The Fiscal Costs of Medicare at 60

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ABSTRACT

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This paper analyzes the budget effects of lowering Medicare's eligibility age to 60. We find that if the newly eligible population is subject to the same rules as current Medicare recipients, nearly 14 million 60- to 64-year-olds would enroll in Medicare Part A, about 8 million would enroll in Part B, and 6.5 million would enroll in Part D. Gross Medicare expenditures would rise by $82.9 billion in 2022. Net Medicare outlays (after accounting for Part B and D premiums)

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would total $69.8 billion. These outlays would be partially offset by reductions in federal outlays for Medicaid, the Affordable Care Act, and military health care programs. The federal deficit would rise by $32.2 billion in 2022 and $393.9 billion over the next 10 years (2022 to 2031). Absent alternative financing mechanisms, the Hospital Insurance Trust Fund would be depleted in 2024, two years sooner than currently projected.

INTRODUCTION

President Biden and congressional Democrats are considering legislation that would lower the Medicare eligibility age from 65 to 60.[2] *Medicare at 60* would represent the largest change to Medicare since 2004's prescription drug expansion, yet there has been little analysis regarding how the expansion would work, how many people it would cover, and what it might cost.[3]

Forecasting the fiscal cost and enrollment of *Medicare at 60* is complicated by the myriad policy dimensions that Congress or the President has yet to specify. How would *Medicare at 60* affect those who currently receive coverage through Medicaid or the Affordable Care Act's (ACA) Marketplace Exchanges? Would late-enrollment penalties apply to those who defer coverage until the current eligibility age of 65? Would reimbursement rates differ for the new population? Would the newly eligible face the same premium requirements, including income-related premiums, that the current Medicare population pay?

Furthermore, lowering the eligibility age could produce several unintended consequences due to complex interactions with other government programs, retiree health care programs, and employer-sponsored insurance (ESI) by current workers. Medicare's program rules and structure are currently premised on the assumption that most individuals are already enrolled in Social Security prior to or upon reaching the Medicare eligibility age. This would no longer be true if the eligibility age were set at 60, potentially leading to large differences in participation between the current eligible population and the newly eligible population.

Overall, the federal deficit would rise by $32.2 billion in 2022 and $393.9 billion over the next 10 years (2022 to 2031).

In this paper we model the likely enrollment and fiscal costs of *Medicare at 60* under the assumption that the newly eligible would face identical program rules to current Medicare recipients.[4] Current Medicaid and ACA participants would be transferred to the Medicare system. Late-enrollment penalties for Parts B and D would apply to newly eligible participants unless they meet existing exceptions. We project ten-year enrollment starting in 2022 with no phase-in period.

Under these assumptions, 13.8 million 60- to 64-year-olds would enroll in Medicare Part A. Of this group, 8 million would enroll in Part B and 6.5 million would enroll in Part D. Gross Medicare expenditures would rise by $82.9 billion in 2022. Net Medicare outlays (after accounting for Part B and D premiums) would total $69.8 billion. These outlays would be partially offset by reductions in federal outlays for Medicaid, the Affordable Care Act, and military health care programs. In addition, tax revenue would rise due to reductions in ESI-related tax expenditures and reductions in ACA tax credits. Overall, the federal deficit would rise by $32.2 billion in 2022 and $393.9 billion over the next 10 years (2022 to 2031).

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[2] Armour, Stephanie and Kristina Peterson. "Democrats Look at Lowering Medicare Eligibility Age in Healthcare Package." *Wall Street Journal.* March 30, 2021.

[3] There are analyses that estimate the effects of a Medicare Buy-In proposal. For example, Garrett et al. (2020) considers a Medicare Buy-In proposal for those age 50 to 64 and find no more than 3 million would enroll. Buy-in proposals tend to assume premiums will be actuarially fair, leading to lower take-up rates and less fiscal impact on the federal budget than a direct expansion of Medicare.

[4] In April 2021, we released a preliminary analysis of Medicare at 60 (Chen, Church, and Heil, April 2021). This analysis used unadjusted data from the Household Component of the Medical Expenditure Panel Survey to explore the Medicare at 60 population. We make the necessary adjustments and incorporate them into a microsimulation model in this paper.

Absent alternative financing mechanisms, the Hospital Insurance (HI) Trust Fund would be depleted in 2024, two years sooner than currently projected. Hospital Insurance outlays would rise by $105 billion from 2022 to 2024, far exceeding the currently projected end-of-year 2024 trust fund balance of $75 billion. The Biden administration has stated that it supports separate financing for these outlays, but this would represent a dramatic shift in the nature of HI

The Hospital Insurance (HI) Trust Fund would be depleted in 2024, two years sooner than currently projected…

financing.[5] Alternatively, Congress would need to raise the HI payroll tax rate by approximately 12 percent to fund the new spending and avoid hastening the insolvency of the trust fund.

The paper is organized as follows. Section I reviews current Medicare program rules and statistics. Section II provides descriptive statistics of the *Medicare at 60* eligible population. Section III discusses the major policy questions that must be answered in designing *Medicare at 60*. Section IV reviews prior analyses on changing the Medicare eligibility age. Section V outlines the model used for imputing enrollment and medical spending for the eligible population. Section VI summarizes estimated enrollment and fiscal costs of the proposal. Section VII summarizes the results of alternative modeling assumptions including changes in medical utilization, the eligibility age, and reimbursement rate assumptions. Section VIII concludes.

I. The Current Medicare Program

Medicare provides health insurance to seniors and the disabled. It consists of three parts, colloquially called Parts A, B, and D (and a quasi-private Part C, more commonly referred to as Medicare Advantage). Hospital Insurance (HI), called Part A, largely covers inpatient care in hospitals and skilled nursing facilities. Supplemental Medical Insurance (SMI), or Part B, functions like most health insurance and pays for doctor's visits and other outpatient medical care. Prescription drug coverage (Part D) was added in 2003 and offers prescription drug subsidies to enrollees.

Congress would need to raise HI payroll tax rate by approximately 12 percent to fund the new spending and avoid hastening the insolvency of the trust fund…

While 61.5 million people were enrolled in Medicare in 2019, not everyone was enrolled in all three parts. Of the 61.5 million enrolled, 61.2 million had Part A coverage, 56.0 million signed up for Part B, and 45.8 million had Part D coverage.[6]

In addition, nearly two-thirds of Medicare enrollees participated in the traditional fee-for-service program. The other third had coverage through Medicare Advantage plans (Part C), with the share enrolled in Part C rising over time.

While Medicare is currently the second-largest single line item in the federal budget, it will soon surpass Social Security and grow more quickly than every other component. Medicare's Hospital Insurance Trust Fund is currently projected to become insolvent in 2026. Absent legislative fixes, Part A spending would need to be cut so that HI outlays do not exceed payroll tax revenue.

