MILLIMAN CLIENT REPORT

Medicare Part B Premium Dynamics Explained

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Overview

Medicare Part B premiums seem simple enough – they are set at 25% of total projected Part B program costs. However, what beneficiaries actually pay can be more complicated due to the relationship with Social Security (SS) payments and income. This report explores the impact of changes in Medicare Part B program costs on Medicare Part B beneficiary premiums and SS payments. This report focuses on the 2022 Part B premium for beneficiaries with various income levels to illustrate the payment dynamics and discusses the implications for related programs (i.e., Medicare Advantage, Medicare Supplement, Employer Retiree, and Medicaid).

BACKGROUND

Medicare, which provides health insurance coverage for the seniors and people who are disabled, is comprised of four main components:

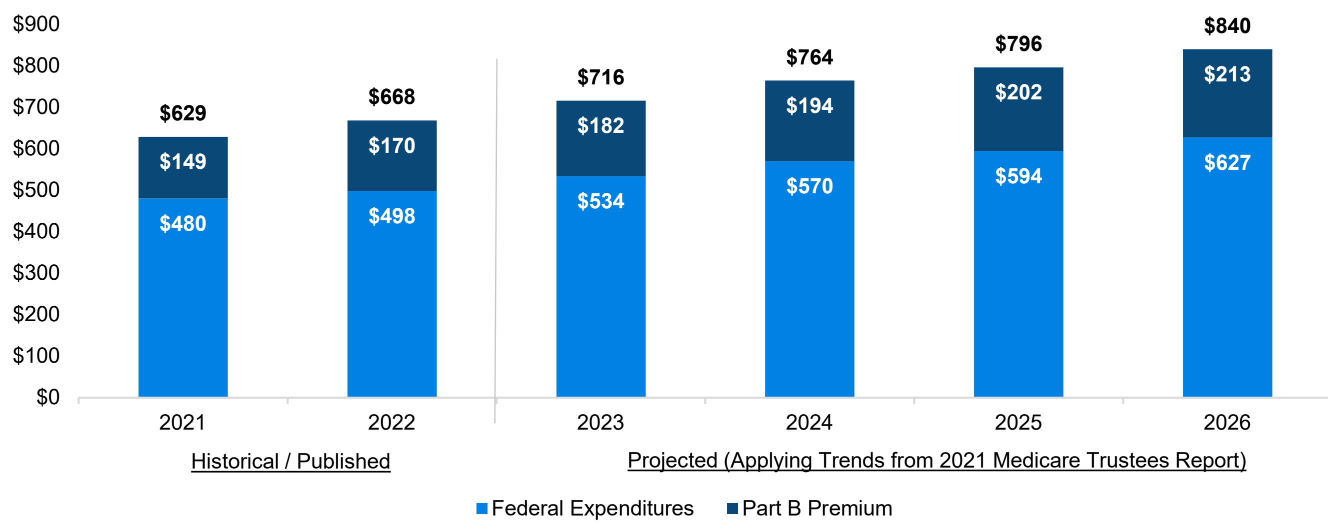
- **Part A**: Inpatient / hospitalization coverage
- **Part B**: Outpatient / physician coverage
- **Part C**: Private coverage for Parts A & B services and supplemental benefits (e.g., dental, hearing, vision)
- **Part D**: Private coverage for prescription drug coverage

Each component is funded through a variety of sources. In particular, Medicare Part B is funded through "general revenues" (i.e., tax dollars) and beneficiary premiums. Part B premiums are "set to cover 25% of projected average per capita Part B program costs for the aged, with federal general revenues accounting for the remaining amount."[1]

On November 12, 2021, the Centers for Medicare and Medicaid Services (CMS) announced the 2022 Part B premium of $170.10 per member per month (PMPM),[2] which reflects a 15% increase from 2021. This increase is the highest dollar premium change in the history of the Part B program, at least in part due to a phase-in of the premium reduction that occurred with the 2021 premium. Specifically, the Continuing Appropriations Act, 2021 and Other Extensions Act, revised the 2021 Part B premium increase to reflect only 25% of the calculated increase without intervention.[3] This change kept the 2021 Part B premium low, but was expected to result in a higher increase in 2022 as the new premium reflects the full phase-in of the 2021 actual costs, plus expected medical trends for 2022. In addition, CMS cited greater than usual uncertainty for 2022 due to the COVID-19 Public Health Emergency (PHE) and the new medication Aduhelm, which treats Alzheimer's disease, in developing the 2022 Part B premium.[4]

The 2021 Medicare Trustees Report estimates Part B program will increase between 4% and 7% annually from 2023-2026.[5] Figure 1 illustrates projected total cost pmpm for Part B enrollees, with the split between Part B premium and federal expenditures from 2021-2026. This figure uses the published Part B premium from 2021 and 2022 as a baseline along with the 2023-2026 trends from the 2021 Medicare Trustees Report.

FIGURE 1: ESTIMATED PART B TOTAL COST PMPM (2021-2026)

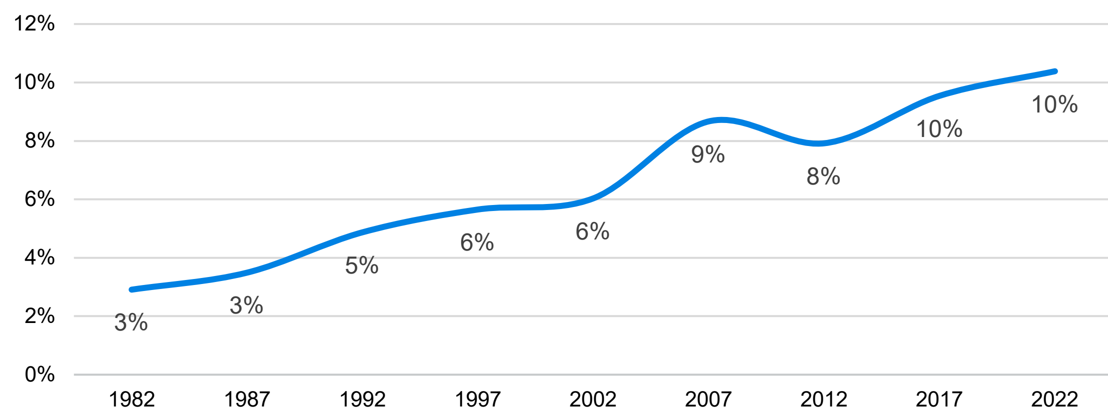


Source: 2022 reflects Part B premium announced by CMS. Future years reflect growth from 2021 Medicare Trustees Report[6]
Premiums include $3 pmpm repayment triggered by the by the Continuing Appropriations Act, 2021 and Other Extensions Act.[7]
Calculation of federal expenditures excludes $3 pmpm surcharge. Please refer to the Methodology section for more detail.

HOW DOES THE PART B PREMIUM AFFECT SOCIAL SECURITY (SS) PAYMENTS?

For most beneficiaries, Part B premiums are deducted directly from Social Security (SS) income. That is, the SS payment beneficiaries receive is net of their Part B premium. The Part B premium reflects a growing share of SS income. In 1980, the Part B premium was $9.60 pmpm, or approximately 2% of the average SS income. In 2022, the Part B premium has increased to $170.10 pmpm, or approximately 10.4% of the average SS income. Figure 2 illustrates the change in Part B premium expressed as a percentage of the average SS income over the last 40 years.

