocket spending for outpatient prescription drugs. This analysis does not factor in the total savings needed to cover long-term-care expenses and other health expenses not covered by Medicare, nor does it take into account the fact that many individuals retire before becoming eligible for Medicare.
The study assumes that all individuals and couples have Medigap Plan G coverage in retirement — and thus treats all individuals and couples as having the Plan G premium as an expense. This approach takes away most of 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 deductible, this study assumes that beneficiaries have the most comprehensive health insurance coverage available that is supplemental to Medicare (i.e., Plan G) and thus pay premiums for this coverage on a regular basis, whether or not they use health care services. To address uncertainty related to out-of-pocket expenses incurred under Medicare Part B, we assume that all Medicare beneficiaries reach the Part B deductible, which is $198 in 2020. The study also assumes that all Medicare beneficiaries have Medicare Part D to cover outpatient prescription drug expenses.

While premiums for Medigap Plan G and Medicare Part D are treated as health care expenses in retirement for the purposes of our model, the model also includes estimates on out-of-pocket spending for the Part B deductible (not covered by Medigap Plan G) and prescription drugs. Data from the Medical Expenditure Panel Survey (MEPS) were used for this part of the model. While it is currently possible for new Medicare beneficiaries to purchase Medigap insurance (e.g., Plan G) 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 the ACA was enacted, it included a provision to phase in a reduction in the donut hole to 25 percent coinsurance by 2020.

Finally, while other EBRI studies consider expenses associated with long-term care and any spending for health care services not traditionally covered by Medicare, such as dental care, these expenses are not included in this study (VanDerheij, 2019).

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 will also affect spending on health care in retirement. While it is possible to derive 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 model7 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.8 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 and D premiums, Part B and D deductibles, initial benefit limits, and catastrophic thresholds came from the 2020 Medicare trustees report. Medigap Plan G premiums were generated for new Medicare enrollees aged 65 in 2020 by metropolitan statistical area. Out-of-pocket spending on outpatient prescription drugs was derived from the 2017 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 4 contains the savings estimates for a person who turns age 65 in 2020 and who purchases both Medigap Plan G to supplement Medicare and Medicare Part D outpatient prescription 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.

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 4: 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 2011–2020.

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 4, in 2020 a man would need $73,000 in savings and a woman would need $95,000 if each had a goal of having a 50 percent chance of having enough money saved to cover health expenses in retirement. This is down 8 and 9 percent respectively from 2019. If either instead wanted a 90 percent chance of having enough savings, $130,000 would be needed for a man and $146,000 would be needed for a woman, a 10 percent decline for both.

A couple both with median drug expenses would need $168,000 to have a 50 percent chance of having enough money to cover health expenses in retirement. They would need $225,000 to have a 75 percent chance of covering their expenses and $270,000 to have a 90 percent chance of covering their expenses. These estimates are 8–10 percent lower than the savings targets estimated in 2019 and are the largest one-year declines experienced since 2012 for this group.

**75th Percentile in Drug Expenses:** For a man with drug expenditures at the 75th percentile throughout retirement, the amount of necessary savings would be $76,000 in order to achieve a 50 percent chance of having sufficient money to cover health care expenses in retirement. For a woman in a similar situation, the savings target would be $98,000. If either instead sought a 90 percent chance of having enough savings, the amounts rise to $132,000 for a man and $147,000 for a woman.

A couple both with drug expenses at the 75th percentile would need $174,000 to have a 50 percent chance of having enough money to cover health care expenses in retirement. They would need $230,000 to have a 75 percent chance of covering those expenses and $274,000 to have a 90 percent chance of covering their expenses. These estimates are 8–
10 percent lower than the savings targets estimated in 2019 and are the largest one-year declines experienced since 2012 for this group.

<table>
<thead>
<tr>
<th>Chance of Having Enough Savings</th>
<th>Median Prescription Drug Expenses Throughout Retirement</th>
<th>Percentage Change Between 2011–2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
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</tr>
<tr>
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<td>75%</td>
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<td>135,000</td>
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<tr>
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<td></td>
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<td>95,000</td>
<td>93,000</td>
</tr>
<tr>
<td>75%</td>
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<tr>
<td>90%</td>
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<tr>
<td><strong>Couple</strong></td>
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<tr>
<td>75%</td>
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</tr>
<tr>
<td>90%</td>
<td>287,000</td>
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</tr>
</tbody>
</table>

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

90th Percentile in Drug Expenses: The year-over-year change in required savings for individuals at the 90th percentile in drug spending at and throughout retirement ranges from 8–10 percent lower according to the EBRI model. In 2020, a man would need $94,000 in savings and a woman would need $118,000 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, $157,000 would be needed for a man and $178,000 would be needed for a woman. This represents a 10 percent and 8 percent decrease from 2019 levels, respectively.