Medicare is heavily subsidized, but it isn't free to all enrollees. While Part A does not charge premiums to eligible workers and their spouses who paid HI payroll taxes for at least 40 quarters, there are some cost-sharing rules that require out-of-pocket payments. Individuals who have not worked 40 quarters are eligible to buy into Part A but must pay premiums. Parts B and D charge premiums to enrollees and cover approximately 25 percent of the expected expenditures. Premiums are identical to all enrollees, regardless of health or age, with the exception of high-income individuals who must pay additional income-related premiums and those subject to late-enrollment penalties. About 4.2 million (or 7.5 percent) Part B recipients paid additional income-related premiums in 2019.

Most people who reach age 65 are automatically enrolled in Medicare Parts A and B because they are also enrolled in Social Security. If eligible individuals are not automatically enrolled, they are expected to enroll during the seven-month period around their 65th birthday. Failure to enroll may trigger late-enrollment penalties that are intended to discourage adverse selection among participants.

There is no late-enrollment penalty for those who qualify for premium-free Part A, although very few defer coverage as there is little financial reason not to enroll. For those who are required to pay premiums, the penalty is 10 percent for twice as many years as the individual delayed their enrollment. In other words, a 67-year-old who deferred coverage for two years and didn't qualify for premium-free Part A would see their premiums increase by 10 percent for the next four years, before dropping to the normal rate. In contrast, late-enrollment penalties for Parts B and D are permanent. Generally, for every year that coverage is delayed without a qualifying reason, Part B premiums rise by 10 percent and Part D premiums rise by 12 percent.

Recipients with qualifying coverage from their (or their spouse's) current employer may defer enrollment in Part B without subsequent penalties. Small employers (those with fewer than 20 employees) may require their employees to enroll in Medicare. In these cases, Medicare becomes the primary payer and the recipient's ESI coverage acts as a secondary payer. Large employers (20 or more employees) are prohibited from denying coverage to Medicare-eligible employees who would otherwise be eligible for their employer's ESI plan. If an employee with ESI coverage from a large employer enrolls in Medicare, their employer's plan acts as the primary payer and Medicare only provides secondary coverage. Eligible individuals may also defer Part D coverage if they have an existing prescription drug plan that is at least as generous as Part D (so-called "creditable coverage").

"Dual-eligible" Medicare recipients are those who qualify for both Medicaid and Medicare. Currently, about 20 percent of Medicare Part B enrollees are dual eligible. Those enrolled in a state's full Medicaid program (typically those with very low incomes who are enrolled in the Supplemental Security Income Program) have all Medicare premiums and cost-sharing paid by their state's Medicaid program. Medicare Savings Programs provide more limited Medicaid subsidies to recipients with low incomes that do not qualify for a state's full Medicaid program. This includes the Qualified Medicare Beneficiary program, which covers Part A premiums (if any), Part B premiums, and Part A and B cost-sharing requirements for recipients with incomes below 100 percent of the federal poverty line (FPL). Medicare Savings Programs also cover Part B premiums for those with incomes above 100 percent and below 135 percent of the FPL.

Part D's low-income subsidy (LIS) program covers all Part D premiums and cost sharing for those with incomes below 100 percent of poverty. Less generous premium and cost-sharing subsidies are available to individuals with incomes from 100 to 135 percent of the FPL. Unlike Medicaid coverage for dual eligibles, the cost of LIS is generally paid by the federal government but there are "clawback" requirements levied on states for the dual-eligible population.

II. The Medicare at 60 Population

In 2022, there will be an estimated 18.0 million 60- to 64-year-olds without current Medicare coverage.[7] We call this group the "*Medicare at 60* eligible population."

CURRENT INSURANCE STATUS

We divide this group into seven insurance statuses: uninsured, employment-sponsored insurance (ESI) coverage in a firm with fewer than 20 workers, ESI coverage in a firm with more than 20 workers, ESI coverage from a non-current employer (or receiving ESI coverage from outside the home), individual market exchange coverage (ACA)[8], individual market coverage but not on the exchanges, Medicaid (and no private coverage), or those with military health care. Table 1 displays the insurance status of the eligible population.

TABLE 1. CURRENT INSURANCE STATUS OF THE MEDICARE AT 60 POPULATION

	Total	Share
Uninsured	1,785,000	9.9%
Government coverage		
ACA Marketplace Exchange	1,260,000	7.0%
Medicaid	2,635,000	14.7%
Military health care programs	419,000	2.3%
Current employer coverage		
From employer with fewer than 20 employees	932,000	5.2%
From employer with 20 or more employees	7,795,000	43.4%
Former employer coverage	2,894,000	16.1%
Other coverage	233,000	1.3%
TOTAL	**17,952,000**	

Notes: Data reflect expected insurance status in 2022 without Medicare at 60. Some recipients may be covered by multiple insurance types. To avoid overlap, we assign insurance status in the following order: ESI coverage from a current employer, ESI coverage from a former employer, exchange coverage, other coverage, Medicaid coverage, and military health care coverage. Current employer coverage includes federal civilian workers enrolled in the Federal Employee Health Benefits (FEHB) program. Values may not sum to totals due to rounding.

Among the *Medicare at 60* eligible population, we project that 48.6 percent will have current ESI coverage in 2022, 16.1 percent will have coverage through a former employer, 24.0 percent will be enrolled in government health insurance plans, and 9.9 percent will be uninsured.

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[7] *All statistics related to the Medicare at 60 are derived from dataset described in Church and Heil (2019). Generally, these data are from the Annual Social and Economic Supplement (ASEC) of the Current Population Survey, with imputations made for health care expenditures and adjustments made to reflect insurance enrollment figures from the Congressional Budget Office and other administrative sources.*

[8] *We do not include the budget or coverage effects of the American Rescue Plan of 2021, which expanded ACA subsidies in 2021 and 2022.*

MEDICAL SPENDING

We estimate that mean medical expenditures among the eligible population will be $16,900 in 2022 (excluding dental and vision expenditures, which are generally not covered by Medicare).[9] As table 2 reveals, the numbers vary depending on insurance status. Spending among those with ESI coverage from either a current or former employer is about $17,000.[10] Among the uninsured, however, imputed spending is only $6,100. In contrast, projected spending among Medicaid recipients—which include many who qualify due to a disability—is over $26,000.

TABLE 2. IMPUTED 2022 SPENDING PER CAPITA FOR MEDICARE AT 60 POPULATION

	Mean
Uninsured	$6,100
Government coverage	
ACA Marketplace Exchange	$12,300
Medicaid	$26,100
Military health care programs	$17,400
Current employer coverage	
From employer with fewer than 20 employees	$17,300
From employer with 20 or more employees	$16,800
Former employer coverage	$17,500
Other coverage	$17,200
ALL _MEDICARE AT 60_ POPULATION	$16,900

Notes: Authors' calculations based on MEPS-HC 2018 data adjusted for underestimates and per capita medical expenditure growth. Expenditures exclude dental and vision care.