FIGURE 2: PART B PREMIUM AS % OF AVERAGE SS INCOME BY YEAR



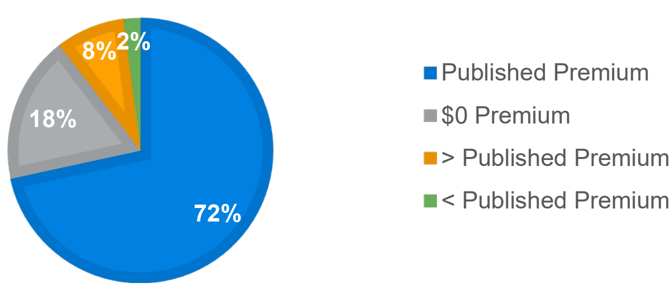
Source: Part B premiums and average SS payments by year from the Social Security Administration (SSA).[8,9] Annual SS payment for 2022 is trended from 2019 actual (from exhibit 3.C4 from the SSA 2020 statistical supplement) by COLA for 2020 through 2022.[10]

WHAT PREMIUMS DO PART B BENEFICIARIES ACTUALLY PAY?

In any given year, most beneficiaries will pay the published Part B premium. However, the actual premium amounts can vary by beneficiary and year. Figure 3 illustrates the estimated breakdown by Part B premium payment for 2021. A few highlights include:

- **Published Premium**: Nearly 75% of Part B beneficiaries paid the published Part B premium of $148.50. This may include a portion of beneficiaries in Medicare Advantage plans that "buy-down" a portion of the Part B premium.
- **$0 Premium**: An estimated 18% of Part B beneficiaries are dually-eligible for Medicare and Medicaid[11] and thus do not pay a Part B premium (i.e., Medicaid pays the Part B premium).
- **Greater than Published Premium**: An estimated 8% of Part B beneficiaries pay more than the published Part B premium due to an income-related adjustment or a late enrollment penalty (described below).[12,13]
- **Less than Published Premium**: An estimated 2% of beneficiaries will pay a premium that is non-zero but less than the published Part B premium due to the hold harmless provision in 2021 (described below).[14] This can vary by year.

FIGURE 3: ESTIMATED 2021 DISTRIBUTION OF BENEFICIARIES BY PART B PREMIUM PAYMENT



Source Notes:

- Kaiser Family Foundation reports 18% of Part B beneficiaries were dually-eligible for Medicare and Medicaid in 2019.[15]
- CMS reports that 7% of Part B beneficiaries pay an IRMAA annually.[16]
- The Congressional Research Service reports 1.4% of Part B beneficiaries paid a late enrollment penalty in 2020.[17]
- The Congressional Research Service reports 2% of Part B beneficiaries were held harmless in 2021.[18]

What affects beneficiary premium?

The Part B premium amount for a particular beneficiary may vary based on several factors, including:

- **Hold Harmless Provision**: This provision guarantees the net SS payment (after the Part B premium) is at least as great as the prior year if the Part B premium is deducted directly from the enrollee's SS payment. This provision protects beneficiaries against Part B premium increases that would otherwise exceed the SS cost-of-living adjustment (COLA). This may reduce the effective Part B premium paid by certain beneficiaries, while increasing the premium for other beneficiaries not held harmless (to target the same 25% of overall expenses).
- **Income Related Monthly Adjustment Amount (IRMAA):** This provision requires beneficiaries with higher incomes to pay higher Part B premiums.
- **Late Enrollment Penalty (LEP):** This provision requires beneficiaries who enroll late in Medicare Part B (after 12 months of eligibility), to pay a penalty when they elect to enroll.

Each of these factors is described in more detail below.

HOLD HARMLESS PROVISION

Historically, Medicare Part B costs have increased at a rate greater than inflation, as illustrated in Figure 2. With this dynamic, the Part B premium increase may reflect a large portion of, or even exceed, the Social Security COLA in nominal dollars. The COLA is set by the Social Security Administration (SSA) each year such that "the purchasing power of Social Security and Supplemental Security Income (SSI) benefits is not eroded by inflation."[19] The hold harmless provision protects SS payments against increases in the Part B premium by setting a "floor" for the beneficiary's net SS payment at the payment from the prior year. As such, the Part B premium increase can be as much as the entire COLA but cannot exceed the COLA for a beneficiary in a given year.

This provision most frequently impacts beneficiaries with lower social security payments. With the hold harmless provision, these beneficiaries may pay less than the full Part B premium amount. Certain beneficiaries, such as those dually eligible for Medicare and Medicaid, may have their Part B premiums paid by Medicaid and are not subject to the hold harmless provision.

Figure 4 illustrates the dynamic of the hold harmless provision. In this example, Member A would receive the same $350 per month net SS payment in Year 2 as in Year 1, with the hold harmless provision reducing the effective Part B premium by $5 pmpm. Under the same COLA and Part B premium increase, Member B would receive a slightly higher SS payment and would pay the full Part B premium amount. For Member A, the Part B premium increase completely offsets the COLA, while Member B retains a portion of the COLA.

FIGURE 4: ILLUSTRATIVE EXAMPLE OF HOLD HARMLESS PROVISION (PMPM)

	Member A	Member B	Calculation
Year 1			
Gross SS Payment	$500	$1,200	(a)
Part B Premium	$150	$150	(b)
Net SS Payment	$350	$1,050	(c)=(a)-(b)
Year 2			
COLA	1.0%	1.0%	(d)
Gross SS Payment	$505	$1,212	(e) = (a)*(1 + (c))
Initial Part B Premium	$160	$160	(f)
Initial Net SS Payment	$345	$1,052	(g) = (e)-(f)
Final Net SS Payment	$350	$1,052	(h) = max (c), (g)
Hold Harmless Impact	-$5	$0	(i) = (g)-(h)
% Change Net SS Pmt.	0.0%	0.2%	(j) = (h) / (c) -1

For 2021, approximately 2% of beneficiaries were subject to the hold harmless provision.[20] The hold harmless provision does not apply to members who pay an IRMAA, have newly enrolled in Part B in the current year, or are eligible for premium subsidies through Medicaid, or who elect to pay Medicare Part B premiums via a separate payment rather than have amounts deducted from their Social Security payment.[21] The "Hold Harmless Impact" in the figure above is redistributed across all beneficiaries not held harmless such that beneficiary premiums make up approximately 25% of total program costs.[22] We discuss this dynamic in greater detail in the “What happens if there is a large shock in Part B program costs?” section of this paper.

