MEDICARE OUT-OF-POCKET COSTS: CAN PRIVATE SAVINGS INCENTIVES SOLVE THE PROBLEM?

Eliot Fishman and Suzanne Tamang
Metropolitan Jewish Health System

Dennis Shea
Pennsylvania State University

March 2008

ABSTRACT: Medicare's benefit structure leaves beneficiaries with significant out-of-pocket costs, particularly if they lack supplemental coverage; such costs disproportionately affect low-income, old, and chronically ill beneficiaries. Supplemental coverage can offset Medicare's cost-sharing but is itself a significant expense. This report analyzes the extent to which incentives for private saving could relieve the burden of post-retirement health care costs. Focusing on low-income participants as part of a broader analysis of families of varying income levels, the analysis projects the savings potential for individuals if they could save a modest percentage of their income tax free and receive a rate of return equivalent to that in a basket of U.S. Treasury bonds. The authors conclude that enhanced savings offer only a partial solution to this problem for low-income seniors, and that a strong fiscal case can be made for partly or totally limiting such tax incentives to low-income and lower-middle-income individuals.

Support for this research was provided by The Commonwealth Fund. The views presented here are those of the authors and not necessarily those of The Commonwealth Fund or its directors, officers, or staff. This and other Fund publications are available online at www.commonwealthfund.org. To learn more about new publications when they become available, visit the Fund's Web site and register to receive e-mail alerts. Commonwealth Fund pub. no. 1113.

CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABOUT THE AUTHORS

Eliot Fishman, Ph.D., is vice president for research and health policy at Metropolitan Jewish Health System. Formerly, Dr. Fishman was a senior health policy analyst with the law firm Manatt, Phelps & Phillips LLP, where he specialized in state health issues. He is the author of *Running in Place: How the Medicaid Model Falls Short and What to Do About It* (Century Foundation Press, 2002) and has written for the *Washington Post* and *Health Affairs*, among other publications. Dr. Fishman earned his doctorate in 1999 from Yale University. He can be contacted at efishman@mjhs.org.

Suzanne Tamang, M.S., is a research associate at the Department of Research at Metropolitan Jewish Health System. Her research interests include health information technology, quality improvement and long-term care policy. Ms. Tamang received her master of science from Brooklyn College and is a doctoral student in computer science at the City University of New York. Ms. Tamang can be contacted at stamang@mjhs.org.

Dennis Shea, Ph.D., is professor and chair of the Department of Health Policy and Administration at Pennsylvania State University. His primary field of study is in health economics and the economics of aging. The focus of his research includes inequality in health and economic resources among the elderly, health insurance coverage of older persons, and economic and financing policy issues in long-term care and mental health care. His most recent research considers Medicare prescription drug coverage, inequality in health and well-being, and aging and mental health policy. Previously, he held associate professorships at the College of Health and Human Development and was a senior research associate with the Center for Health Policy Research. He received his doctorate in economics from Rutgers University. He can be contacted at dshea@psu.edu.

ACKNOWLEDGMENTS

The authors gratefully acknowledge the contributions of Daniel Zenilman for his research assistance, and support developing the final stages of the report.

We thank members of The Commonwealth Fund for their review, thoughtful comments, and assistance with editing, production, and dissemination. We particularly thank the following staff, present and past, of the Fund's Program on Medicare's Future: Stuart Guterman, senior project director; Barbara S. Cooper, former director; Michelle Serber, former program assistant; and Sophie Kasimow, program assistant. Finally, we thank Chris Hollander, the Fund's associate communications director.

Editorial support was provided by Paul Berk.

EXECUTIVE SUMMARY

Medicare's benefit structure leaves beneficiaries with significant out-of-pocket costs, particularly if they lack supplemental coverage. Out-of-pocket costs disproportionately affect low-income, old, and chronically ill Medicare beneficiaries: in 2003, the elderly with incomes under 135 percent of federal poverty level (FPL) spent one-third of their income on uncovered medical care, on average. Individuals of all incomes with fair or poor health status or age 85 and older spent almost 30 percent. (The 2007 Federal Poverty Level is $10,787 for a nonelderly adult and $9,944 for an elderly adult.) Although Medicare added an outpatient prescription drug benefit in 2006, poor and sick beneficiaries still face a substantial cost burden.

Supplemental coverage is a way to offset Medicare's cost-sharing requirements, but it is itself typically a significant expense. The poor, ill, and "oldest old"—that is, the same populations that face the highest out-of-pocket expenses—have particularly poor access to Medicare supplemental coverage. Low-income individuals disproportionately lack retiree benefits from former employers and typically cannot afford Medigap premiums, while the oldest old and those with chronic conditions will often be turned down for affordable Medigap coverage and may hesitate to enroll in managed care plans because of their more acute need for access to specific providers. Lack of supplemental coverage is associated with reduced access to care: beneficiaries without such coverage are less likely to have a physician as a regular source of care, more likely to delay care because of cost, and less likely to receive standard preventive care. Uncovered long-term care costs also have significant negative effects on many Medicare beneficiaries and their families. The great majority of Medicare beneficiaries must rely on their own income and savings to pay for long-term in-home assistance. Nursing home costs are also a major medical burden for Medicare beneficiaries. While Medicaid guarantees virtually universal access to nursing home care, Medicaid eligibility imposes catastrophic financial costs on many Medicare beneficiaries.

As a possible solution to the out-of-pocket cost burden on the elderly, incentives for private saving have considerable appeal. Recent proposals from both parties in related policy areas have centered on tax incentives for saving during working-age years, including Health Savings Accounts and subsidized or tax-advantaged long-term care insurance. Private savings may seem to be the most realistic path for doing something to address the growing problem of post-retirement medical expenses, particularly given competing budget priorities such as the Medicare drug benefit and the renewed focus on the nonelderly uninsured.

This report analyzes the extent to which incentives to save could offer significant relief of post-retirement healthcare costs. We analyze this with a particular focus on low-income participants as part of a broader analysis of families of varying income levels. We include projections of savings potential for individuals of varying income levels if they could save a modest percentage of their income tax free and receive a rate of return equivalent to that in a basket of U.S. Treasury bonds. (We provide the main findings from this analysis in the body of the report as well as more detailed charts and tables in Appendices A and B.) We also add an analysis of the potential impact of a moderately sized government match for low-income beneficiaries, using the Earned Income Tax Credit as a rough guide for potential subsidy levels. We look at current IRA/401(k) participation by income level both to project possible participation rates in an incentivized savings program and to examine the impact of matching subsidies on low-income participation.

Several key analytical conclusions emerge from this discussion.

- **The problem of uncovered out-of-pocket costs is predominantly a problem of low-income individuals.** Low-income seniors actually have lower medical costs on average than other seniors, but they have far fewer cash and insurance resources to apply to them. Medicare beneficiaries with an income less than 135 percent FPL spend 33 percent of their annual income on out-of-pocket health care costs, on average, while those above 200 percent FPL spend only 12 percent.

- **Enhanced savings offer only a partial solution to this problem for low-income seniors.** Even with a matching subsidy, low-income individuals who saved 1 percent of their income tax free from age 50 on would on average save enough to pay for about a year of Medigap for poor and near-poor seniors (incomes under 150% FPL), and three years of Medigap for lower-middle-income seniors. Because their preretirement incomes are low on average, helping low-income individuals to save will not fully address the problem of out-of pocket medical costs for the low-income elderly. Nevertheless, particularly given the low savings levels of the poor and near poor, savings on the order of 1 percent of income could make a real difference in relative terms.

- **A policy allowing near-retirees to save for post-retirement medical expenses tax free is likely to appeal to both low-income and higher-income individuals.** Low-income and lower-middle-income populations do participate in appreciable numbers in tax-advantaged retirement savings in their 50s and 60s, while higher

income populations participate in these programs at higher rates. If patterns from other savings incentives programs would hold for a similar program targeted at medical costs, between 20 percent and 40 percent of low-income people would participate, with participation on the higher end of that range among those with incomes between 150 percent and 300 percent FPL. There is evidence that a public matching subsidy would be a critical element to attracting low-income participation. Participation rates for individuals with average and higher incomes are likely to be 50 percent or more.

- **There is a strong fiscal case for partly or totally limiting any tax incentives for post-retirement medical costs to low-income and lower-middle-income individuals.** The policy problem of uncovered post-retirement medical costs is far more acute in this population. A universal option to save a percentage of income for post-retirement medical costs tax free would cost $18 in lost tax revenue for every dollar saved. In contrast, allowing only those with incomes of 300 percent FPL or less to shelter savings from taxation would reduce the tax revenue loss to the federal budget to $8 of every $100 saved. A more modest form of means testing would allow tax incentives to apply almost universally but still reduce costs: applying the Alternative Minimum Tax (AMT) to income saved and denying eligibility for the highest 3 percent of earners who do not pay the AMT would reduce the percentage of total income potentially subject to sheltering by about 38 percent, and would reduce budgetary impacts by close to 50 percent.

MEDICARE OUT-OF-POCKET COSTS: CAN PRIVATE SAVINGS INCENTIVES SOLVE THE PROBLEM?