OTHER CHARACTERISTICS

The Medicare at 60 eligible population differs from the current Medicare population in several dimensions that will affect their decision to enroll. These differences will generally mean the newly eligible will be less likely to enroll in Medicare.

The *Medicare at 60* eligible population differs from the current Medicare population in several dimensions that will affect their decision to enroll. These differences will generally mean the newly eligible will be less likely to enroll in Medicare—even if they subsequently face late-enrollment penalties.

First, among the newly eligible population only 17.5 percent report Social Security enrollment. This presents unique enrollment challenges for *Medicare at 60* because automatic Medicare enrollment for Parts A and B are

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[9] *The estimates here are significantly larger than presented in our earlier brief on Medicare at 60 (Chen, Church, and Heil, April 2021). As we noted in the brief, the statistics discussed reflected unadjusted data from the Household Component of the Medical Expenditure Panel Survey Household. The data presented here are adjusted to account for undercounts in reported MEPS-HC expenditures relative to National Health Expenditures Accounts. For more details on this imputation see Bernard, Selden, and Pylypchuk (2015). The data are further increased to account for per capita medical spending increases from 2018 to 2022.*

[10] *The ESI numbers are slightly higher than those reported by Rae, Cubanski, and Damico (2021). Using commercial claims data, they estimate that spending among individuals with large-employer coverage was $12,700 in 2018, or about $15,200 in 2022 after accounting for growth in per capita personal health expenditures (using 2020 NHE projections). This figure is about 10 percent lower than we project. However, their estimates exclude balanced billing and out-of-network expenditures.*

only available to those receiving Social Security benefits. While the Social Security full retirement age will be 66 and 6 months in 2022, over half of 65-year-olds in our sample are expected to collect Social Security benefits and be automatically enrolled in Medicare.

Second, over 15 percent of the *Medicare at 60* population have children under 26 living in their households. This is important since Medicare does not provide coverage to dependents that do not otherwise qualify for coverage.

Some exchange participants may be worse off after transitioning to Medicare…

Policyholders of family plans are unlikely to enroll in Medicare if it results in the loss of coverage for other family members. While some currently eligible Medicare recipients face this dilemma— seven percent of Medicare recipients ages 65 to 69 have a child under 26 living in their household—it would be a far larger issue for the *Medicare at 60* population.

Finally, 17 percent of the newly eligible population would owe income-related premiums. This is far higher than the 7.7 percent share among existing Medicare recipients. This difference is largely due to greater employment among the newly eligible. Nevertheless, over 15 percent of those with former employer insurance coverage would also owe income-related premiums.

III. Design Questions for Medicare at 60

Estimating the future enrollment and budget effects of *Medicare at 60* depends crucially on how the program is designed. In President Biden's May 2021 budget proposal, the administration stated it supports "giving people age 60 and older the option to enroll in the Medicare program with the same premiums and benefits as current beneficiaries."[11] Beyond this statement, however, most details of the proposed expansion remain unknown. We consider several of these policy questions below.

ENROLLMENT REQUIREMENTS

Medicare generally requires individuals to enroll in Medicare at age 65 or face late-enrollment penalties. Only individuals with current-employer health coverage may defer enrollment without facing subsequent penalties. *Medicare at 60* would introduce new administrative and logistical challenges to these rules. As noted above, the newly eligible population will be less likely to enroll than those age 65 even if they face subsequent late-enrollment penalties. The potential that an expansion of Medicare—predicated on improving coverage for 60- to 64-year-olds—would ultimately make some new recipients worse off may encourage policymakers to develop alternative premium rules for the newly eligible. This could include waving late-enrollment penalties until age 65.

ACA MARKETPLACE ELIGIBILITY

Under current ACA rules, only those under 65 are generally eligible for subsidies. In designing *Medicare at 60*, policymakers must decide whether to maintain these subsidies for 60- to-64-year-olds or transition all exchange participants to Medicare. As noted above, 1.3 million individuals that would qualify for *Medicare at 60* are currently covered by a plan on the ACA's marketplaces. Nearly 70 percent of this group currently receive ACA subsidies.

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[11] *OMB (2021).*

Fully transitioning exchange participants to Medicare could improve the risk pool for the exchanges. Nevertheless, some exchange participants may be worse off after transitioning to Medicare, particularly those with incomes above 135 percent of the poverty line, who would be required to pay Part B and Part D premiums.

MEDICAID ELIGIBILITY

Medicaid currently covers approximately 15 percent of the *Medicare at 60* population. Policymakers must decide whether to transition this group to Medicare and whether the newly enrolled would be eligible for Medicaid assistance. Assuming Medicaid eligibility is expanded, this would have limited effects for enrollees (their premiums and cost-sharing would generally still be paid for by the government), but it would shift some health care spending from states to the federal government. The amount of the cost shift depends on a state's Federal Medical Assistance Percentage (FMAP), how an individual currently qualifies for Medicaid (e.g., due to a disability or ACA's Medicaid Expansion), and whether the individual would become a dual eligible.

IV. Previous Analyses of Changing the Medicare Eligibility Age

There are relatively few analyses of lowering Medicare's eligibility age, particularly regarding expected enrollment and budget costs. In fact, most existing analysis with respect to changing the Medicare eligibility age is related to increasing it to 67 or indexing it to longevity. The Congressional Budget Office (CBO), for example, regularly scores "options to reduce the deficit," including increasing the Medicare eligibility age to 67 from 65. These changes would occur by increasing the eligibility age by two or three months every year until the higher age is reached. CBO (2018) estimated that raising the retirement age by two years would reduce Medicare spending (net of offsetting receipts) by about 5 percent over the long term.

Raising the age would reduce the budget deficit and generate savings for Medicare and Social Security, but those savings would be partially offset by the newly ineligible population enrolling in federally subsidized health insurance until they reached the new eligibility age. In other words, federal ACA subsidies, Medicaid spending, and the number of uninsured individuals would all rise.

Other reports generally mirror CBO's analysis.[12] Net savings would go to the government, but many dual-eligible individuals would be shifted entirely onto Medicaid, increasing the amount of spending required by states. The Kaiser Family Foundation (2011) estimated single-year net federal savings of $5.7 billion against $31.1 billion in gross federal savings. The disparity is driven by offsets from higher spending in the ACA exchanges, Medicaid recipiency, and a reduction in Medicare premiums. The report also made estimates about the effects on premiums in affected populations. They estimated that Part B premiums would increase by 3 percent due to the deferred enrollment of relatively healthy, lower-cost beneficiaries, which would raise the average cost across remaining beneficiaries. Conversely, the report estimated that premiums for adults under 65 on the exchanges would rise by three percent, since more would-be Medicare beneficiaries would instead be shifted onto the exchanges.

This naturally suggests that the opposite would be true if the eligibility age were lowered; there would be net costs to the federal government, savings to state Medicaid programs, and lower premiums for Medicare recipients (although the latter is beyond the scope of this analysis).