INCOME RELATED MONTHLY ADJUSTMENT AMOUNT

The IRMAA is an adjustment made to the Part B premium for enrollees with higher incomes. Figure 5 illustrates the IRMAA for 2022 Part B premiums based on 2020 income. In 2022, the IRMAA will only apply to beneficiaries with 2020 income above $91,000 if filing an individual tax return or $182,000 if filing a joint tax return. This adjustment reflects a sliding scale to the Part B premium to cover 35% to 85% of total Part B program costs, as opposed to the standard 25%. An estimated 7% of Part B beneficiaries pay an IRMAA.[23]

FIGURE 5: IRMAA AND TOTAL PART B PREMIUM BY INCOME LEVEL (PMPM)

2020 Income Level		IRMAA	Total 2022 Part B Premium
Individual	Joint		
<$91k	<$182k	$0.00	$170.10
$91k-$114k	$182k-$228k	$68.00	$238.10
$114k-$142k	$228k-$284k	$170.10	$340.20
$142k-$170k	$284k-$340k	$272.20	$442.30
$170k-$500k	$340-$750k	$374.20	$544.30
>$500k	>$750k	$408.20	$578.30

Source: 2022 IRMAA reported by CMS in the federal register[24]

LATE ENROLLMENT PENALTY

The Medicare Part B LEP is calculated as 10% of the Part B premium for each twelve-month period that the member was not enrolled in most situations.[25] In 2020, approximately 1.4% of Part B beneficiaries paid a LEP.[26] Certain beneficiaries may be exempt from an LEP (e.g., if individual gets coverage through spouse’s employer insurance).

For example, a beneficiary who aged into Medicare in January 2020 but elects to enroll in Medicare Part B in March 2022 will pay 120% of the Part B premium each month for as long as they remain enrolled in the program. This additional 20% accounts for the two, twelve-month periods from January 2020 to January 2022 that the member was not enrolled. There is no additional penalty for January 2022 to March 2022, as this is not a full twelve-month period.

How does the Hold Harmless Provision Affect Beneficiary Payments?

The hold harmless protection for a particular beneficiary relies on three factors:

- The gross SS payment for a particular beneficiary
- Part B premium trends (and cost)
- COLA or inflation rates for SS Payments

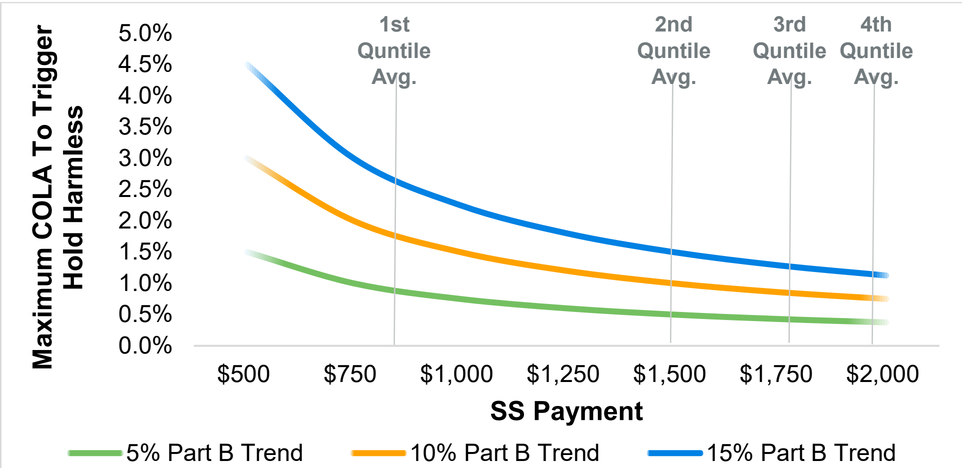
For the hold harmless provision to be triggered, the increase in the Part B premium must exceed the COLA impact on a beneficiary’s SS payment. This provision has a greater likelihood of being triggered for individuals receiving lower SS payments, as the COLA is applied to a lower dollar value and the Part B premium is a flat dollar amount.

In order to maintain the total Part B premium collected as 25% of program costs, there are some scenarios where the premium impact of beneficiaries held harmless could shift to beneficiaries not held harmless. This provision could have a cascading effect on beneficiaries not held harmless, given this circular nature. We describe this in more detail below.

COLA TO TRIGGER HOLD HARMLESS PROVISION

Figure 6 illustrates the maximum COLA to trigger the hold harmless provision for various levels of SS payments and Part B premium trends. For example, if the Part B premium trend was 5%, a beneficiary receiving a monthly SS payment of $500 would be held harmless if COLA was 1.5% or lower. With the same Part B premium trend, a beneficiary receiving a monthly SS payment of $1,500 would be held harmless if COLA was 0.5% or lower. In these scenarios, the Part B premium increase would erode the COLA’s impact on beneficiary payments.

FIGURE 6: MAXIMUM COLA TO TRIGGER HOLD HARMLESS PROVISION WITH VARYING SS PAYMENTS AND PART B TRENDS



Note: Applies assumed Part B premium trend to starting Part B premium of $150 PMPM to align closely with 2021.

Vertical lines reflect averages of each income quintile, as presented in Figure 13. Only averages for the first four quintiles are shown, as many individuals in the fifth quintile are subject to an IRMAA and exempt from the hold harmless provision.

ALLOCATION OF HOLD HARMLESS IMPACT

The impact of the hold harmless provision for those held harmless is generally borne by other beneficiaries through higher overall premiums. In years with high inflation and/or low medical inflation, this has limited impact on the overall premiums. However, in years with low inflation and/or high medical inflation, this can cause a “snowball” effect where more and more members are subject to hold harmless, leaving a relatively small portion of the population to cover the total impact.

A recent report from the Congressional Research Service (CRS) indicates the following on this topic:

> *“The law does not specify how Medicare Part B financing (premiums and general revenues) should be established in years in which the hold-harmless provision applies to a large number of Medicare beneficiaries. Under current law, the only way to generate enough premium revenue to cover 25% of Part B costs is to have those not held harmless shoulder the entire beneficiary share of any increase in premiums.”* [27]

As a result, annual increases to published Part B premiums may be comprised of two components:

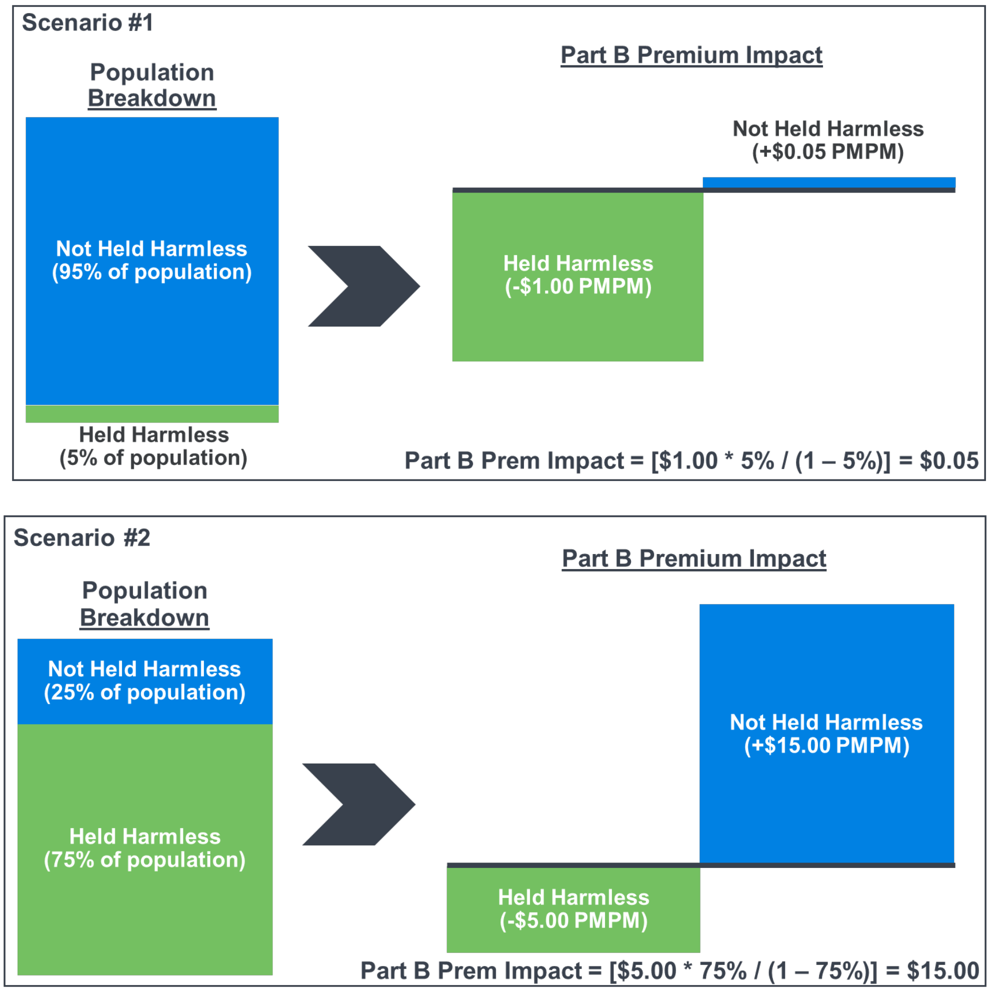
- Changes in medical trend (including utilization and cost)
- A surcharge to make up lost revenues for beneficiaries held harmless

Figure 7 illustrates the Part B premium dynamics of the hold harmless provision for beneficiaries held harmless and those not held harmless. Figure 7 includes two illustrative scenarios: (a) where 5% of the population is held harmless with a $1 reduction, to their premium and (b) where 75% of the population is held harmless with a $5 reduction in premium. The premium impact is leveraged as more beneficiaries are held harmless (such as in the “0.5% COLA” scenario), as there is a smaller population to spread the costs across.

Recalibration of Part B premiums may not occur in all years where the hold harmless provision is triggered. The difference in premium resulting from this dynamic may be a negligible factor in years where COLA is sufficiently high and/or Part B premium trends are low. For example, in scenario #1 below, the total premium impact is $0.10 pmpm assuming 5% of the population is affected. The premium impact would be lower in 2021, where only 1.4% of the population was affected (as noted before).

The reallocation impact affects not only beneficiaries not held harmless, but also state Medicaid budgets. For dual-eligible beneficiaries, Medicaid pays the Part B premium, and these beneficiaries are not held harmless since this amount is not withheld from their SS payment. For years with a low COLA and a large portion of beneficiaries held harmless, Medicaid would end up subsidizing a large portion of the cost reduction that would otherwise have been paid by beneficiaries held harmless through the reallocation dynamic.

FIGURE 7: ILLUSTRATION OF PART B PREMIUM IMPACT FROM HOLD HARMLESS PROVISION FOR VARYING PERCENTAGE OF POPULATION HELD HARMLESS



Note: Scenario #1 assumes 5% of population is held harmless with average impact of $1.00 PMPM. Scenario #2 assumes 75% of population is held harmless with average impact of $5.00 PMPM. Average impact on beneficiaries held harmless in both scenarios is illustrative.

IMPACT FOR NEW ENROLLEES AND THOSE NOT DEDUCTING PART B PREMIUM FROM SS PAYMENTS

Beneficiaries that age into Medicare during or after a large increase in program cost may retain less of their monthly social security payment than beneficiaries that were already enrolled. These beneficiaries will pay the full Part B premium in the first year they enroll in the program. This dynamic also applies to a beneficiary that does not deduct the Part B premium from their SS payment, as the hold harmless provision does not apply.

In the first year, a new beneficiary has their net SS payment “locked in” with that net payment serving as the minimum for all future payments. If this occurs prior to a large increase in Part B costs, the beneficiary would be protected against material premium increases. However, if this occurs during or after a large change in program costs, their net SS payment is set based on the full Part B premium and could be lower than a similarly situated beneficiary who first enrolled in the prior year.

Figure 8 illustrates how a beneficiary who enrolls a year later than an otherwise equivalent beneficiary may see a reduced SS payment. Beneficiaries that do not deduct the Part B premium from their Social Security payment are not held harmless, and their payments would reflect the “Beneficiary B” scenario in all years, regardless of when they enrolled in Part B.

FIGURE 8: ILLUSTRATIVE IMPACT OF HOLD HARMLESS PROVISION AND DELAYED PART B ELIGIBILITY

	Beneficiary A	Beneficiary B
Year 1	**Enrolled**	**Not Enrolled**
Gross SS Payment	$1,000.00	N/A
Part B Premium	$150.00	N/A
Net SS Payment	$850.00	N/A
Year 2	**Enrolled**	**Enrolled**
COLA	1%	1%
Gross SS Payment	$1,010.00	$1,010.00
Part B Premium	$170.00	$170.00
Hold Harmless Adjustment	$10.00	$0.00
Net SS Payment	$850.00	$840.00

Note: The assumed $1,000 gross SS payment is in-between the averages for the 1st and 2nd income quintiles in Figure 13

In year 2 of this example, we see that Beneficiary A is not subject to from the $20 increase in Part B premium. The $10 hold harmless adjustment maintains the net SS beneficiary payment. Beneficiary B, on the other hand, is newly enrolled in Part B in year 2 and is not eligible for a hold harmless adjustment. The net SS payment is lower for Beneficiary B due to the timing dynamics in this example. The premium increase in this example is similar to the actual 2022 increase, and the hold harmless impact is driven by the assumed 1% COLA for this scenario.

What happens to SS payments if there is a large change in Part B program costs?

For 2022, CMS announced the published Part B premium will increase by 15% or $21.60 pmpm, the largest dollar premium increase in Part B program history. CMS' Office of the Actuary (OACT) cited numerous drivers of this change, including a phase-in of the 2021 Part B premium. The Continuing Appropriations Act, 2021 and Other Extensions Act revised the 2021 monthly actuarial rate to reflect only 25% of the increase that would otherwise have occured. Since Part B premium is determined as half of the monthly actuarial rate, this means that the premium also only reflected 25% of the increase that was otherwise expected by CMS. This change limited the 2021 premium increase, driving a portion of the large change for the 2022 Part B premium.

In addition to medical trend and the 2021 premium phase-in impact, OACT cited uncertainty due to the COVID-19 pandemic and the new Alzheimer's treatment, Aduhelm, as the two largest drivers of additional contingency margin contributing to the higher-than-average Part B premium increase.[28] CMS specifically noted Aduhelm's cost, initially estimated at $56,000 annually per patient, and the large prevalence of Alzheimer's disease in the Medicare population as key drivers of future uncertainty. It is worth noting that Biogen announced on December 20, 2021 that it was reducing the annual price of Aduhelm to $28,100 per patient.[29] In the context of a large change in program costs, specific beneficiaries' premiums would be affected by each of the dynamics previously discussed. In addition, the published Part B premium may increase to offset the impact of beneficiaries held harmless, if material.