Background

Out-of-pocket medical costs for Medicare beneficiaries are significant, often disproportionately hurting low-income beneficiaries. In 2003, beneficiaries with incomes under 135 percent of the federal poverty level (FPL) spent one-third of their income on uncovered medical care, on average, while beneficiaries of all incomes with fair or poor health status or age 85 and older spent almost 30 percent.[1] (The 2007 Federal Poverty Level is $10,787 for a nonelderly adult and $9,944 for an elderly adult.) Although Medicare added an outpatient prescription drug benefit in 2006, poor and sick beneficiaries still face a substantial cost burden.[2]

Medicare beneficiaries have access, in principle, to multiple sources of supplemental or "wraparound" coverage for these costs: they may receive retiree benefits from a former employer; they may enroll in a Medicare Advantage plan (formerly known as Medicare managed care plans); or they may pay for a stand-alone insurance product known as Medigap. While supplemental coverage can be a means to reduce the impact of out-of-pocket costs, the poor, ill, and "oldest old" populations—that is, the same populations that face the highest out-of-pocket expenses—have particularly poor access to Medicare supplemental coverage. Low-income individuals disproportionately lack retiree benefits from former employers and typically cannot afford Medigap premiums.[3] Medigap insurance is sold to beneficiaries at varying premiums through private insurance companies. The oldest old and those with chronic conditions will often be turned down for affordable Medigap coverage and may hesitate to enroll in managed care plans because of their more acute need for access to specific providers.[4] Lack of supplemental coverage is associated with reduced access to care using several measures, including whether beneficiaries have a physician as a regular source of care, whether they are likely to delay care because of cost, and whether they receive standard preventive care measures.[5]

Uncovered long-term care costs also have significant negative effects on many Medicare beneficiaries and their families. Following implementation of prospective payment in Medicare's Home Health benefit, long-term paid home care is predominantly financed either with Medicaid and/or with private, out-of-pocket payment.[6] With fewer than 20 percent of Medicare's enrollees covered by Medicaid, the great majority of Medicare beneficiaries must rely on their own income and savings to pay for in-home assistance. Nursing home costs are also a major medical burden. While Medicaid guarantees virtually universal access to nursing home care, Medicaid eligibility imposes

catastrophic financial costs on many Medicare beneficiaries. Fifty percent of nursing home residents once had financial resources that they subsequently lost trying to "spend down" to become eligible for Medicaid, and more than 6 percent of all elderly people will become impoverished by catastrophic nursing home costs.[7]

Prefunding Alternatives for Medicare Out-of-Pocket Costs

As a possible solution to the out-of-pocket cost burden on the elderly, incentives for private saving have considerable appeal. Recent proposals from both parties in related policy areas have centered on tax incentives for saving during working-age years, including Health Savings Accounts and subsidized or tax-advantaged long-term care insurance. Private savings may seem to be the most realistic path for doing something to address the growing problem of post-retirement medical expenses, particularly given competing federal and state budget priorities such as the Medicare drug benefit and the renewed focus on the nonelderly uninsured.

This report analyzes the extent to which tax incentives to save could significantly reduce post-retirement healthcare costs. If individuals were allowed to save a modest percentage of income tax free for the specific purpose of prefunding their future out-of-pocket medical costs, how much of an impact would these savings have?

To conduct this analysis, we used several assumptions to construct a reasonable and potentially appealing tax incentive policy and than analyze its impacts. We assumed individuals would be allowed to save up to 1 percent of income, and would begin saving at no younger than age 50 (and perhaps as late as age 60). Accumulated contributions and earnings would be held in a virtual or actual "account," which would become available to the individual at age 65 to pay Medicare Part B (Supplementary Medical Insurance) and Part D (Prescription Drug Coverage) premiums, long-term care expenses, and other out-of-pocket health-related costs. The accumulated account value, when applied to appropriate expenses, would be tax free upon withdrawal. We assumed a rate of return for the accounts equivalent to that in a basket of U.S. Treasury bonds similar to that used for the Medicare and Social Security Trust Funds. Indeed, one way to structure these accounts to make participation easy and to reduce fees to third-party account administrators would be simply to allow individuals to supplement their Medicare FICA withholding and have their "account" invested in the Medicare Trust Fund. [8]

How This Study Was Conducted

To lay out the scope of the medical cost burden faced by Medicare beneficiaries, we use the most recent published sources to identify current per beneficiary costs and then inflate them to project future costs.[9] We use the Medicare Trustees' Reports to calculate the impact of medical inflation on future health care costs. To project how average out-of-pocket costs will look in 2011 and 2021, when our cohorts will turn 65, we inflate our most recent cost estimates at a rate of 5.1 percent per year, reflecting the intermediate medical inflation projection of the Medicare Trustees.[10] We apply the inflation formula across all cost categories, although our base year varied from 2002 to 2005.

To project average savings that would be accumulated if individuals were allowed to save up to 1 percent of income tax free for post-retirement medical costs, we assume rates of return equivalent to the Medicare Trust Fund, using the Medicare Trustees' Reports intermediate rates of return for the Medicare Trust Fund for the years 2006 to 2021. We project total savings at age 65 for individuals of varying income levels under two pairs of assumptions: one for how long they might invest (starting at age 50 or at age 60) and the second for how much of their income they would invest (0.5% of pretax income or the maximum of 1%). We generate estimated savings at 65 for individuals in the following preretirement income level categories: less than 100 percent of the federal poverty level (FPL), 100 to 149, 150 to 199, 200 to 299, and greater than 300 percent FPL. Our focus is on low-income and lower-middle-income individuals (about one-third of individuals ages 50 to 65 have incomes less than 300 percent FPL.)[11] We utilized 2002 data from the biennial Health and Retirement Study (HRS) of individuals age 50 and older to generate anticipated dollar inputs into a tax-free account from age of initial investment until retirement, and select a "program start year" (that is, the year when participants would begin prefunding) of 2007. We also added an analysis of the potential impact of a moderately sized government match for low-income beneficiaries, using the Earned Income Tax Credit as a rough guide for potential subsidy levels.[12]

To analyze the potential impact of tax-free prefunding as a way to pay for the post-retirement health-related costs of participants, we look at future uncovered costs and evaluate how different levels of prefunding would offset them. We discuss how the ability to save 0.5 percent or 1 percent of pretax income for this purpose could impact retirees' ability to pay for Medicare supplemental policies following retirement or, alternatively, to pay for out-of-pocket costs directly. We are particularly interested in benefits for individuals with low incomes.

To describe how participation in the prefunding mechanism would affect overall retirement savings at different income levels, we draw from the HRS to determine mean and median IRA and 401(k) plan holdings and the Survey of Income and Program Participation for IRA and 401(k) plan participation rates. To project average accumulated preretirement wealth by income level, we use financial projections from nationally representative data from the 1992–2002 HRS published by the Urban Institute, and the Survey of Income and Program Participation for IRA and 401(k) participation rates.[13]

To explain possible participation rates for individuals of varying incomes in a tax-advantaged savings mechanism for out-of pocket medical costs, we look at participation rates in IRAs and 401(k) plans.

A potential enhancement to this structure would be a public match for low-income individuals: the government would match 25 percent of annual contributions for individuals with incomes 100 to 149 percent FPL and 50 percent for individuals with annual incomes less than 100 percent FPL. We used the Earned Income Tax Credit as a rough guide for potential subsidy levels. We look at current IRA/401(k) participation by income level both to project possible participation rates in an incentivized savings program and to examine the impact of matching subsidies on low-income participation.

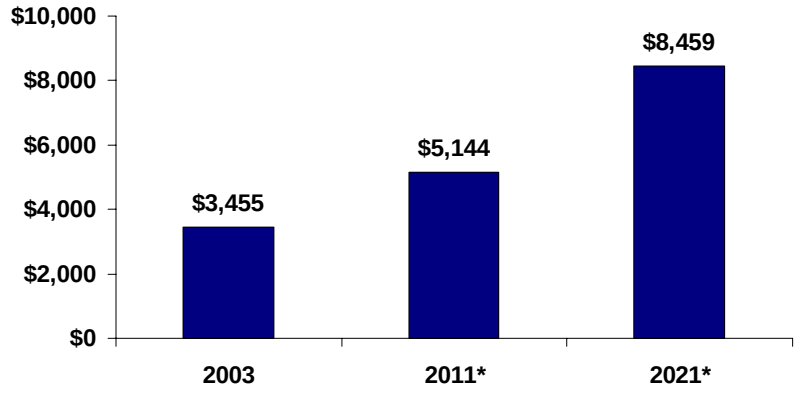
To sum, rather than evaluating prefunding incentives as a way to address out-of-pocket medical costs for retirees strictly as a concept, we look at the projected impacts of a more specific tax-incentive structure that is representative of the political appeal of prefunding incentives. (See the box below for further detail on the methods used for this analysis.)