A couple both with median drug expenses would need $212,000 to have a 50 percent chance of having enough money to cover health care expenses in retirement. This is a 9 percent decrease and brings costs back in line with 2015 levels.
They would need $276,000 to have a 75 percent chance of covering their expenses and $325,000 to have a 90 percent chance of covering their expenses (Figure 5). This represents a 9–10 percent decrease from the 2019 levels. This is one of the largest decreases EBRI has seen since it started this analysis is 2011 and brings the costs back in line with 2014 levels.

Figure 5
Savings Needed to Have a 90 Percent Chance of Having Enough Money for Medigap Premiums, Medicare Part B and D Premiums, Part B Deductibles, and Out-of-Pocket Drug Expenses for Retirement at Age 65 in 2011–2020 for a Couple With Drug Expenses at the 90th Percentile

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

Explaining the Changes in Savings Targets Between 2019 and 2020
As Figure 6 shows, savings targets declined between 2012 and 2014 and then increased from 2014 to 2018. Between 2018 and 2019, savings targets increased again for Medicare beneficiaries with median prescription drug expenses throughout retirement, but they fell as much as 11 percent for those with prescription drug expenses at the 90th percentile throughout retirement. Between 2019 and 2020, savings targets fell for all Medicare beneficiaries.

The EBRI model includes several factors that could result in an increase or decrease in targeted savings, but there are two reasons for the decrease in needed savings from 2019 to 2020. The first reason 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. The Medicare Trustees reduced projected costs for Medicare Part D premiums and out-of-pocket expenses. For example, in the 2019 trustees report, the monthly Medicare Part D premium was projected to be $51.37 in 2028. In the 2020 report, it was projected to be $44.79 or 13 percent lower. Similarly, the 2028 Part D deductible projection was $615 in the 2020 report, down from $670 in the 2019 report, an 8 percent reduction. Projecting these and other changes in Medicare Part D out-of-pocket spending over the course of one’s lifetime results in a significant reduction in savings targets for Medicare beneficiaries who would benefit from such changes the most — Medicare beneficiaries with prescription drug spending at the 75th and 90th percentiles throughout retirement.
Out-of-pocket spending is also tied to the Medical Expenditure Panel Survey (MEPS), and 2017 data are now the most recent year of data available. Actual out-of-pocket spending at the median, 75th, and 90th percentiles were lower than projected for 2017 when projections were based on pre-2017 data. As a result of this re-baselining, predicted estimates on out-of-pocket spending for prescription drugs decreased for 2017 and beyond.

We made a one-time change in our model to account for the fact the Medigap Plan F is no longer available to new beneficiaries. Instead, we are now using Medicap Plan G premiums. Premiums for Plan G in 2020 were about 25 percent lower than Plan F premiums in 2019. This change reduces savings targets. Because Plan G does not cover the Part B deductible, we assume everyone in our model reaches that deductible, which is $198/year in 2020. These
additional out-of-pocket costs increased needed savings in our model but were not large enough to offset the lower Medigap premium that resulted from moving from Plan F to Plan G in our model.

**Conclusion**
The ACA has now completely phased in reduced cost sharing in the Part D coverage gap, or so-called “donut hole.” Coinsurance in the coverage gap is now 25 percent. This year-to-year reduction in coinsurance reduced the savings needed for health care expenses in retirement, all else equal, for individuals with the highest drug use. Improvements in the outlook for growth in premiums and out-of-pocket expenses related to the Medicare Part D program also contributed to the decline in savings targets.

However, despite lower projected savings targets for health care expenses in retirement among Medicare beneficiaries with high use of prescription drugs throughout retirement, individuals should still 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.

It is also 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, 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.

**References**

Fronstin, Paul, and Jack VanDerhei, "Savings Medicare Beneficiaries Need for Health Expenses: Some Couples Could Need as Much as $363,000," *EBRI Issue Brief*, no. 481, (Employee Benefit Research Institute, May 2019).


Endnotes

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

2 Medicare Part D covers outpatient prescription drugs.

3 Medigap Plan G covers the Medicare Part A deductible, 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 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.

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

6 In 2019, the Medicare Part B deductible was $185.

7 A technique used to estimate the likely range of outcomes from a complex process by simulating the process under randomly selected conditions a large number of times.

8 Nominal rates of return were assumed to follow a log-normal distribution with a mean of 1.078 and a standard deviation of 0.101. This provided a median nominal annual return of 7.32 percent.