PART B PREMIUM CHANGES BY INCOME QUINTILE

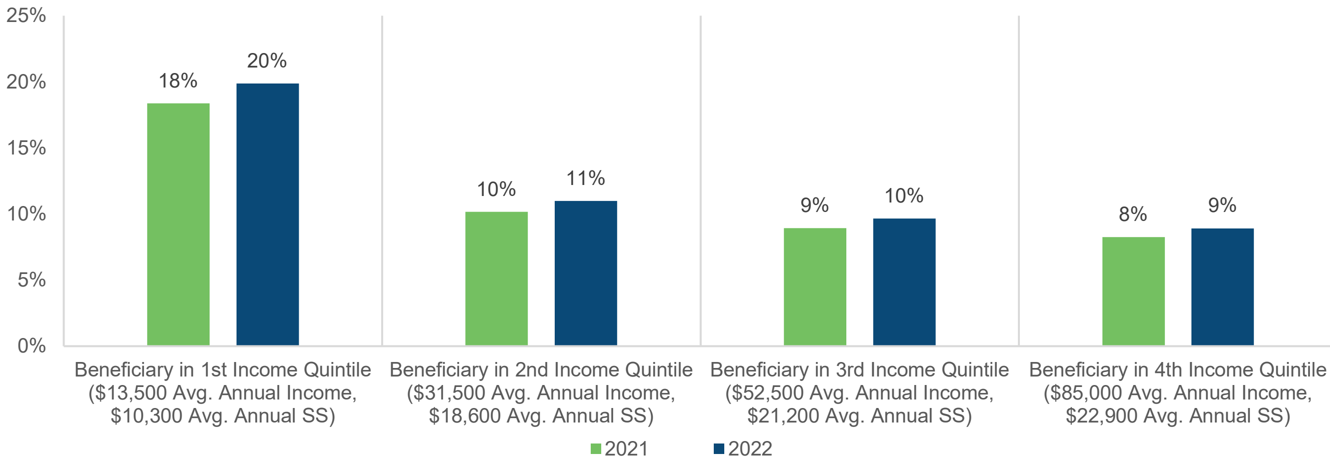
From 2021 to 2022, the Part B premium has increased as a proportion of total gross SS payments for most beneficiaries. This occurs as the Part B premium is increasing at a faster pace (15%) than COLA (5.9%) for 2022. Figure 9 illustrates the Part B premium expressed as a percentage of social security payments for beneficiaries with different income levels in 2021 and 2022.

Our analysis focused on five subsets of the population, based on income quintiles. We treated each quintile as if it was a representative beneficiary with existing Part B coverage to demonstrate the concepts and impacts of Part B premium dynamics. These quintiles represent the income level and monthly SS benefit for each hypothetical beneficiary. We provide more detail in the "Methodology" section.

As illustrated, the Part B premium impact is greater for beneficiaries with lower SS payments. We excluded beneficiaries in the highest income quintile, as many of these beneficiaries are not subject to hold harmless and pay an IRMAA.

Appendix A summarizes Part B premium, SS payment, and average income by representative beneficiary for 2021-2022 that underlie Figure 9.

FIGURE 9: 2021 VS. 2022 PART B PREMIUM AS A PERCENTAGE OF GROSS SS PAYMENT FOR LOWEST FOUR INCOME QUINTILES



Source: Reflects average gross SS payment for each income quintile based on data from the Urban Institute's DYNASIM model.[30] Relies on published Part B premiums of $148.50 for 2021 and $170.10 for 2022. Excludes 5th income quintile (beneficiaries that qualify for IRMAA).

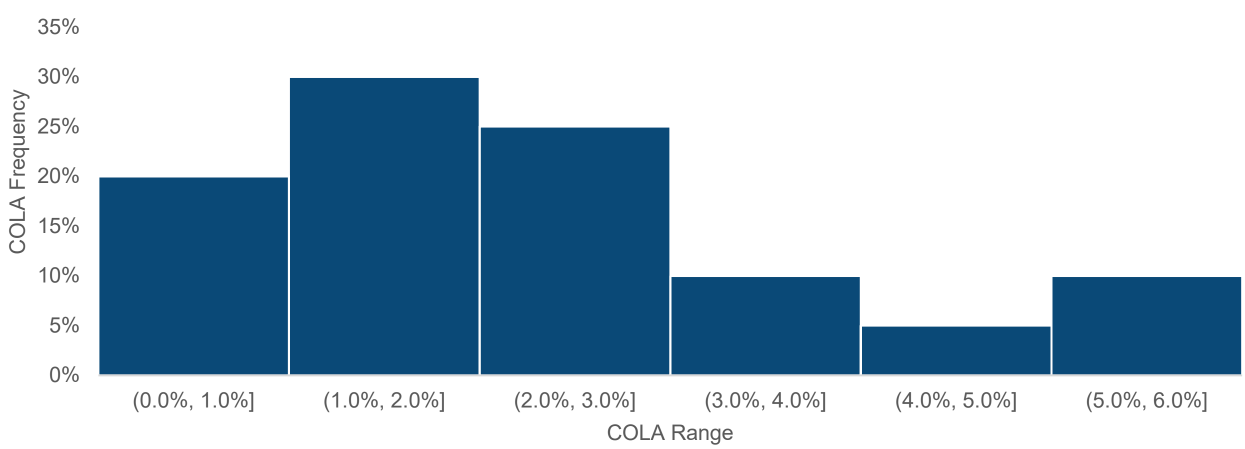
IMPACT OF DIFFERENT COLA SCENARIOS ON SS AND PART B PREMIUM PAYMENTS

Although the 2022 COLA is known (5.9%), we viewed the 2022 Part B premium under multiple alternative COLA scenarios. These scenarios are intended to illustrate the impact to beneficiaries' SS and Part B premium payments when there is a large change in Part B program costs under varying conditions, such as the 2022 Part B premium change (which reflects the largest dollar premium change in program history). We focused on 2022 given the magnitude of the premium change relative to prior years.

Illustrative COLA Scenarios

From 2011 to 2021, COLA has varied from 0.0% (2016) to 3.6% (2012).[31] For 2022, the SSA has set the COLA at 5.9%.[32] Figure 10 illustrates the distribution of COLAs over the past 20 years (from 2003 to 2022). We grouped the historical COLAs within 1% ranges to illustrate the frequency of different COLAs over the last few years to inform our modeled COLA scenarios.

FIGURE 10: DISTRIBUTION OF HISTORICAL SS COLAS (2003-2022)



To illustrate a range of potential outcomes in our analysis, we modeled three illustrative COLA scenarios in addition to the actual COLA for 2022 to estimate the impact on social security payments. The last three scenarios were selected based on the midpoint of the three most frequent COLA levels over the last 20 years (between 0% and 1%, between 1% and 2%, and between 2% and 3%). The four modeled scenarios are as follows:

- **'Actual COLA' Scenario:** Reflects the actual 5.9% COLA set by the SSA for 2022.
- **'2.5% COLA' Scenario**: Reflects an illustrative 2.5% COLA for 2022.
- **'1.5% COLA' Scenario**: Reflects an illustrative 1.5% COLA for 2022.
- **'0.5% COLA' Scenario**: Reflects an illustrative 0.5% COLA for 2022.