Projected Out-of-Pocket Costs for Medicare Beneficiaries

As with current Medicare beneficiaries, future Medicare beneficiaries face substantial out-of-pocket costs above and beyond what Medicare covers. We break out these costs for people who will turn 65 years old in 2011 and those who will turn 65 in 2021 (that is, people who were 50 or 60 at the beginning of 2007). Adjusting our base year, 2003, for medical inflation, we project that average out-of-pocket costs for Medicare beneficiaries will be $5,114 in 2011, increasing to $8,459 by 2021 (Figure 1).[14] Figure 2 shows the projected increase in out-of-pocket Medigap Plan F premiums from 2005 to 2011 and to 2021.[15,16]

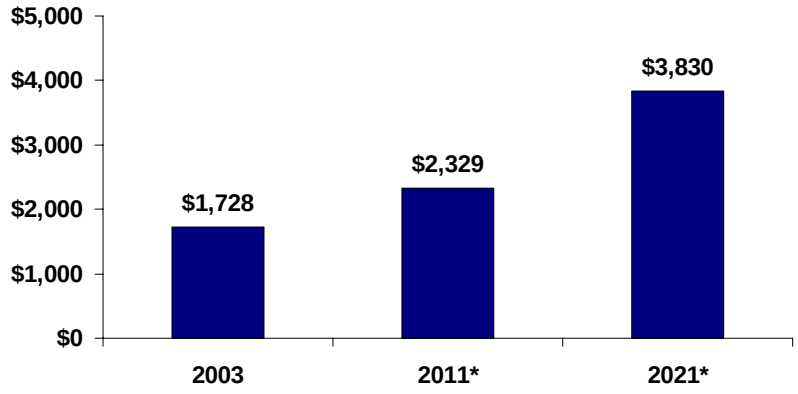
Notably, these figures exclude most long-term care costs (they include only rehabilitative skilled nursing facility care and home health care, excluding in-home personal care, assisted living, and custodial nursing home care). As described in our background section, many elderly households must pay out of pocket for most or all of their long-term care needs. Average estimates for these out-of-pocket costs in 2004 vary from between about $650 to about $1250 per elderly Medicare beneficiary per year.[17] Since these cost estimates overlap only slightly with the out-of-pocket health care costs described above and in Figure 1, average out-of-pocket costs for all health-related needs are about 20 to 30 percent higher than those charted in Figure 1 (and in similar figures throughout the rest of the report) when long-term care costs are taken into account.

Figure 1. Average Out-of-Pocket Health Care Spending, for All Medicare Beneficiaries Age 65 and Up



* Projected costs assume an annual 5.1% inflation rate.

Figure 2. Average Annual Supplemental Medigap Plan F Premium for Medicare Beneficiaries Age 65 and Up

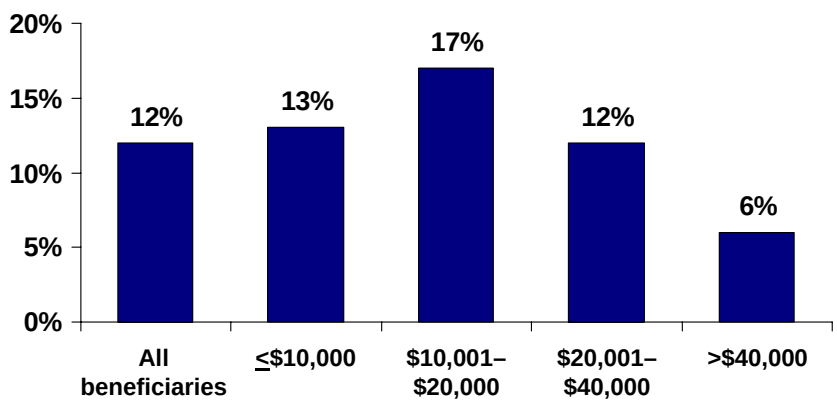


* Projected costs assume an annual 5.1% inflation rate.

An estimated 12 percent of Medicare beneficiaries do not have any supplemental insurance coverage to assist in the payment of services currently not covered by Medicare, and sources of coverage vary considerably with income.[18] Figure 3 shows that 13 percent of

beneficiaries with annual household incomes of $10,000 or less and 17 percent of beneficiaries with incomes between $10,001 and $20,000 have no supplemental coverage, while only 6 percent of those with incomes of $40,000 lack additional coverage.

Figure 3. Medicare Beneficiaries Without Supplemental Coverage, 2002



In addition, individuals in lower income brackets pay a higher percent of total annual income for out-of-pocket costs than those with higher annual incomes. Medicare beneficiaries with an income less than 135 percent FPL spend 33 percent of their annual income on out-of-pocket health care costs, on average, while those above 200 percent FPL spend only 12 percent.[19] This is true despite the lower nominal out-of-pocket costs faced by low-income seniors. As illustrated by Figures 4a and 4b, low-income seniors have lower costs on average, but have far fewer cash and insurance resources to apply to them.

Potential Impact of Tax-Free Prefunding

As a possible solution to the out-of-pocket cost burden on the elderly, incentives for private saving have considerable appeal. Recent proposals from both parties in related policy areas have centered on tax incentives for saving during working-age years, including Health Savings Accounts and subsidized or tax-advantaged long-term care insurance. Private savings may seem to be the most realistic path for doing something to address the growing problem of post-retirement medical expenses, particularly given competing budget priorities such as the Medicare drug benefit and the renewed focus on the nonelderly uninsured.

Figure 4a. Average Out-of-Pocket Health Care Spending in 2003, for Poor and Middle-Income Individuals

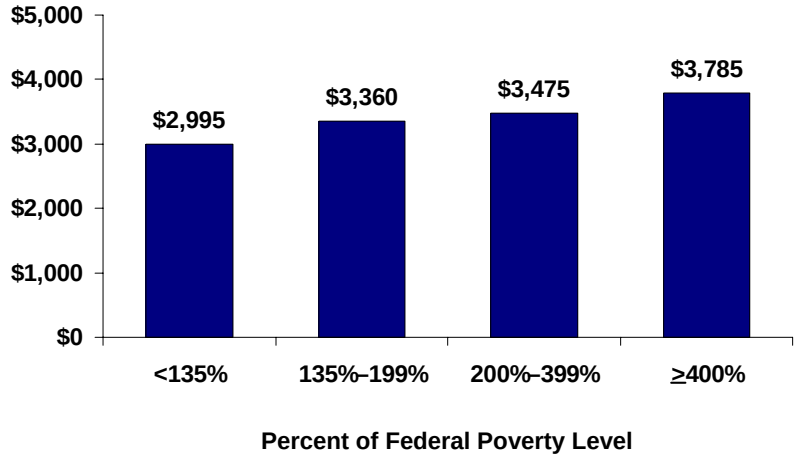
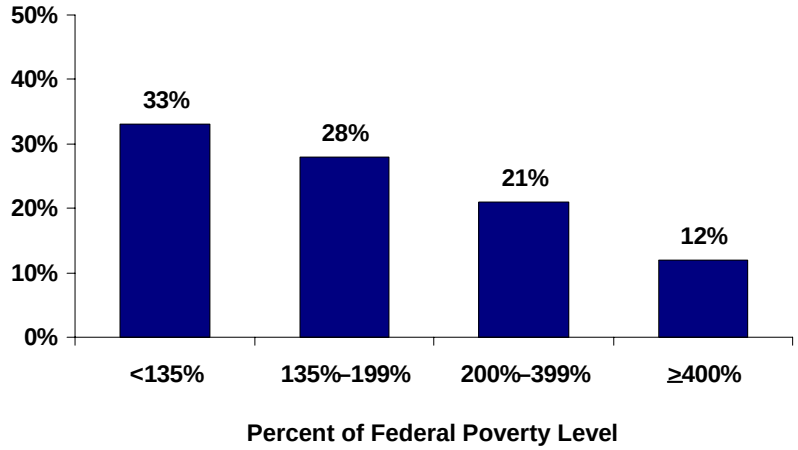


Figure 4b. Average Out-of-Pocket Health Care Spending as a Percentage of Income in 2003, for Poor and Middle-Income Individuals



If individuals were allowed to save a modest percentage of income tax free for the specific purpose of prefunding their future out-of-pocket medical costs, how much of an impact would these savings have? To conduct this analysis, we used several assumptions

to construct a reasonable and potentially appealing tax incentive policy and than analyze its impacts. (We provide the main findings from this analysis in the body of the report as well as more detailed charts and tables in Appendices A and B.) We assumed individuals would be allowed to save up to 1 percent of income, and would begin saving at no younger than age 50 (and perhaps as late as age 60). Accumulated contributions and earnings would be held in a virtual or actual "account," which would become available to the individual at age 65 to pay Medicare Part B (Supplementary Medical Insurance) and Part D (Prescription Drug Coverage) premiums, long-term care expenses, and other out-of-pocket health-related costs. The accumulated account value, when applied to appropriate expenses, would be tax free upon withdrawal. Accumulated contributions and earnings would be available to the individual at age 65 to pay Medicare supplemental costs or other health-related expenses.

As a reminder, we assumed a rate of return for the accounts equivalent to that in a basket of U.S. Treasury bonds similar to that used for the Medicare and Social Security Trust Funds. Indeed, one way to structure a prefunding mechanism to make participation easy and to reduce fees to third-party account administrators would be simply to allow individuals to supplement their Medicare FICA withholding and have their "account" invested in the Medicare Trust Fund.[20]

In this section, we perform two analyses of this prefunding mechanism. First, we project how much money individuals with different preretirement incomes are projected to accrue. Second, we compare projected health-related costs with the amounts accumulated in the accounts.