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[12] *For example, see Waidmann and Lawton (2015).*

A recent analysis by Rae, Cox, Amin, and Neuman (2021) calculated how total health spending would change if 60 to 64-year-olds with coverage from a current large employer were shifted onto Medicare. They argue that because Medicare offers lower reimbursement rates for hospitals and providers than private insurers, transitioning this group to Medicare would lower total spending for this group and reduce employer premiums. Nevertheless, the analysis does not address the fact that those covered by current large employers are the insured group least likely to take advantage of *Medicare at 60*.

V. Data and Methods

Our *Medicare at 60* baseline estimate assumes the eligibility age falls to age 60 in January 2022. We assume the newly eligible population will face the same Medicare rules as the existing population. In addition, we assume that those enrolled in state Medicaid programs and the ACA exchanges will switch to Medicare coverage. All new Medicare recipients that would be eligible for Medicaid assistance if they were 65 are assumed eligible for assistance at age 60.

We construct a microsimulation to estimate enrollment, premiums, and medical expenditures for the eligible population. Our model uses microdata projections of healthcare spending, insurance premiums, and insurance statuses through 2031.[13] It also splits up healthcare spending by spending category, type of payer, and part of Medicare. These data are intended to match administrative sources and publicly available projections from the Congressional Budget Office for federal healthcare programs.

Below we provide an overview of the assumptions and the model we use to estimate the proposal. Further modeling details are available in the appendix.

MEDICAL EXPENDITURES UNDER MEDICARE

Projecting new levels of healthcare expenditures requires estimating the level of take-up and the expected spending per new enrollee. Our microdata projections include imputed medical expenditures by spending category (e.g., inpatient care, emergency room care, office visits) and payers (e.g., private insurers, Medicare), conditional on a respondent's current insurance status.[14] Since Medicare and private insurers reimburse healthcare providers at different rates for the same care, we estimate how total healthcare expenditures would change when enrollment status changes. We estimate this Medicare-adjusted spending level by altering a respondent's current spending by each category.[15] We assume no changes in medical utilization from Medicare enrollment (although we make a sensitivity check later in our analysis). We apply these changes to individuals not currently on Medicare or Medicaid. Medicaid reimbursement rates tend to be lower than Medicare. Thus, our assumption that spending by Medicaid recipients will remain constant when enrolled in Medicare means we may be underestimating the fiscal costs of *Medicare at 60*.

We then determine the share of new Medicare-adjusted spending that would be reimbursed by Medicare. We consider two methods of calculating this share. The first is a rules-based approach that would apply known cost-sharing rules in Medicare to each category of medical spending. The second option imputes the share of medical

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[13] *The projections are based on those used in the model outlined in Church and Heil (2019). Original data are based on the 2018 Annual Social and Economic Supplement (ASEC) of Current Population Survey. Medical spending and insurance enrollment are imputed using the 2018 Medical Expenditure Panel Survey's Household Component (MEPS-HC). We use National Health Expenditure data projections, various CBO reports, and Census data to build the projections. For details and assumptions, see Church and Heil (2019).*

[14] *The spending categories are based on MEPS-HC available categories: inpatient, outpatient, office, emergency care, prescription drugs, home health, vision, dental, and other. Payers are out-of-pocket payments, private insurers, Medicaid, Medicare, and other. Spending estimates are not available for skilled nursing facilities, but these expenditures should be a small share of total spending for the Medicare at 60 population.*

[15] *We rely on CMS estimates (Shatto and Clemens, 2018) to determine how much less Medicare pays than private insurers. In 2014, inpatient hospital services were 62 percent of private insurer rates and physician services were reimbursed at 75 percent the rate of private insurers. These changes apply to inpatient, outpatient, emergency care, and office spending categories. All other health spending is assumed to be reimbursed at private insurer rates.*

spending paid for by Medicare by category using MEPS-HC expenditure data of current Medicare recipients (ages 66 and older). Because the imputed spending variables reflect all MEPS-HC spending, including spending not reimbursable by Medicare, the former approach would overstate the share covered by Medicare. Consequently, we use the imputation method. Due to deductibles and other non-linear cost-sharing rules, the share of health spending covered by Medicare varies by the amount of medical spending. Accordingly, when imputing the share of expenditures covered by Medicare, we divide our sample into spending buckets and impute the average Medicare share for each bucket.

We then assign each spending category to the part of Medicare that may cover the expense. Part A spending includes all inpatient expenditures, a portion of home health expenditures,[16] and vision and dental care.[17] Part B spending includes outpatient, emergency, office-based care, home health care services not paid for by Part A, other personal health care expenses, and a portion of prescription drugs expenditures.[18] Part D spending comprises the share of prescription drug expenses not covered by Part B.

For most of the eligible population we rely on the current enrollment behavior of 66- to 70-year-olds to predict enrollment decisions among the newly eligible.

ENROLLMENT BY MEDICARE PART

The *Medicare at 60* eligible population includes 60 to 64-year-olds who are not currently enrolled in Medicare. For most of the eligible population we rely on the current enrollment behavior of 66- to 70-year-olds to predict enrollment decisions among the newly eligible.[19] As the decision to enroll in Medicare will vary depending on particular circumstances, we use several variables to impute enrollment. These include:

- Whether a respondent is currently enrolled in government insurance plan (e.g. Medicaid, ACA, TRICARE).

- Medicare-Medicaid "dual" eligibility: A respondent's poverty level meets eligibility requirements for Medicaid assistance (either through state categorical requirements or the Medicare Savings Program).

- Income-related premium requirements: A respondent's income is above income-related premium thresholds, leading to higher Medicare premiums.[20]

- Employment status: A respondent or their spouse is currently employed by a large employer (20 or more employees) or a small employer (fewer than 20 employees).

- Former employer coverage: A respondent reports coverage from a former employer.

- Social Security recipiency: A respondent receives Social Security benefits.[21]

Medicare enrollees frequently sign up for Part A but not Parts B or D. As a result, we impute enrollment for each part of Medicare separately. We discuss each imputation method below.

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[16] *This is equal to the share of home health expenditures reimbursed by Medicare that are paid by Part A. Data are derived from table MDCR Summary AB 1 of CMS (2021). We assume this share will not change over time.*

[17] *Vision and dental care are rarely covered by Medicare, but MEPS-HC reports a small share of these expenditures is covered by Medicare. These appear to occur in inpatient settings.*

[18] *These are typically drugs administered at a doctor's office or similar setting. We impute the share of prescription drugs covered by Part B by calculating the average difference in expected Part D expenditures and NHE projections for Medicare-reimbursed prescription drugs. From 2019 to 2028, approximately 25 percent of Medicare-reimbursed prescription drugs will not be paid by Part D.*

[19] *We exclude 65-year-olds in our sample as they may not have been eligible or enrolled for the entire year.*

[20] *Since income-related premium requirements are based on tax returns from two years earlier, we deflate the respondent's income using wage growth estimates from CBO.*

[21] *MedPAC (2019) suggests that Social Security recipiency plays a growing role in enrollment decisions because individuals with Social Security are notified of Medicare eligibility and are automatically enrolled in Parts A and B at age 65.*

PART A

We assume all respondents currently enrolled in a government insurance program will be enrolled in Medicare Part A.[22] For the remaining respondents, we randomly assign Part A enrollment such that the share enrolling matches the share of the 66-to-70 population enrolled, conditional on former-employer coverage, Medicare-Medicaid eligibility, employment status, and Social Security recipiency.