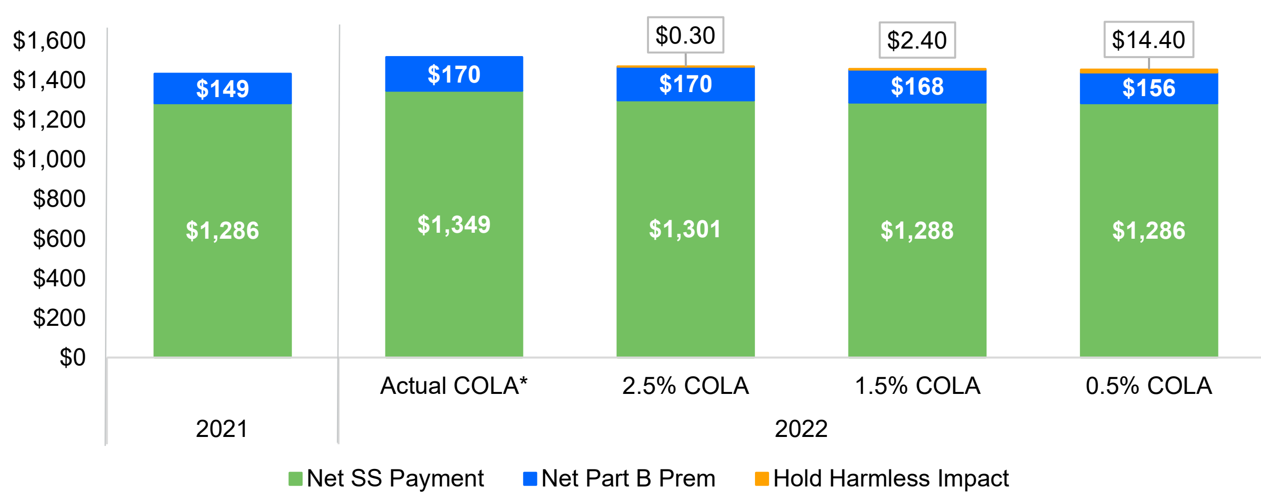
We relied on the 2022 Part B premium announced by CMS on November 12, 2021 in all scenarios.[33]

Impact on SS Payments and Part B Premium

Figure 11 illustrates the results for each COLA 2022 scenario relative to 2021. This figure illustrates the monthly net social security payment, the effective Part B premium (not the published amount), and the impact of the hold harmless provision for beneficiaries held harmless. The hold harmless impact reflects the reduction in the beneficiary premium to maintain at least the same net SS payment as the prior year. We discuss the impact for each scenario below.

- **With the Actual COLA scenario**, there is no impact from the hold harmless provision for the modeled beneficiaries. This occurs because the COLA increase to SS payments exceeds the estimated increase in Part B premiums for the average of each income quintile. While the COLA of 5.9% is lower than the assumed Part B premium increase of 15%, the COLA is applied to the larger gross SS dollar amount and results in a larger dollar increase. In this scenario, the average net social security payment across the first four income quintiles increases by 4.9% from 2021 to 2022, compared to the COLA of 5.9%.
- **In the 2.5% COLA scenario**, the assumed COLA is low enough to trigger the hold harmless provision for the lowest income quintile in 2022. In this scenario, the average net social security payment across the first four income quintiles increases by 1.1% from 2021 to 2022, compared to the COLA of 2.5%.
- **In the 1.5% COLA scenario**, the assumed COLA is low enough to trigger the hold harmless provision for the lowest income quintile in 2022. In this scenario, the average net social security payment across the first four income quintiles increases by 0.2% from 2021 to 2022, compared to the COLA of 1.5%.
- **In the 0.5% COLA scenario**, the assumed COLA is low enough to trigger the hold harmless provision for the four lowest income quintiles (i.e., nearly all beneficiaries that are not subject to an IRMAA). In this scenario, net SS payments remain level (0% increase) from 2021 to 2022, compared to the COLA of 0.5%.

FIGURE 11: COMPARISON OF MONTHLY NET SOCIAL SECURITY PAYMENT, PART B PREMIUM, AND HOLD HARMLESS IMPACT ON PART B PREMIUM ACROSS REPRESENTATIVE BENEFICIARIES BY SCENARIO



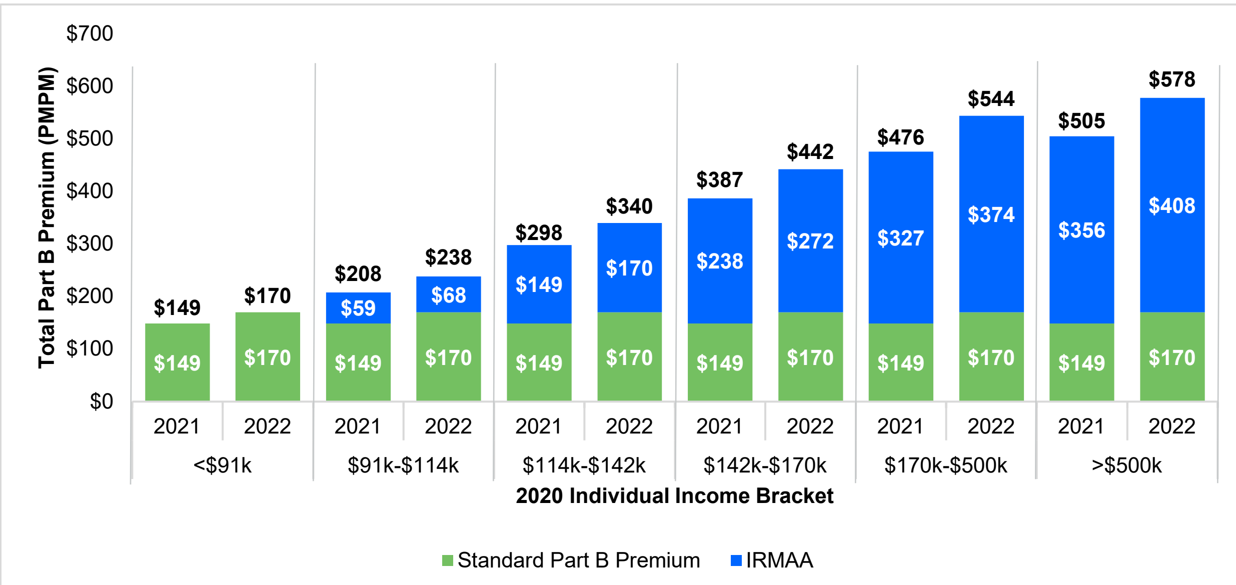
Note: Reflects average across representative beneficiaries from the lowest four income quintiles. "Hold Harmless Impact on Part B Premium" reflects average amount not be collected due to this provision and will need to be redistributed among other beneficiaries.
*Actual COLA is 5.9% for 2022.