Projected Holdings

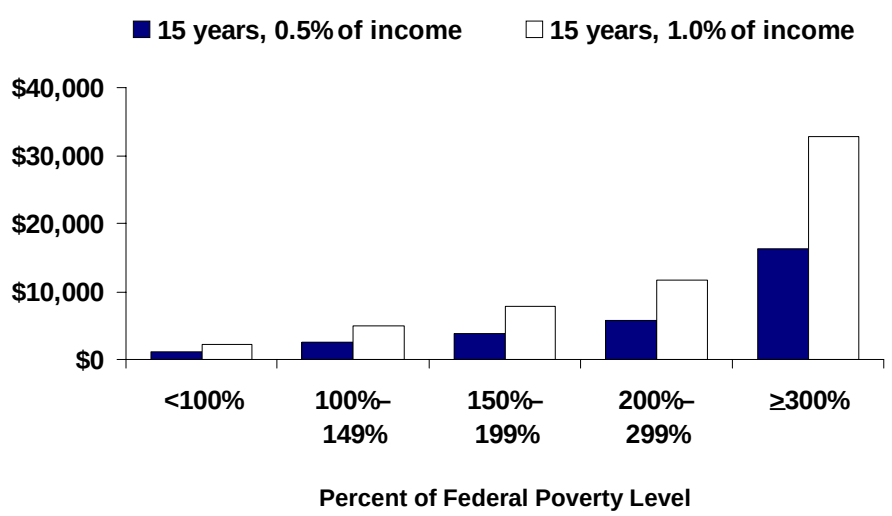
As with our projections of future retiree health care costs above, we explore two alternatives for ages at which participants could begin to save a percentage of pretax income—at age 50 and age 60. We therefore estimate contributions over two periods: 2007 to 2011 (five years) for those starting at 60 and 2007 to 2021 (15 years) for those starting at 50.[21] We projected holdings at 65 for people contributing 1 percent of pretax income or 0.5 percent of income. We then multiply the principal and any accrued interest by the compounded rate of return of the Medicare Part A Trust Fund under the Trustees' most recent intermediate rate projections. In Appendix A, we report all of the above permutations. We also report our raw data—year-by-year projections of annual contributions and compounded accumulated account totals.

There are two key dynamics at work in these projections:

First, while the Medicare Trustees project 5.1 percent annual medical inflation, they project slightly less than 5.9 percent annual returns for the Trust Fund. That is, the Medicare Trust Fund is currently projected to increase 0.8 percent faster than underlying medical inflation.

Second, unsubsidized savings levels directly reflect preretirement income. As a result, projected account holdings vary by over 500 percent between poor individuals (<100% FPL) and lower middle-income individuals (200–299% FPL), with middle- to higher-income persons (≥300% FPL) in turn holding about three times as much on average as lower-middle-income individuals. Figure 5 shows average projected holdings in 2021 (that is, at age 65) for individuals of different income levels who were age 50 in 2007.

Figure 5. How Projected Account Holdings at Age 65 Vary for Poor- and Middle-Income Individuals

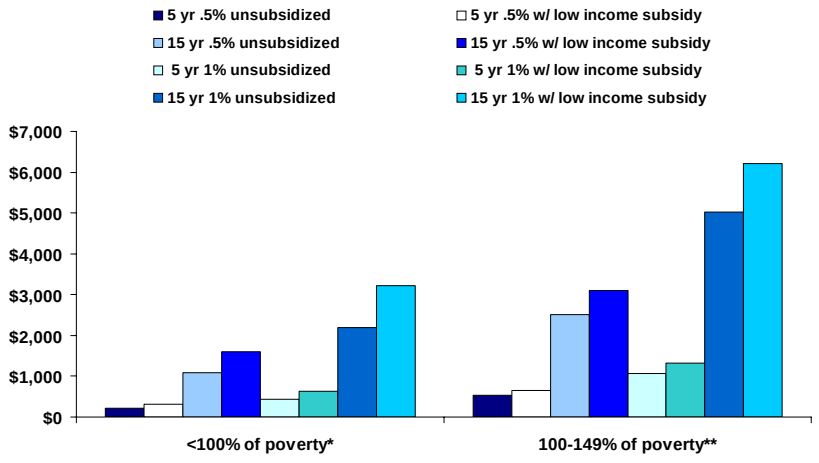


As described above, out-of-pocket medical costs for the elderly represent more than 25 percent of income for poor and near-poor individuals on average, and much less as a percentage of income for higher-income individuals. The severe needs of low-income beneficiaries accentuate the already regressive impacts of a universal tax incentive. A public matching subsidy for low-income contributors could help to mitigate this problem. We use the Earned Income Tax Credit as a rough guide for possible subsidy

levels for low-income beneficiaries. Following the EITC phase-out in simplified form, we built in a 50 percent match on all contributions made by individuals with incomes at Federal Poverty Level or less and a 25 percent match on all contributions made by individuals with incomes between 100 and 149 percent FPL. (Presumably, the actual phase out from a 50 percent match to a 25 percent match would be less abrupt.) Approximately 15 percent of the population ages 50 to 64 has an income in this range and would be eligible for such a subsidy. For income eligible beneficiaries, Figure 6 lays out the impact of this low-income subsidy on accrued account holdings at retirement.

Figure 6. Pretax Account Contributions With and Without Low-Income Subsidy

Accumulated under 5- and 15-year investment scenarios



* 50% annual subsidization level
** 25% annual subsidization level.

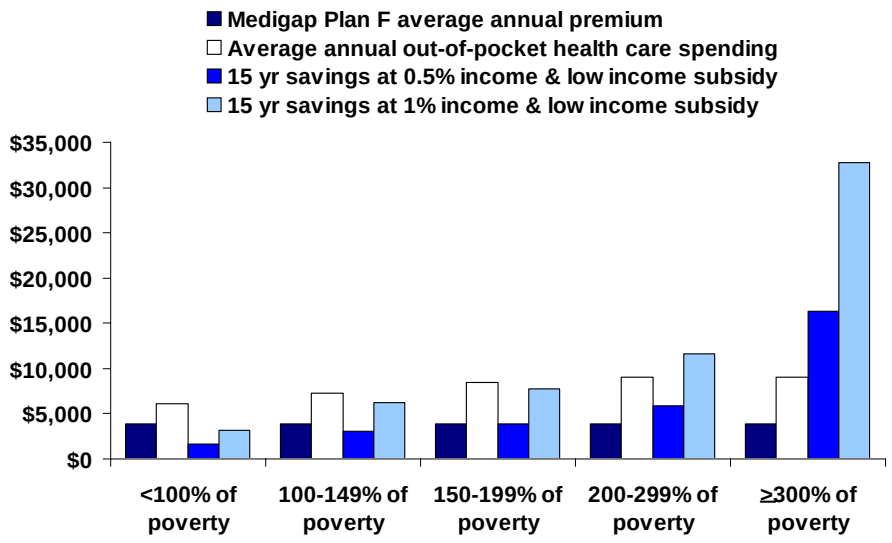
The detailed projected holdings for various low- and middle-income levels under these permutations are laid out in Appendix A.

Account Holdings vs. Medical Costs

We also compare projected health care costs with the amounts that would be accumulated with tax incentives under the different scenarios above. As illustrated, middle-income and higher-income individuals can be expected to accrue much more than lower-income individuals. While out-of-pocket medical spending also goes up somewhat with (post-retirement) income, the variation is much less dramatic than variation in income itself. As a result, prefunding based on 0.5 or 1 percent of pretax income would provide substantially more protection for middle and high-income people than for low-income people. Middle- and higher-income individuals can accrue amounts sufficient to offset

several years of out-of-pocket medical costs, while poor individuals accrue amounts insufficient to fund even one year of costs, and near-poor individuals accrue enough to fund about one to two years. Figure 7 compares two 15-year savings scenarios to Medigap and out-of-pocket costs in 2021.

Figure 7. Prefunded Account Holdings vs. Annual Medical Costs in 2021, by Income Level



- Even with a low-income subsidy as described above, if an individual with an annual income less than 100 percent of the FPL invests 0.5 percent of pretax income for fifteen years, he or she will accrue $1,610 including interest. This would be inadequate to finance even one year of a Medigap premium and represents about three months of average annual projected out-of-pocket health care costs in 2021. One percent of pretax income with a matching subsidy for 15 years would pay for a little less than a year of Medigap coverage.

- Individuals with preretirement incomes between 100 and 149 percent of the FPL can finance nearly two years of Medigap Plan F with 1 percent of pretax income starting at age 50 with the help of a low-income subsidy. Lesser investment levels finance less than one year of supplemental coverage and less than six months of average out-of-pocket costs.

- For individuals with preretirement incomes between 150 percent and 199 percent of poverty, 15 years of investing 1 percent of pretax income in a dedicated

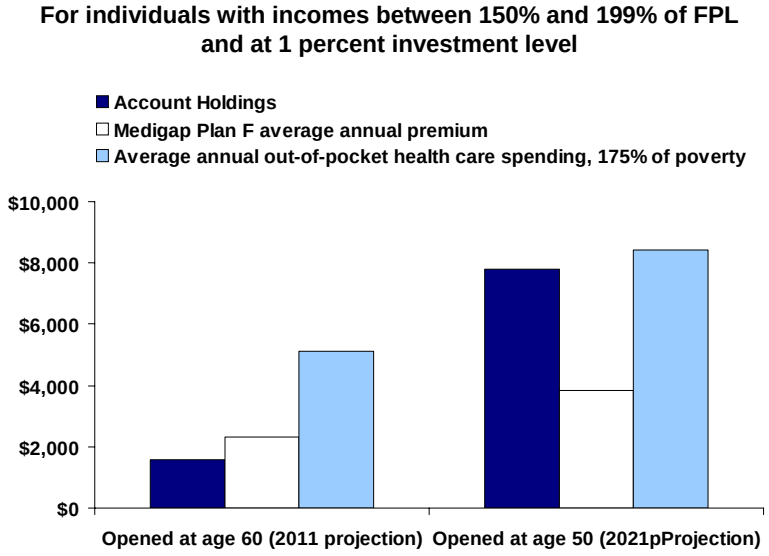
account would prefund about two years of Medigap premiums, or just under a year of average out-of-pocket costs.

- For lower-middle-income individuals, our tax-free prefunding mechanism can offer enough savings to offset about a year of post-retirement medical costs or multiple years of supplemental coverage. For individuals with preretirement incomes between 200 percent and 300 percent FPL, investments of 1.0 percent for 15 years can pay for three years of Medigap or over one year of average out-of-pocket health costs. More modest investment levels yield less than one year of out-of-pocket costs or Medigap premiums.