PART B

Part B enrollment is limited to those with imputed Part A enrollment. This assumption is consistent with administrative data that shows that less than 1 percent of Medicare enrollees did not participate in Part A in 2019 (presumably, those who do not qualify for premium-free Part A).[23]

For respondents with coverage from a current employer, the decision to enroll is based on whether their total expected healthcare spending (including tax-adjusted premiums) would be lower on Medicare than in their current private plan. Importantly, this assumes that the newly eligible *Medicare at 60* population

Medicare recipients may qualify for Medicaid subsidies to cover premiums and cost-sharing.

is otherwise indifferent between Medicare and their existing private plans. We provide further details on this imputation method in the appendix.

For those without current-employer coverage, we model Part B enrollment by randomly assigning enrollment such that the share of Part A recipients enrolling in Part B matches the share of 66- to 70-year-olds with Part A coverage that enroll in Part B. We divide the sample by former-employer coverage, Medicare-Medicaid eligibility, employment status, and whether the respondent would pay income-related premiums.

PART D

We limit Part D coverage to those with imputed Part B coverage. Similar to our Part B methodology for those without coverage from a current employer, we impute enrollment by randomly assigning enrollment such that the share of Part B *Medicare at 60* recipients enrolling in Part D matches the share of 66- to 70-year-olds who are Part B recipients with Part D coverage. We divide the sample by former-employer coverage, Medicare-Medicaid eligibility, employment status, and whether the respondent would pay income-related premiums.

MEDICARE-MEDICAID DUAL ELIGIBILITY ENROLLMENT

Medicare recipients may qualify for Medicaid subsidies to cover premiums and cost-sharing. These dual-eligible populations often qualify by meeting certain income requirements. There are multiple programs that may qualify a recipient for Medicaid assistance. Some recipients with particularly low incomes qualify for a state's full Medicaid program. Others with higher incomes may qualify through the Medicare Savings Program (MSP) that offers more limited benefits.[24] There are three income-based tiers within MSP:

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1. Qualified Medicare Beneficiary (QMB) Program: Under the QMB program, Medicaid pays for all premiums and Medicare cost sharing. Individuals must have incomes below 100 percent of the federal poverty line (FPL).

2. Specified Low-Income Medicare Beneficiary (SLMB) Program: SLMB pays for Medicare premiums and is available to individuals with incomes between 100 to 120 percent of the FPL.

3. Qualifying Individual (QI) Program: The QI program also covers Medicare premiums and is eligible to individuals with incomes between 120 percent and 135 percent of the FPL. Subsidies are limited to available funds and may not be available to all participants.

Survey data reveal that not all who qualify for Medicaid assistance are enrolled, and enrollment rates vary considerably depending on whether a recipient qualifies for full Medicaid or one of the MSP programs. As such, we impute dual-eligible enrollment using current enrollment by the existing Medicare population ages 66 to 70, conditional on which Medicaid eligibility standard a recipient meets. We further assume that respondents who currently report Medicaid eligibility would continue to qualify for the state's full Medicaid program. This assumption would likely require legislative changes to expand Medicaid eligibility to this group.

MEDICARE ADVANTAGE (PART C)

We complete a similar imputation procedure used for Part D to assign enrollment in Medicare Advantage. Enrollment in part C may affect recipients' cost-sharing, required premiums, or services covered. Nevertheless, the program's rules generally mean that Medicare spending per enrollee is similar regardless of Medicare Advantage enrollment.[25] Thus, the Medicare Advantage imputation has little effect on the budget estimates. We discuss this further when we consider utilization changes.

SUPPLEMENTAL MEDICARE PLANS

The majority of Medicare recipients have secondary insurance plans that cover a portion of Medicare cost-sharing rules. This includes dual eligibles, those with coverage from a current or former employer, and those who purchase Medigap coverage or other supplemental plans. While supplemental plans will not directly affect Medicare budget costs, they have an indirect effect by altering medical utilization rates. We impute whether individuals purchase supplemental plans following similar methodology used to impute Part C and Part D status. We also assume respondents that currently report coverage from a former employer or have military health care will have supplemental plans.

VI. Estimates of Enrollment and Cost

Using our microsimulation, we estimate enrollment and costs for *Medicare at 60* by year over the next 10 years (2022 to 2031).[26] We estimate 13.8 million individuals would enroll in 2022. The proposal would increase the 2022 deficit by $32.2 billion and the ten-year deficit by $393.9 billion.[27] Net outlays would increase by slightly more but would be offset by about $2 billion per year in increased federal tax revenue. Below we provide details of the relevant statistics.

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[25] *Exact comparisons between Medicare spending for Medicare Advantage (MA) enrollees and those covered under traditional fee-for-service plans is subject to considerable debate. MedPAC (2021) estimates that MA plans cost Medicare slightly more per enrollee than traditional FFS plans. America's Health Insurance Plan (2021), however, argues MA enrollees cost less on average than those with FFS coverage from both Part A and Part B.*

[26] *Each year is estimated independently of other years.*

[27] *All numbers are in nominal dollars.*

ENROLLMENT

Among the 18.0 million individuals eligible for *Medicare at 60*, 13.8 million would enroll in Part A, 8.0 million would enroll in Part B, and 6.5 million in Part D.[28] Reflecting absolute declines in the eligible population, the number of enrollees of *Medicare at 60* would fall from 13.8 million in 2022 to 12.5 million in 2031. Table 3 divides this enrollment by the eligible population's current insurance coverage.

TABLE 3. CURRENT INSURANCE STATUS OF THE MEDICARE AT 60 POPULATION

	Eligible Population	Part A	Part B	Part D
Uninsured	1.8	1.4	1.3	1.0
Government coverage				
ACA Marketplace Exchange	1.3	1.3	1.1	0.8
Medicaid	2.6	2.6	2.6	2.2
Military health care programs	0.4	0.4	0.4	0.3
Current employer coverage				
From employer with fewer than 20 employees	0.9	0.5	0.3	0.2
From employer with 20 or more employees	7.8	5.0	0.2	0.1
Former employer coverage	2.9	2.4	2.1	1.8
Other coverage	0.2	0.1	0.1	0.1
TOTAL	**18.0**	**13.8**	**8.0**	**6.5**

Notes: Authors' calculations. Values may not sum to totals due to rounding.