This figure illustrates how a lower COLA results in (a) a lesser (or no) change in net SS payments, and (b) a greater impact of the hold harmless provision across the market.

IMPACT OF IRMAA

Beneficiaries with higher incomes pay a premium that indexes with changes in Part B program costs. The IRMAA is set so the total beneficiary premium ranges from 35% to 85% of Part B program costs. Figure 12 illustrates the IRMAA-adjusted Part B premium for 2021 and 2022 for beneficiaries in all applicable income brackets, where a beneficiary with 2020 modified adjusted gross income lower than $91k pays no IRMAA, and a beneficiary with 2020 modified adjusted gross income above $500k pays an IRMAA that amounts to 60% of Part B program costs. This Figure illustrates that the total premium impact for beneficiaries paying an IRMAA is greater than the impact for beneficiaries not paying an IRMAA, and how the total premium escalates with higher income levels.

FIGURE 12: TOTAL PART B BENEFICIARY PREMIUM (AFTER IRMAA) BY INCOME BRACKET, 2021-2022 (PMPM)



Note: Assumes a beneficiary filing taxes individually for 2020. 2022 IRMAAs are set based on the 2020 tax cycle. Income bracket thresholds differ slightly for 2021 IRMAA (set based on the 2019 tax cycle).

Is there any precedent for a large change in program costs without a high COLA?

In 2016, large growth in Part B spending coupled with a 0.0% COLA caused a large portion of Part B beneficiaries to be held harmless.[34] The redistribution of revenues lost due to the hold harmless provision, plus the expected increase in medical costs, would have yielded a $159.30 pmpm premium for the 30% of beneficiaries not held harmless if Congress had not intervened.[35] This would have equated to a 52% increase from the $104.90 standard Part B premium in 2015.[36]

To distribute the impact of this growth more evenly across all beneficiaries, the Bipartisan Budget Act of 2015 mandated that 2016 premiums be set without regard for the hold harmless provision (i.e., premium increases were based on changes in medical costs alone).[37] Instead, the Part B program added a surcharge of $3.00 pmpm to be collected until all lost revenues were accounted for (approximately $9 billion in aggregate).[38] The 70% of beneficiaries held harmless continued to pay the 2015 premium of $104.90, while the remaining 30% paid a premium of $121.80, which included a $3.00 surcharge.[39,40] Higher-income beneficiaries were subject to a surcharge of up to $9.60, in addition to an IRMAA. The 2022 Part B premium announcement indicated a similar repayment of $3.00 pmpm will continue to apply in 2022, as triggered by the Continuing Appropriations Act, 2021 and Other Extensions Act and required by Section 1839(a) of the Social Security Act.[41]

This historical change establishes a precedent to allocate the hold harmless provision across multiple years if the impact to the published Part B premium would be material. This precedent indicates that the impact in a particular year could be lower than the dynamics presented in our analysis. However, the only way to accomplish this today would be through Congressional action, such as what was experienced with the Bipartisan Budget Act of 2015.

How might a large change in spending affect related programs?

We describe above the impact in the Medicare Fee-For-Service (FFS) market for a large change in program spending, using the 2022 Part B premium change as a case study (which was large even after accounting for the remaining phase-in of the 2021 premium increase). Other affected markets could include:

- Medicare Advantage
- Medicare Supplement
- Employer Retiree Coverage
- Medicaid

Each of these markets would have different considerations for a large change in program costs. There are countless considerations for each market, we describe a select few considerations for each of these markets below. These considerations are not intended to be exhaustive.

MEDICARE ADVANTAGE

Medicare Advantage, or Medicare Part C, provides privatized coverage for Medicare Parts A & B services. There are numerous implications of a large change in Part B program costs to the Medicare Advantage market. Some of these changes may include:

- **County-level Benchmarks.** Medicare Advantage Organizations (MAOs) are paid capitation rates set by the federal government at the county-level. These capitation rates are intended to reflect the cost to insure Medicare Parts A & B services in a particular county. We expect these benchmarks would need to be adjusted to account for large changes in program costs. However, if the large changes in program costs are driven by new high-cost treatments or therapies, these may be covered by Medicare FFS initially if they meet the meaningful cost threshold, which would temporarily exclude these costs from county-level benchmarks.[42]
- **Out-of-pocket Maximum.** Unlike Medicare FFS, beneficiaries who enroll in Medicare Advantage have an out-of-pocket maximum (OOPM) that caps beneficiary costs beyond a certain threshold. For 2021 and 2022, the OOPM amount is $7,550.[43] Plans may have an OOPM lower than $7,550. For a large change in program costs that could be concentrated in a small subset of the population, this could lead to increased costs for the plan sponsor that are not fully reflected in the county-level benchmarks. As a result, more Part C Rebates may be allocated towards the OOPM, which could in turn increase Part C beneficiary premiums or reduce Part C supplemental benefits. Conversely, if the large change in program costs was spread out across a broader population at lower cost per patient levels, the impact to plan sponsors would be minimal.

MEDICARE SUPPLEMENT

Medicare Supplement plans (also known as ‘Medigap’) are designed to “fill in” costs that Medicare FFS does not cover. For the Part B program, this may include insuring part or all of the beneficiary deductible and/or coinsurance. With no OOPM under FFS Medicare, the cost sharing associated with a large change in program spending concentrated in a subset of the population could be material. As a result, a large spike in program costs due to the introduction of a high-cost service or therapy could have a direct and material impact on Medigap premiums.

Medigap plans are supplemental and offered by private insurance companies. Beneficiaries are not required to purchase a Medigap plan. A large premium increase could lead to decreased enrollment in this market. We discuss premium elasticity in more detail later in this whitepaper.

EMPLOYER RETIREE COVERAGE

The employer retiree market may also be affected by large changes in Part B program costs. Employers that currently choose to offer retiree medical coverage could currently offer several types of coverage. Common coverage types may include a Medicare Advantage plan, supplemental coverage mirroring the Commercial plan that uses coordination of benefits (COB), or a health reimbursement arrangement (HRA) to cover Medicare beneficiary cost sharing. In these cases, the considerations may be similar to those described above for each of these markets.

Depending on how benefits and premiums are funded, a large change in program costs may create a strain on employer budgets for covering these new costs. This may be particularly true for union-negotiated benefits, where there may not be contractual flexibility to renegotiate benefits or premium sharing.

MEDICAID

For beneficiaries that are dually-eligible for Medicaid and Medicare, Medicaid is generally responsible for Part B premium payments. Depending on the state and income level of the beneficiary, Medicaid may also be responsible for Part B cost sharing.[44] For these reasons, a large change in Part B program costs could also increase state Medicaid expenditures. In addition, dual-eligible Part B premiums are not subject to the hold harmless provision and would be adversely affected if a large population is held harmless.

What are other stakeholder considerations?

PREMIUM / PRICE ELASTICITY

Part B coverage is optional for beneficiaries. It is possible that if premiums were to increase materially, some beneficiaries may elect to opt out of the Part B program. However, the Medicare-eligible population will likely need outpatient and physician services, and the majority of beneficiaries end up enrolling in Part B. Alternative coverage at an affordable premium may not exist for these beneficiaries, and the late enrollment penalty provides a financial incentive to enroll in the program earlier. These dynamics may limit the potential premium elasticity effect.