- For individuals with middle and high preretirement incomes—greater than 300 percent FPL—more modest investment levels in tax-free accounts can yield several years of full offsets of supplemental costs or supplemental insurance premiums.

For the low-income populations that have the most difficulty with Medicare out-of-pocket costs, investment levels of less than 1 percent of income for 15 years do not make a substantial impact on post-retirement costs. Tax-free accounts initiated five years before retirement do not accrue substantial amounts for lower-income persons. Figure 8 shows that for individuals with incomes between 150 and 199 percent FPL, an account begun at 60 has a minimal capacity to offset costs at 65 with 1 percent of income invested, while saving 1 percent of income tax free beginning at age 50 would make a modest but significant contribution towards post-retirement costs.

Figure 8. Account Holdings vs. Costs: The Difference Between Accounts Opened at Age 50 and at Age 60



Appendix B lays out all of the data that is summarized above in tabular form: average income levels, projected tax-free account holdings, and average out-of-pocket and supplemental premium costs for aged Medicare beneficiaries for all of the above income categories. In Appendix B, we also chart each of our income categories in greater detail, looking at premiums for Medicare supplemental and long-term care coverage and both medical out-of-pocket costs. We show how each of these potential costs would be offset by projected account holdings.

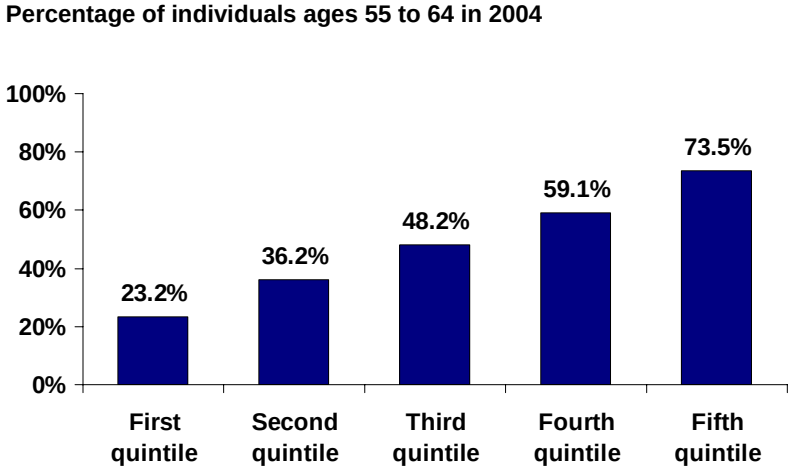
Prefunded Accounts in the Context of Other Retirement Savings

As detailed above, the option to save pretax dollars for post-retirement health costs would have small impacts for low-income individuals. One important caveat to this finding is that even though prefunding would not offset a large proportion of their medical costs, prefunding would dramatically boost retirement savings for lower income individuals who were able to participate. Because average liquid savings at retirement for low-income people are very limited, and because uncovered medical costs represent a high percentage of their income, even the modest amounts they would accrue if they participated in a pretax account would dramatically increase their ability to finance out of pocket costs in relative terms.

As illustrated in Figure 9a, participation in IRA/401(k)s is highly correlated with income. Figure 9b (derived from a different survey than Figure 9a and hence with slightly

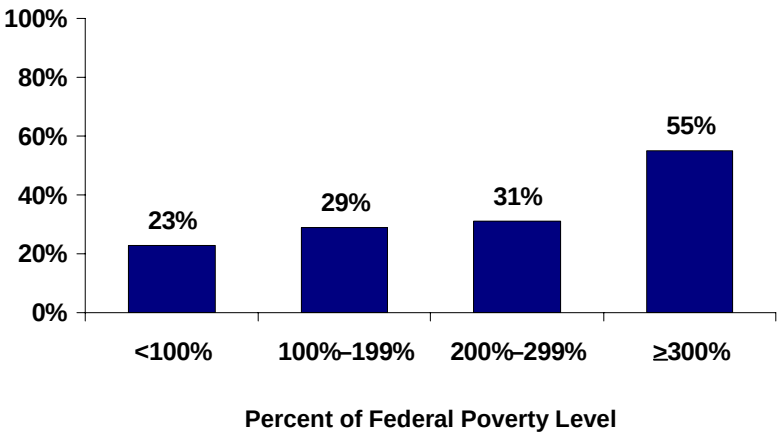
different age ranges) shows similar variation in IRA/401(k) participation by income with income categories between 0 and 300 percent FPL (the bottom 40 percent of the income distribution) broken out in more detail.[22]

Figure 9a. Participation in IRA or 401(k)-Type Plans, by Income Quintile



Source: Survey of Income and Program Participation Study (2004, Wave 1).

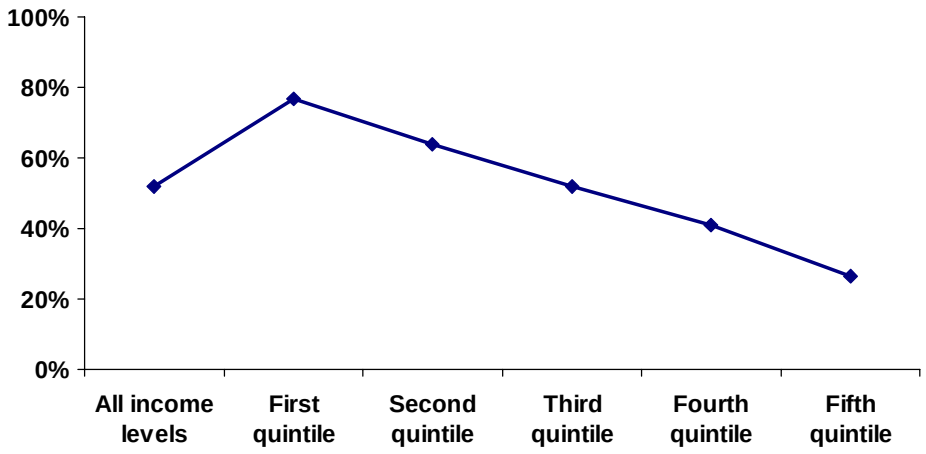
Figure 9b. Participation in IRA or 401(k)-Type Plans Relative to Poverty Level



Source: Health and Retirement Study, 2000.

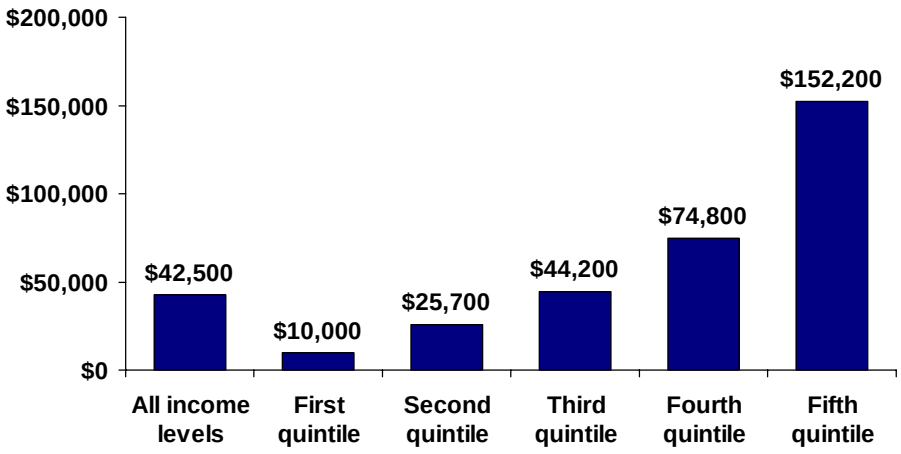
Figure 10a shows participation rates for 401(k) and IRA accounts for 55- to 69-year-olds by income quintile; Figure 10b shows the average retirement account holdings (adding together IRA and 401(k)-type holdings) by income quintile.

Figure 10a. Average Retirement Account Holdings for Individuals Ages 55 to 69, by Income Quintile, 2004



Source: Survey of Income and Program Participation Study (2004, Wave 1).

Figure 10b. Estimated Average Retirement Account Holdings for Individuals Ages 55 to 69, by Income Quintile



Source: Authors' tabulation based on the Survey of Income and Program Participation Study (2004, Wave 1), the 2000 Health and Retirement Study, and Johnson, Burman, Kobes (2004).

The lowest income quintile in these charts equates to individuals with incomes ranging from zero to slightly above 150 percent FPL. As detailed above, these individuals would have several thousand dollars accumulated in a tax-free account if they contributed 1 percent of income for 15 years and received a public matching subsidy, averaging over $3,000 for poor individuals and over $6,000 for those between 100 percent and 149 percent FPL. Twenty-three percent of individuals in the lowest income quintile currently participate in IRAs and 401(k)-type plans. Among those who participate, median combined holdings are just over $10,000. Although—even investing a full 1 percent of income for 15 years—holdings are small relative to looming post-retirement out-of-pocket medical and long-term care costs, they could in principle augment by 30 to 60 percent other retirement savings for poor and near-poor persons, on average.

For individuals with preretirement incomes between 150 percent FPL and 300 percent FPL—roughly the second income quintile—approximately 30 to 35 percent participate in an IRA or 401(k)-type plan. Among these participants, IRA/401(k) holdings average $25,600. Accounts based on 1 percent of pretax income, as detailed above, would average about $10,000 for this group: as with the poor and near-poor group, accounts dedicated to out-of-pocket health costs could in principle significantly augment retirement savings.