We estimate few individuals (only about two percent) with coverage from a current large employer would forego their ESI coverage and enroll in Parts B or D. Those with large employer coverage that enroll in only Part A are expected to maintain their private coverage and have Medicare act as only a secondary payer. Those with current small employer coverage would have higher take-up rates (28 percent would elect to enroll in Part B and 18 percent in Part D), but the majority would maintain their current coverage. These numbers may be higher if employers encourage or require employees to enroll in Medicare.
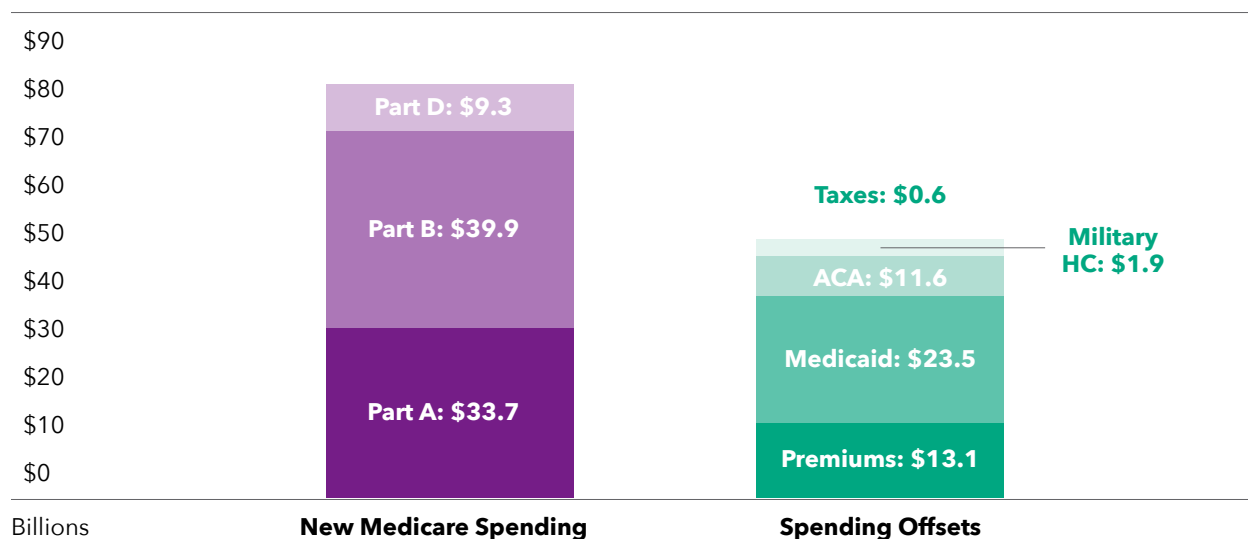
Our model predicts a portion of those currently uninsured would not enroll in Medicare. This is consistent with take-up rates for the currently eligible Medicare population. As discussed above, the lack of Social Security recipiency may delay enrollment among some participants. Furthermore, the uninsured may defer enrollment to avoid paying the required premiums (including income-related premiums).

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[28] *The numbers are inclusive of those that would enroll in Medicare Advantage plans.*

BUDGET EFFECTS

The 2022 deficit would rise by $32.2 billion. Figure 1 shows the particular changes in the budget.

FIGURE 1. 2022 MEDICARE AT 60 SPENDING AND RELATED OFFSETS

Chart — vertical axis "Billions" scaled from $0 to $90.

New Medicare Spending (stacked bar):
- Part A: $33.7
- Part B: $39.9
- Part D: $9.3

Spending Offsets (stacked bar):
- Premiums: $13.1
- Medicaid: $23.5
- ACA: $11.6
- Taxes: $0.6
- Military HC: $1.9

Medicare at 60 would increase gross Medicare outlays (before accounting for premiums) by $82.9 billion in 2022. Part A spending would rise by $33.7 billion, part B spending by $39.9 billion, and part D by $9.3 billion. *Medicare at 60* enrollees (or state Medicaid programs) would pay $11.1 in part B premiums and $2.0 billion in part D premiums, thus net Medicare spending (after accounting for premiums) would rise by $69.8 billion in 2022.

The new Medicare expenditures would be partially offset by tax revenue increases and reductions in federal outlays for Medicaid, the Affordable Care Act, and military health care programs. Federal Medicaid expenditures would fall by $23.5 billion. Outlays related to the Affordable Care Act would fall by $10.2 billion and revenue would rise by $1.4 billion as fewer people would claim ACA premium tax credits. Military health care outlays would fall by $1.9 billion. Those that forego current employer coverage would see an increase in their taxable compensation resulting in increased tax revenue. These gains, however, are small (approximately $600 million in 2022) because relatively few individuals with current ESI coverage are expected to enroll.

The changes in Medicaid spending merit further discussion. Medicaid spending on the newly dual-eligible population would be $26.0 billion in 2022; approximately 57 percent of this spending would be covered by the federal government.[29] Nevertheless, Medicare would become the primary payer for 2.6 million current Medicaid recipients. This would result in far fewer Medicaid expenditures overall. Without *Medicare at 60*, total Medicaid expenditures for this group would be $62.6 billion, with the federal government covering an average of 61 percent. Thus, *Medicare at 60* would lower total Medicaid spending by $36.6 billion, including $13.1 billion of savings for state governments.[30]

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[29] *The assumed federal share is based on states' FMAPs as of January 2020 (i.e. before Congress enacted temporary FMAP increases in various COVID-related legislation).*

[30] *Our estimates do not include Part D "claw-back" payments. Originally, these payments were intended to ensure state spending on drug coverage for dual eligibles remained the same after the introduction of Part D. Because this requirement did not envision subsequent expansions to the dual-eligible population, extending the requirements to newly created dual eligibles would represent a departure from the claw-back's original purpose. If the claw-back provisions were extended to the Medicare at 60 population, the estimated 2022 federal deficit effect would fall by $2.4 billion and the ten-year deficit estimate would fall by $29.1 billion. The projected savings to state Medicaid programs would decrease by equal amounts.*

Over time, the impact on the federal budget from *Medicare at 60* would grow. As shown in figure 3, federal deficits would rise by $47.9 billion in 2031. In total, 10-year federal deficits would rise by $393.9 billion. The impact on Medicare spending would be even larger. Total Medicare spending would rise by $995 billion over 10 years.

FIGURE 2. DEFICIT EFFECTS OF MEDICARE AT 60

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Billions	$32.2	$33.3	$35.1	$36.6	$38.5	$40.2	$41.6	$43.3	$45.2	$47.9

THE HOSPITAL INSURANCE TRUST FUND AND POTENTIAL TAX INCREASES

The increase in Part A spending would hasten the insolvency data of the Hospital Insurance (HI) Trust Fund without corresponding offsets. Under the current baseline, CBO (2021) projects the HI trust fund will be insolvent in 2026. We estimate that, absent alternative financing options, *Medicare at 60* would push the insolvency date into fiscal year 2024.