However, a large change in program costs or premiums could affect the enrollment of beneficiaries in FFS vs. Medicare Advantage. Of all beneficiaries enrolled in a Medicare Advantage Prescription Drug (MA-PD) plan, 60% pay no premium beyond the standard Part B premium.[45] The last several years have seen a growth in Medicare Advantage plans. MA growth from 2019 to 2020 totaled 9%,[46] compared to 2% growth in Medicare overall.[47] If MA premiums were to increase or MAOs were to reduce benefits to maintain current premiums, this market's growth may slow if beneficiaries are sensitive to these premium changes.

FEDERAL SPEND AND COVERAGE

The hold harmless provision is intended to have no impact to the federal spending. However, large changes, such as those experienced in 2016, could result in a change in federal spending if premiums are set without considering the hold harmless impact. These changes may be offset over time by provisions such as Section 1839(a) of the Social Security Act, which has been used to offset large Medicare Part B premium increases in 2016 and 2021. Other provisions, such as the IRMAA and LEP, may help offset any federal spending increase by resulting in greater federal revenue.

Methodology

For Figure 1, the calculation of total Part B program costs, premium, and federal expenditures rely on a few sources:

- **2021 Values.** The 2021 premium reflects the published Part B premium of $148.50. This premium calculation was adjusted by the Continuing Appropriations Act, 2021 and Other Extensions Act to reflect less than 25% of the program costs for the aged population.[48] The total Part B program costs reflect twice the actuarial rate developed by OACT before the phase-in of the 2021 premium was announced, as this is consistent with the expected costs for 2021.[49] Federal expenditures reflect the difference between the published premium and total program costs, resulting in a premium that is lower than 25% of total program costs.
- **2022 Values.** The 2022 premium and total costs reflect the announced values from CMS on November 12, 2021.[50] This includes the full phase-in of the 2021 premium increase, which, as noted above, was limited based on the Continuing Appropriations Act, 2021 and Other Extensions Act. Similar to 2021, the total program costs reflect twice the actuarial rate announced by CMS on November 12, 2021,[51] with federal expenditures as the difference between the total program costs and the published premium.
- **2023-2026 Values.** The values projected for 2023 through 2026 rely on total program costs from 2022, projected forward based on assumed trends from the 2021 Medicare Trustees Report. Projected premiums reflect 25% of estimated program costs, plus a $3.00 surcharge, consistent with the surcharge outlined in the Continuing Appropriations Act, 2021 and Other Extensions Act. This surcharge results in the published Part B premium being slightly greater than 25% of total program costs.

In defining additional assumptions for the analysis at different income levels, we modeled five hypothetical Part B members with varying SS payments. These members are intended to represent different income quintiles of SS payments based on the Urban Institute's DYNASIM model.[52] Figure 13 summarizes the estimated 2020 income and monthly SS payments by member.

FIGURE 13: REPRESENTATIVE PART B MEMBERS, 2020 ANNUAL INCOME, AND 2022 MONTHLY SOCIAL SECURITY PAYMENTS

Member	Annual Income	Monthly SS Payment
Quintile 1	$13,500	$855
Quintile 2	$31,500	$1,550
Quintile 3	$52,500	$1,765
Quintile 4	$85,000	$1,910
Quintile 5	$225,500	$2,115

We assume these representative beneficiaries have aged into Medicare in 2021, having no residual effects of the hold harmless provision from prior years but being eligible for hold harmless protections in 2022. SS payments and annual income reflect the average within each quintile, and the aggregate payments were calibrated to the average annual 2019 SS benefit of $18,034,[53] trended using the 2020-2022 COLAs.[54] Annual income includes earnings, Social Security income, defined benefit pension, annuitized asset income, and other sources of income.[55] This estimated distribution of annual income is not a calculation of modified adjusted gross income (MAGI) used for the IRMAA, but is shared here for reference relative to the social security payments relied on in our analysis.

To estimate the impact by beneficiary, we applied the COLA scenarios to the income for each beneficiary and deducted the 2022 Part B premium. These COLA scenarios are intended to be illustrative and reflect a range of potential estimates to reflect the uncertainty associated with future inflation and the premium dynamics in a year with a large change in program costs.

We acknowledge that there could be a skew of income within each income quintile where the average may not be representative of all members in this quintile. The representative beneficiaries and the analysis presented herein are intended to be illustrative to demonstrate concepts and impacts to different beneficiaries.

Caveats and limitations

This Milliman report has been prepared for the specific purpose of summarizing Medicare Part B premium dynamics. Milliman does not intend to benefit, and assumes no duty or liability to, recipients of this work product. Any third-party recipient of this work product that desires professional guidance should not rely upon Milliman's work product but should engage qualified professionals for advice appropriate to its own specific needs. Any releases of this report to a third party should be in its entirety. Milliman does not endorse any public policy or advocacy position on matters discussed in this report.

MODEL AND DATA RELIANCE

Milliman has developed certain models to estimate the values included in this report. The models are intended to estimate Social Security payments and their interaction with Part B premiums. We have reviewed the models, including their inputs, calculations, and outputs, for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP).

The models rely on data and information as input to the models. We have relied upon certain data and information provided by the Drug Pricing Lab at Memorial Sloan Kettering, CMS, and other public sources for this purpose. We accepted these data and information without audit but reviewed them for general reasonableness. To the extent that the data and information provided is not accurate, or is not complete, the values provided in this report may likewise be inaccurate or incomplete. Key data and information reliance includes:

- Total projected Part B enrollment and cost by year, based on the 2021 Medicare Trustee's Report.
- Historical Part B Premiums and COLA published by CMS
- Historical average monthly Social Security payments published by the SSA
- Income quintiles and related social security payments from the Urban Institute's DYNASIM model.

SOURCES OF UNCERTAINTY

The results presented herein are estimates based on carefully constructed actuarial models. Differences between our estimates and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience. There are some material sources of uncertainty that affect our analysis. Some of these sources include:

- Current and future inflation levels in the United States.
- Future changes in Part B program costs.

ACKNOWLEDGMENT OF QUALIFICATION

Kevin Pierce is a Consulting Actuary at Milliman. He is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Appendix A: Part B Premium, SS Payment, and Income by Representative Beneficiary

	Representative Beneficiary by Income Quintile			
	1st Quintile	**2nd Quintile**	**3rd Quintile**	**4th Quintile**
2020				
Average Annual Income	$13,500	$31,500	$52,500	$85,000
2021				
Part B Premium	$149	$149	$149	$149
SS Payment	$809	$1,463	$1,665	$1,802
Premium % of SS Payment	18%	10%	9%	8%
2022				
Part B Premium	$170	$170	$170	$170
SS Payment	$857	$1,549	$1,763	$1,908
Premium % of SS Payment	20%	11%	10%	9%
Total Change in SS Payment	5.9%	5.9%	5.9%	5.9%

Note: Values are per beneficiary per month unless otherwise noted.
Source: Reflects average gross SS payment for each income quintile based on data from the Urban Institute's DYNASIM model. [56]

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