These figures, however, come with a major caveat. As described below, projecting a quantitative relationship between participation in accounts dedicated to health costs and in IRA/401(k) plans would require a dynamic model that is beyond this report's scope. But it is unlikely that saving for post-retirement health costs would be totally or even mostly additive to IRA/401(k) saving, particularly for low-income groups with little disposable income.

Projecting "Take-Up" of a Prefunding Option

Thus far, we have primarily discussed potential impacts of prefunding of health costs if people of varying incomes actually used a potential tax-free account option. Projecting whether individuals ages 50 to 65 would in fact take advantage of this option is inherently speculative. IRA/401(k) participation—also involving deferral of income until retirement—seems to be the best basis for projecting participation rates. The mechanism we have laid out would be more attractive than IRAs in some ways and less attractive in others: it would not be as flexible as an IRA or 401(k) in terms of post-retirement spending, but it would allow for tax-free deposits and redemptions, unlike IRAs and 401(k)s, which are taxed upon redemption (or before deposit in the case of Roth IRAs).

Throughout this analysis our focus has been on low-income individuals. If we assume enrollment in a health costs prefunding program would be similar to the general pattern we observe for participation by income in 401(k)-type plans, then low-income individuals will be the least likely to take advantage. Currently, IRA/401(k) participation rates among 50- to 65-year-olds are about 25 percent for the poor and about 30 percent for the near poor. Participation rates for those with middle incomes are 50 to 60 percent, and almost 80 percent of high-income individuals participate.

As described above, the need for enhanced health savings is primarily among those with incomes in the lower two quintiles and particularly the lowest quintile. There is evidence to suggest that a public matching subsidy option would be a critical element to attracting low-income participation. A large randomized field experiment conducted by the National Bureau of Economic Research in collaboration with H&R Block showed that IRA take–up rates for low-income households increased from 3 percent for a control group with no matching subsidy, to 12 percent for a group with a 20 percent match, to 21 percent for a group with a 50 percent matching subsidy.[23] In addition, the incentivized groups contributed, on average, more than 40 percent more to their accounts. This evidence suggests that similar incentives would be necessary to attract low-income participants, and that a matching subsidy may serve as the critical factor for individuals with limited access to financial resources to financially prepare for post-retirement costs. With the matching subsidy option, it appears realistic that between 20 and 40 percent of low-income individuals would participate in a prefunding program, particularly for those with incomes between 150 and 300 percent FPL. Participation rates for individuals with average and higher incomes are likely to be 50 percent or more.

It should be noted that the above analysis refers only to a simple participation rate. Projecting the *amount* of income that various income groups might commit to their post-retirement health costs, which would be critical to a projection of budgetary impact, would require a model to account for the potentially offsetting relationship between these and other retirement savings instruments. This is beyond the scope of this report.

Nevertheless, the above figures capture several key analytical points: low-income and lower-middle-income populations do participate in appreciable numbers in tax-advantaged retirement savings in their 50s and 60s, while higher-income populations participate in these programs at high rates. A policy allowing near-retirees to save for post-retirement medical expenses tax free and subsidized under income-based criteria is likely to appeal to both low-income and higher-income individuals. Particularly given the low savings levels of the poor and near-poor, having even a modest account dedicated to out-of-pocket costs could make a real difference in relative terms.

Budgetary Considerations

Though budgetary effects are not within the scope of this study, some important guidelines to thinking about them should be noted. While low- and middle-income households have the greatest need for a tax incentive to prefund health costs, most of the budgetary impact would depend upon the tax treatment and behavior of high-income households, who are subject to high marginal tax rates.

As illustrated in Table 1, the majority of households face a marginal income tax rate of 15 percent, 10 percent, or zero. However, the minority of higher-income households would drive most revenue losses. This finding holds even if we assume that low-income groups would contribute an equal percentage of their income as would higher-income groups. If participation rates for different income groups followed IRA/401(k) participation rates and if they contributed an equal share of income, for every $100 saved in a tax-free account, approximately $18.50 of tax revenue would be lost.

Table 1. Distribution of Individual Income Tax Returns and Earnings, by Statutory Marginal Tax Bracket, 2005

	Percentage of Taxpayers Facing the Rate	Those Taxpayers' Share of Total Earnings
Statutory Marginal Rate		
0	19.7	3.8
10	21.6	7.7
15	36.9	33.8
25	16.5	28.4
28	2.1	6.1
33	0.4	1.8
35	0.4	7.5
Alternative Minimum Tax	2.5	2.5

Source: Congressional Budget Office, Tax Policy Center.

On the one hand, a matching low-income subsidy would have a minimal budgetary impact on the proposal as a whole, representing approximately 0.3 percent (or thirty cents out of every $100) of total invested dollars. On the other hand, applying the Alternative Minimum Tax (AMT) to any income saved and denying eligibility for the highest 3 percent of earners who do not pay the AMT would reduce the percentage of total income potentially subject to sheltering by about 38 percent, and would reduce budgetary impacts by close to 50 percent when likely near-universal participation rates are accounted for in these high-income categories.[24] Allowing only those with incomes of 300 percent FPL or less to participate would reduce the tax revenue loss to $8 of every $100 invested in the program, on average.

Conclusions

Several key analytical conclusions emerge from this discussion.

A. *The problem of uncovered out-of-pocket costs is predominantly a problem of low-income individuals.* Low-income seniors actually have lower medical costs on average than other seniors, but they have far fewer cash and insurance resources to apply to them. Medicare beneficiaries with an income less than 135 percent FPL spend 33 percent of their annual income on out-of-pocket health care costs, on average, while those above 200 percent FPL spend only 12 percent.

B. *Enhanced savings will only be a partial solution to this problem for low-income seniors.* Even with a matching subsidy, low-income individuals who saved 1 percent of their income tax free from age 50 on would on average save enough to pay for about a year of Medigap for poor and near-poor seniors (incomes under 150% FPL), and three years of Medigap for lower-middle-income seniors. Because their preretirement incomes are low on average, helping low-income individuals to save will not fully address the problem of out-of pocket medical costs for the low-income elderly. Nevertheless, particularly given the low savings levels of the poor and near-poor, savings on the order of 1 percent of income could make a real difference in relative terms.

C. *A policy allowing near-retirees to save for post-retirement medical expenses tax free is likely to appeal to both low-income and higher-income individuals.* Low-income and lower-middle-income populations do participate in appreciable numbers in tax-advantaged retirement savings in their 50s and 60s, while higher-income populations participate in these programs at higher rates. If patterns from other savings incentives programs would hold for a similar program targeted at medical costs, between 20 percent and 40 percent of low-income people would participate, with participation on the higher end of that range among those with incomes between 150 percent and 300 percent FPL. There is evidence that a public matching subsidy would be a critical element to attracting low-income participation. Participation rates for individuals with average and higher incomes are likely to be 50 percent or more.

D. *There is a strong fiscal case for partly or totally limiting any tax incentives for post-retirement medical costs to low-income and lower-middle-income individuals.* The policy problem of uncovered post-retirement medical costs is far more acute in this population. A universal option to save a percentage of income for post-retirement medical costs tax free would cost $18 in lost tax revenue for

every dollar saved. In contrast, allowing only those with incomes of 300 percent FPL or less to shelter savings from taxation would reduce the tax revenue loss to the federal budget to $8 of every $100 saved. A more modest form of means-testing would allow tax incentives to apply almost universally but still reduce costs: applying the Alternative Minimum Tax (AMT) to income saved and denying eligibility for the highest 3 percent of earners who do not pay the AMT would reduce the percent of total income potentially subject to sheltering by about 38 percent, and would reduce budgetary impacts by close to 50 percent.

APPENDIX A. DETAILED PROJECTIONS OF CONTRIBUTIONS AND HOLDINGS

We generated estimated account holdings at age 65 for individuals in the following preretirement income level categories: less than 100 percent FPL, 100 to 149 percent FPL, 150 to 199 percent FPL, 200 to 299 percent FPL and greater than 300 percent FPL. That is, our focus is on low-income and lower-middle-income individuals (about one-third of individuals ages 50 to 65 have incomes of less than 300 percent FPL[25]). We use the latest available (2002) HRS data to generate anticipated dollar inputs into accounts from age of first investment until retirement, and select a "program start year" (that is, the year when participants would begin funding accounts) of 2007. We project account holdings under different assumptions: varying by age of initial contribution, investment level, and with or without a partial match for low-income participants.