To avoid weakening the trust fund, the Biden administration has stated that the expansion will have "financing separate from the Medicare Trust Fund."[31] This implies that it plans to use general fund revenue to offset the spending increase. This approach, however, would represent a fundamental shift in the HI program. Since its enactment, the program's benefits have been viewed as an "earned right" because they are paid for by dedicated HI payroll taxes. Severing, or at least weakening, the tie between the HI payroll taxes and the benefits provided is thus not merely an accounting change.

> **Over time, the impact on the federal budget from Medicare at 60 would grow…**

The alternative to insolvency or general fund transfers is to increase the HI payroll tax. During the first 20 years of the program's history, the HI tax was regularly increased, but since 1986, the rate has been set at 2.9 percent (split evenly between employee and employer). Since then, Congress has modified the tax mechanism to raise revenue. First, in 1994 Congress removed the cap on earnings subject to the HI tax. Second, the Affordable Care Act (ACA) added an additional Medicare tax of 0.9 percent on earnings above certain thresholds ($200,000 for single filers, $250,000 for joint filers).

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[31] *OMB (2021).*

We consider two HI tax increases to finance *Medicare at 60* Part A expenditures. The first would increase the additional Medicare tax. This may be a politically attractive option since it would only apply to tax filers with at least $200,000 in earnings. The rate needed to finance the new spending would be substantial: we estimate that the rate would need to rise by 285 percent in 2022. The new additional Medicare tax rate would be 3.5 percent in addition to the 2.9 percent for the standard Medicare payroll tax. Alternatively, Congress could raise the standard HI tax, which would impact many more Americans. In 2022, the tax rate would need to be 3.25 percent—a 12 percent increase in the current rate.

> **Regardless of how it is financed, Medicare at 60 will ultimately exacerbate the looming policy challenge facing Congress.**

Compounding these calculations is the current state of the trust fund. As noted above, the HI trust fund is already nearing insolvency. Future tax increases, benefit reductions, or general fund transfers will be needed. Thus, regardless of how it is financed, *Medicare at 60* will ultimately exacerbate the looming policy challenge facing Congress.

LIMITATIONS

There are some model limitations that preclude fully accounting for other changes that might affect the federal budget. We summarize these potential issues below.

First, we assume Part B and D premiums will not change in light of the new population risk pool. Since *Medicare at 60* enrollees would have lower mean Medicare costs than the average Medicare recipients there would be a small effect on average Medicare premiums.

Second, we do not account for late-enrollment penalties that the newly eligible may incur. As discussed above, there are several reasons to suspect that take-up rates among the newly eligible will be far lower than the existing Medicare population. This would include many who would face late-enrollment penalties under current Medicare rules. If these penalties are not waived there would be some savings to the Medicare program in later years.

Third, the estimates do not account for potential savings to the Federal Employees Health Benefit program. Medicare would become the primary payer for federal civilian retirees who enroll. Further, there may be some cost savings from current federal workers who choose to enroll in Medicare. State budgets may also benefit if state government retirees enroll.

Finally, the model does not account for potential savings to the ACA from improved risk pools. The ACA community rating rules limit the variation in premiums by age. Thus, average premiums on the exchanges could fall if insurers no longer have to provide coverage for 60- to 64-year-olds. This could result in even larger reductions in ACA subsidies than estimated above. Similarly, we do not adjust private insurance premiums to reflect changes in private market risk pools.

VII. Sensitivity Analysis

We consider three alternative assumptions to the above analysis: changes in utilization, reimbursement rate assumptions, and a different eligibility age.

UTILIZATION CHANGES

Our primary analysis assumes no change in healthcare utilization. There is considerable evidence, however, that Medicare enrollment encourages increased utilization and medical spending. Card, Dobkin, and Maestas (2008), for example, find Medicare permanently increases a recipient's utilization of inpatient care. This is consistent with several studies that show that consumers alter their medical consumption due to changes in the price of medicine—often measured by the share of their total spending paid out of pocket.[32]

We estimate changes in out-of-pocket (OOP) expenditures by imputing supplemental coverage, enrollment in Medicare Advantage, and dual eligibility, which lowers out-of-pocket expenditures. About 90 percent of Part B recipients would either be enrolled in Medicare Advantage, have a supplemental plan, or receive Medicaid assistance.[33] We then use spending estimates from the existing Medicare population (ages 66 to 70) to impute the share of total expenditures paid out-of-pocket for those with and without supplemental coverage who enroll in Part B. Current Medicaid recipients are excluded from the analysis as they already have few cost-sharing requirements. Reflecting the fact that recipients may respond differently to a price change for Part A than for Part B or D, we divide the spending by Medicare part.[34]

The share of Part A related spending that would be paid out-of-pocket would slightly increase (14 percent). Meanwhile, the OOP share would fall by 63 percent for Part B related spending and 51 percent for Part D.[35] While these changes may seem large, they have limited effects on our budget estimates. We estimate that accounting for utilization changes would increase our Part B spending estimate by 5 percent ($2 billion) and our Part D spending by 12 percent ($1 billion). Part A spending estimates are not significantly affected.

REIMBURSEMENT RATE CHANGES

A common argument for various Medicare expansions is the potential savings that may occur due to Medicare's relatively lower reimbursement rates. As noted above, Medicare reimburses hospital and providers at rates far below those paid by private insurers. Schwartz et al. (2021) estimated that if all private insurers reimbursed at Medicare's rate, their spending would fall by $351 billion or 41 percent. Rae, Cubanski, and Damico (2021) estimate that average healthcare spending per enrollees aged 60 to 64 in large-group employer plans is 38 percent higher than average spending for traditional Medicare beneficiaries aged 65 to 69.

On the other hand, doctors, hospitals, and other healthcare providers may object to lower reimbursement rates for *Medicare at 60* enrollees. If reimbursement rates were kept at private levels (and assuming no changes in utilization), the single-year cost of *Medicare at 60* would rise from $32.2 billion to $43.6 billion—an increase of 35.4 percent. And the ten-year increase in the deficit would rise from $393.9 billion to $528.8 billion. Medicare outlays (net of premiums) in 2022 would rise from $69.8 billion to $81.5 billion.

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[32] *The seminal work is the Rand Health Insurance Experiment. For discussion of the elasticities derived from the experiment, see Aron-Dine, Einav, and Finkelstein (2013).*

[33] *This is similar to the existing Medicare population. MedPAC (2020) estimated that 11.2 percent of Part B recipients had no supplemental coverage (including from Medicare Advantage or Medicaid) in 2017.*

[34] *We use the estimated arc elasticities reported in Garret et al. (2019). They estimate an elasticity of -0.1 for Part A spending, -0.2 for Part B, and -0.3 for Part D.*

[35] *To be consistent with the assumed arc elasticities, the percent changes are based on the midpoint of the old and new shares.*

[36] *See Cogan (2018).*

LOWERING THE ELIGIBILITY AGE TO 55

The history of federal entitlement eligibility is generally one of expansion.[36] Once Medicare's eligibility age is lowered to 60, pressure to lower the age further would increase. Such incremental changes could be an attractive alternative to supporters of "Medicare for All," offering a more politically viable approach. Here, we consider the costs of reducing the Medicare eligibility age to 55.