Table A-1a. Average Annual Pretax Contribution by Income Level

	Current Family Income as Percentage of FPL				
Year	**<100**	**100–149**	**150–199**	**200–299**	**≥300**
Estimated Contribution Beginning at Age 60, 0.5% of Income					
2007	$35	$87	$129	$162	$519
2008	$36	$89	$132	$166	$532
2009	$36	$91	$135	$170	$544
2010	$36	$91	$135	$170	$543
2011	$36	$91	$135	$169	$542
Estimated Contribution Beginning at Age 60, 1% of Income					
2007	$70	$174	$258	$324	$1,039
2008	$71	$178	$264	$332	$1,063
2009	$73	$182	$271	$340	$1,088
2010	$73	$182	$270	$340	$1,087
2011	$73	$181	$269	$339	$1,084
Estimated Contribution Beginning at Age 50, 0.5% of Income					
2007	$40	$91	$141	$211	$593
2008	$41	$94	$146	$219	$616
2009	$43	$98	$152	$228	$640
2010	$44	$100	$156	$233	$656
2011	$45	$103	$160	$239	$671
2012	$46	$105	$163	$245	$688
2013	$47	$108	$167	$251	$704
2014	$48	$110	$171	$257	$720
2015	$48	$110	$171	$256	$719
2016	$48	$110	$170	$255	$717
2017	$48	$109	$170	$254	$714
2018	$47	$109	$169	$253	$709
2019	$47	$108	$167	$250	$703
2020	$46	$107	$166	$248	$697
2021	$46	$105	$164	$245	$688

	Current Family Income as Percentage of FPL				
Year	**<100**	**100–149**	**150–199**	**200–299**	**≥300**
Estimated Contribution Beginning at Age 50, 1% of Income					
2007	$79	$182	$282	$423	$1,187
2008	$82	$189	$293	$439	$1,232
2009	$85	$196	$304	$456	$1,280
2010	$88	$201	$312	$467	$1,311
2011	$90	$206	$319	$478	$1,343
2012	$92	$210	$327	$490	$1,375
2013	$94	$215	$335	$501	$1,408
2014	$96	$220	$342	$513	$1,441
2015	$96	$220	$342	$512	$1,439
2016	$96	$220	$341	$511	$1,435
2017	$95	$219	$339	$509	$1,428
2018	$95	$217	$337	$505	$1,419
2019	$94	$215	$334	$501	$1,407
2020	$93	$213	$331	$496	$1,393
2021	$92	$211	$327	$490	$1,376

Table A-1b. Accumulated Pretax Contribution by Income Level

		Current Family Income as Percentage of FPL				
Year	**Intermediate Rate**	**<100**	**100–149**	**150–199**	**200–299**	**≥300**
Estimated Contribution Beginning at Age 60, 0.5% of Income						
2007	5.6%	$136	$169	$170	$543	$548
2008	5.9%	$272	$337	$339	$1,085	$1,144
2009	5.9%	$272	$337	$339	$1,085	$1,788
2010	5.9%	$533	$660	$663	$2,124	$2,469
2011	5.9%	$800	$991	$996	$3,188	$3,188
Estimated Contribution Beginning at Age 60, 1% of Income						
2007	5.6%	$273	$338	$340	$1,087	$1,097
2008	5.9%	$545	$675	$678	$2,171	$2,288
2009	5.9%	$545	$675	$678	$2,171	$3,575
2010	5.9%	$681	$851	$889	$2,764	$4,937
2011	5.9%	$823	$1,034	$1,109	$3,380	$6,376
Estimated Contribution Beginning at Age 50, 0.5% of Income						
2007	5.6%	$151	$195	$233	$656	$627
2008	5.9%	$305	$394	$473	$1,327	$1,316
2009	5.9%	$463	$598	$717	$2,015	$2,072
2010	5.9%	$624	$808	$968	$2,718	$2,888
2011	5.9%	$789	$1,022	$1,225	$3,439	$3,770
2012	5.8%	$955	$1,235	$1,481	$4,158	$4,716
2013	5.8%	$1,119	$1,448	$1,736	$4,875	$5,734
2014	5.8%	$1,283	$1,660	$1,991	$5,589	$6,828
2015	5.8%	$1,446	$1,871	$2,243	$6,299	$7,986
2016	5.8%	$1,608	$2,080	$2,494	$7,002	$9,208
2017	5.8%	$1,768	$2,287	$2,742	$7,699	$10,497
2018	5.8%	$1,926	$2,491	$2,987	$8,387	$11,856
2019	5.8%	$1,926	$2,491	$2,987	$8,387	$13,288
2020	5.8%	$2,198	$2,844	$3,409	$9,573	$14,796
2021	5.8%	$2,481	$3,210	$3,848	$10,806	$16,382

		Current Family Income as Percentage of FPL				
Year	Intermediate Rate	<100	100–149	150–199	200–299	≥300
Estimated Contribution Beginning at Age 50, 1% of Income						
2007	5.6%	$301	$390	$467	$1,311	$1,253
2008	5.9%	$609	$788	$945	$2,654	$2,632
2009	5.9%	$925	$1,197	$1,435	$4,029	$4,143
2010	5.9%	$1,248	$1,615	$1,936	$5,437	$5,776
2011	5.9%	$1,579	$2,043	$2,449	$6,877	$7,539
2012	5.8%	$1,909	$2,470	$2,962	$8,316	$9,431
2013	5.8%	$2,239	$2,897	$3,473	$9,751	$11,467
2014	5.8%	$2,567	$3,321	$3,981	$11,179	$13,657
2015	5.8%	$2,892	$3,742	$4,486	$12,598	$15,971
2016	5.8%	$3,215	$4,160	$4,987	$14,004	$18,415
2017	5.8%	$3,535	$4,574	$5,483	$15,397	$20,994
2018	5.8%	$3,851	$4,983	$5,973	$16,774	$23,713
2019	5.8%	$3,851	$4,983	$5,973	$16,774	$26,576
2020	5.8%	$3,851	$4,983	$5,973	$16,774	$29,592
2021	5.8%	$3,851	$4,983	$5,973	$16,774	$32,764

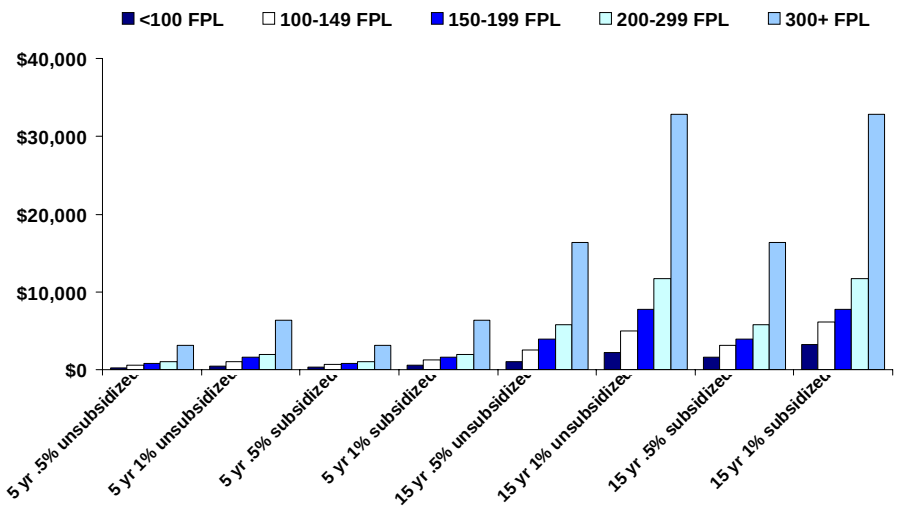
We have generated projections based on two possibilities for ages at which participants could begin to fund their accounts—at age 50 and age 60. We therefore estimate contributions over two time periods: 2007 to 2011 (five years) for those starting at 60 and 2007 to 2021 (15 years) for those starting at 50.[26] This model proposal allows individuals to invest up to 1 percent of pretax income. We project holdings at 65 for people funding accounts at either 1 percent of income or at 0.5 percent of income.

We then multiply the principal and any accrued interest by the compounded rate of return of the Medicare Part A Trust Fund under the Trustees' most recent intermediate rate projections. We report our raw data—year-by-year projections of annual contributions and compounded accumulated account totals. Notably, while the Medicare Trustees project 5.1 percent annual medical inflation, they project slightly less than 5.9 percent annual returns for the Trust Fund.[27] An additional important note is that average incomes tend to go down as individuals approach 65, as some take early retirement.

Because a savings account based entirely on income has regressive economic effects, we also model account holdings with a public matching subsidy for low-income contributors. We use the Earned Income Tax Credit as a rough guide for subsidy levels for low-income beneficiaries. Following the EITC phase out in simplified form, we built in a 50 percent match on all contributions made by individuals with incomes at Federal Poverty Level or less and a 25 percent match on all contributions made by individuals with incomes between 100 percent and 149 percent FPL. (Presumably, the actual phase out from a 50 percent match to a 25 percent match would be less abrupt.) Approximately 15 percent of the population ages 50 to 64 has an income in this range and would be eligible for such a subsidy.

Figure A-1 display projected account holdings at age 65 under all of the permutations described above.

Figure A-1. Projected Holdings at Age 65 by Percentage of FPL and Under Alternative Assumptions



APPENDIX B. DETAILED PROJECTIONS OF HOLDINGS VS. COSTS

Using the average annual pretax contribution projections at the 0.5 and 1.0 percent income investment levels and under the 5- and 15-year investment scenarios reported in Table A-1b, we compare the average prefunded account accumulation for each income level to various projected long-term care costs. We detail how account holdings may offset projected average annual out-of-pocket health care and Medigap Plan F premium costs for individuals by relative income level.

Table B-1a. Full Prefunded Account Projections Under 5-Year Investment Scenario by Income, and Investment Rate

Average Prefunded Account Accumulation by Income Level, 2011				
Percentage of FPL	**5-Year, 0.5% Unsubsidized Investment**	**5-Year, 1.0% Unsubsidized Investment**	**5-Year, 0.5% Subsidized Investment**	**5-Year, 1.0% Subsidized Investment**
<100*	$213	$427	$314	$628
100–149**	$533	$1,067	$660	$1,319
150–199	$793	$1,585	$793	$1,585
200–299	$996	$1,992	$996	$1,992
≥300	$3,188	$6,376	$3,188	$6,376

* subsidized annually at the 50% level; ** subsidized annually at the 25% level.