Large reductions in the Medicare eligibility age would significantly disrupt the health insurance market.

We project that lowering the Medicare eligibility age to 55 would increase the eligible population to 37.8 million (from 18.0 million at age 60), with enrollment reaching a total of 28.3 million individuals. The distribution of take-up by part would parallel the *Medicare at 60* take-up rates projected in this paper.

Compared to the current baseline, federal deficits would rise by $58.0 billion in 2022 and by $706.8 billion over the ten-year period from 2022 to 2031. Gross Medicare outlays would rise by $154.2 billion in 2022 and $1.86 trillion over ten years. After accounting for premiums paid, net Medicare outlays would rise by $129.4 billion and $1.6 trillion respectively.

While these numbers show the direction and potential magnitude of further reducing the Medicare eligibility age, they should be viewed with caution. Large reductions in the Medicare eligibility age would significantly disrupt the health insurance market. It would lead to large shifts in the behavior of healthcare providers and insurers that we have not considered here.

VIII. Conclusion

Medicare at 60 would represent a significant change in health coverage for the eligible population. The focus of this paper has been on how coverage would change and how this would affect the federal budget. There are several other potential effects that have not been explored in depth.

First, lowering the eligibility age may affect labor markets if it induces some individuals to retire earlier. This could result in lower tax revenue, further straining the federal budget. A recipient's decision to retire early may also increase Social Security outlays—at least temporarily—if recipients choose to enroll sooner.

Second, we have not considered the distributional consequences of the new Medicare spending. As noted in section VI, a portion of the new federal spending would benefit state governments that would experience a decline in Medicaid spending. Similar benefits could accrue to former employer plans that would no longer act as the primary payer. *Medicare at 60* recipients covered by these plans would now owe Medicare premiums while seeing few new benefits from their Medicare enrollment. In many cases, these individuals would be required to enroll in Medicare or risk losing their retiree health benefits. For example, retirees covered by CALPERS, California's public pension system, are required to enroll in Medicare when they turn 65 in order to maintain their health benefits.

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[36] *See Cogan (2018).*

Medicare at 60 may also harm some ACA recipients. For example, a single individual with income at 200 percent of FPL must contribute $140 per month for an ACA benchmark plan.[37] In comparison, Part B premiums are currently $148.50 and the Part D premium is $33.06. Making matters worse, after accounting for ACA's cost-sharing reductions, Medicare's cost-sharing requirements would likely be higher for this individual. If multiple family members are enrolled on the ACA, the net effect to the family from one member shifting to Medicare would be even worse since the family's required ACA contribution would remain the same.

Finally, *Medicare at 60* would negatively affect hospitals and medical providers by reducing the reimbursement rates they receive. While shifting more patients to Medicare's reimbursements rates is often suggested as a way to reduce costs, this blunt cost-cutting method would significantly disrupt health care systems. There are already concerns that low reimbursement rates may discourage providers from accepting new Medicare patients. Likewise, rural-area hospitals and providers regularly object to Medicare's rate structure. Moving millions more to these low rates through *Medicare at 60* will further aggravate these issues and may result in provider shortages for the currently Medicare-eligible population.

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[37] *The current required contribution is even lower due to temporary changes in the American Rescue Plan for 2021 and 2022.*

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APPENDIX

ENROLLMENT IN PART B FOR THOSE WITH CURRENT-EMPLOYER COVERAGE

In modeling Part B enrollment, we assume that those with current employer coverage will only switch to Medicare if their total medical costs would fall. Total health spending under a respondent's current private plan is equal to the respondent's current expenditures not covered by private insurance plus the expected increase in compensation if a respondent foregoes private insurance. The expected increase in compensation is effectively the respondent's cost of maintaining their private health insurance plan. It reflects the fact that the employee will receive increased taxable compensation if they opt for Medicare coverage in lieu of their current plan.

The expected increase in taxable compensation depends on the size of the respondent's employer. For those with coverage from a large employer, we assume the tax-adjusted premium is equal to the employee's premium share multiplied by one minus the respondent's marginal tax rate (including federal income taxes, FICA taxes, and state income taxes). Since large employers are generally prohibited from altering coverage options for Medicare-eligible workers, we assume that the employees will not experience any increase in wages and salaries from deferring private coverage.

In contrast, those with coverage from a small employer could see their wages or salaries rise if they defer their employer coverage. Thus, for the latter population, their expected change in compensation is equal to their total premium costs multiplied by one minus their marginal tax rate. These assumptions imply that those employed by small employers are more likely to enroll in Medicare. This is consistent with existing Part B enrollment patterns.[38]

We divide the sample into those with self-only plans and family plans. For self-only plans, we assign them to Part B enrollment if a respondent's total health spending (including premiums) would be lower if enrolled in Medicare than the total cost of their private coverage. The calculation for total health spending if enrolled on Medicare is equal to the respondent's expected Part B premium (including income-related premiums) plus their expected spending (adjusted to reflect Medicare's reimbursement rates) that would not be covered by Medicare.[39]

Similar calculations are performed for those with family plans. The enrollment decision, however, becomes more complicated because it must account for the effect that it would have on family members covered by existing coverage. We assume the decision to enroll is made jointly among all eligible family members. The cost of maintaining private coverage is equal to the expected increase in compensation if *Medicare at 60* eligible family members forego private insurance plus the family's total current health expenditures not covered by their private plan. The total cost of enrolling in Medicare is equal to the family's expected Medicare premiums (for all eligible members) plus the family's remaining health expenditures not covered by Medicare.

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[38] We review these figures in Chen, Church, and Heil (April 2021).

[39] In some cases, the decision to enroll in Part B may be influenced by the Part D benefit. We thus complete this procedure twice. First, without any assumed Part D coverage (i.e., no Part D premiums but higher out-of- pocket drug costs) and then with assumed Part D coverage.

The family's remaining health expenditures include the eligible family members' non-Medicare covered costs (adjusted for lower Medicare reimbursement rates), any remaining private premiums to cover ineligible family members (adjusted for the tax considerations and employer-size dynamics discussed above), and any health expenditures not covered by the private plan for ineligible members. If the plan's policyholder is eligible for *Medicare at 60*, total health costs for ineligible family members are set to their expected health expenditures.[40] If the plan's policyholder is ineligible for *Medicare at 60*, all ineligible members will remain on the private insurance with adjusted premiums to reflect potential changes in plan type.[41]

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[40] *This might lead us to underestimate enrollment insofar as ineligible family members may enroll in alternative insurance coverage offered by their employers or government insurance options.*

[41] *We assume no change in premiums if three or more family members remain on the private plan. If only one member remains on the private plan, we impute a new premium equal to the cost of a self-only plan. If two members remain on the private plan, they are assigned an imputed premium for a self-plus-one plan (set at the midpoint between the family and self-only plans).*