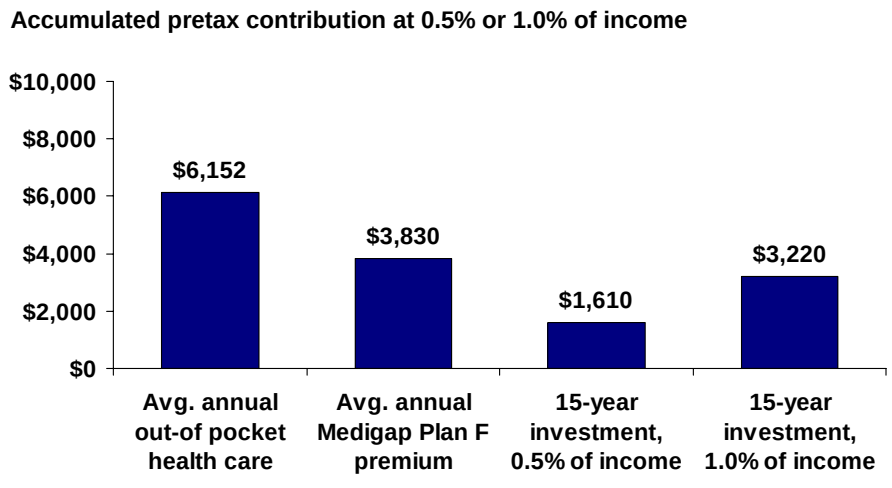
Table B-1b. Full Prefunded Account Projections Under 15-Year Investment Scenario by Income, and Investment Rate

Average Prefunded Account Accumulation by Income Level, 2021				
Percentage of FPL	**15-Year, 0.5% Unsubsidized Investment**	**15-Year, 1.0% Unsubsidized Investment**	**15-Year, 0.5% Subsidized Investment**	**15-Year, 1.0% Subsidized Investment**
<100*	$1,093	$2,187	$1,610	$3,220
100–149**	$2,507	$5,015	$3,100	$6,200
150–199	$3,893	$7,787	$3,893	$7,787
200–299	$5,834	$11,668	$5,834	$11,668
≥300	$16,382	$32,764	$16,382	$32,764

* subsidized annually at the 50% level; ** subsidized annually at the 25% level.

Figure B-1 compares accumulated account holdings and projected costs for individuals with annual incomes less than 100 percent of the FPL.

Figure B-1. Subsidized* Account Holdings and Average Annual Costs for Individuals Under 100% of Federal Poverty Level



* Subsidized annually at the 50% level.

Figure B-2 shows accumulated account holdings and projected costs for individuals with incomes between 100 and 149 percent of the FPL.

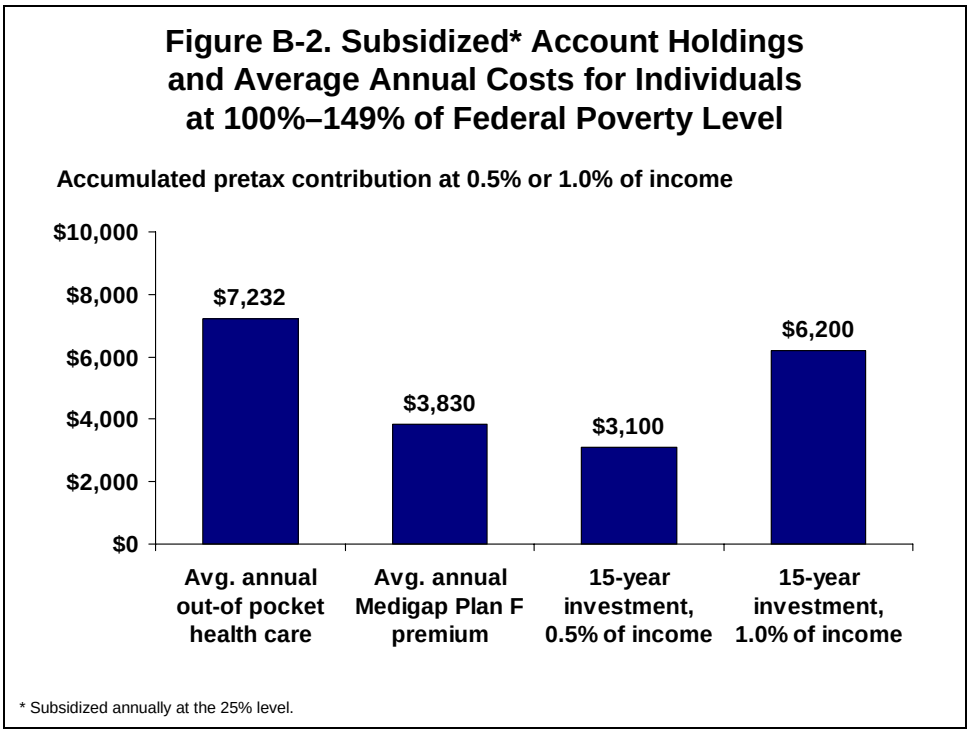


Figure B-3 shows accumulated account holdings and projected costs for individuals with incomes between 150 and 199 percent of the FPL.

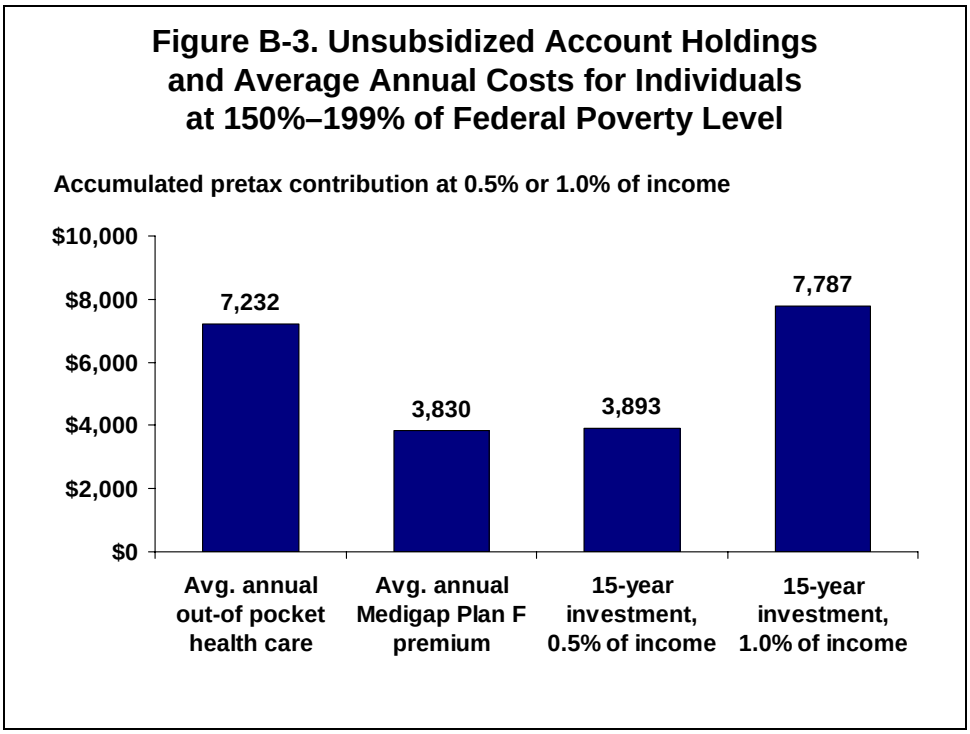


Figure B-4 shows accumulated account holdings and projected costs for individuals with incomes between 200 and 299 percent of the FPL.

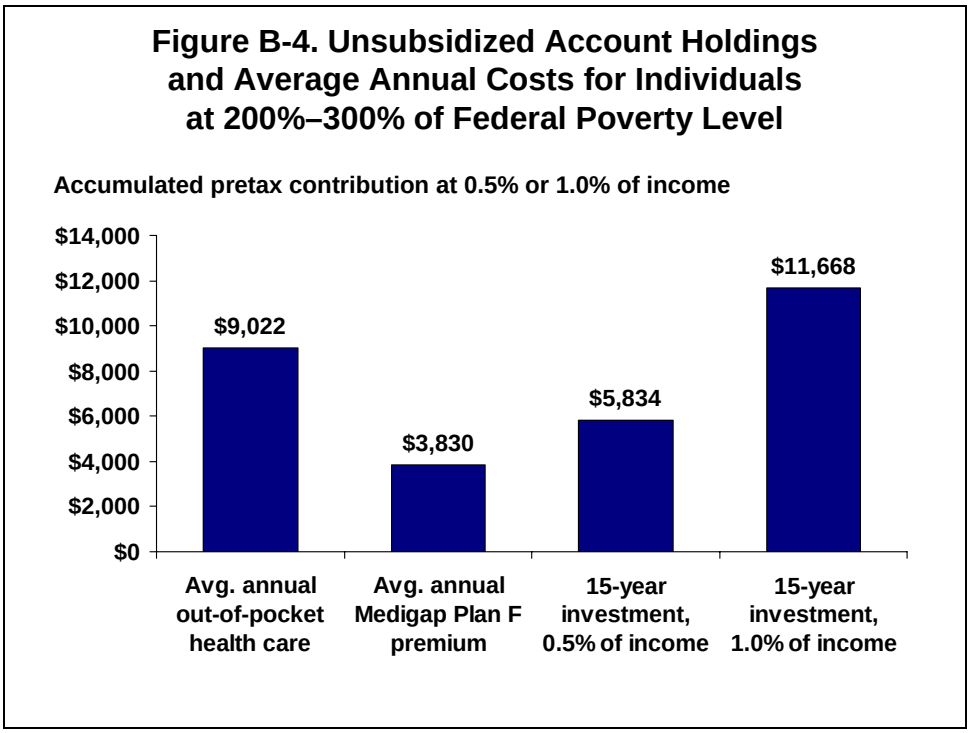
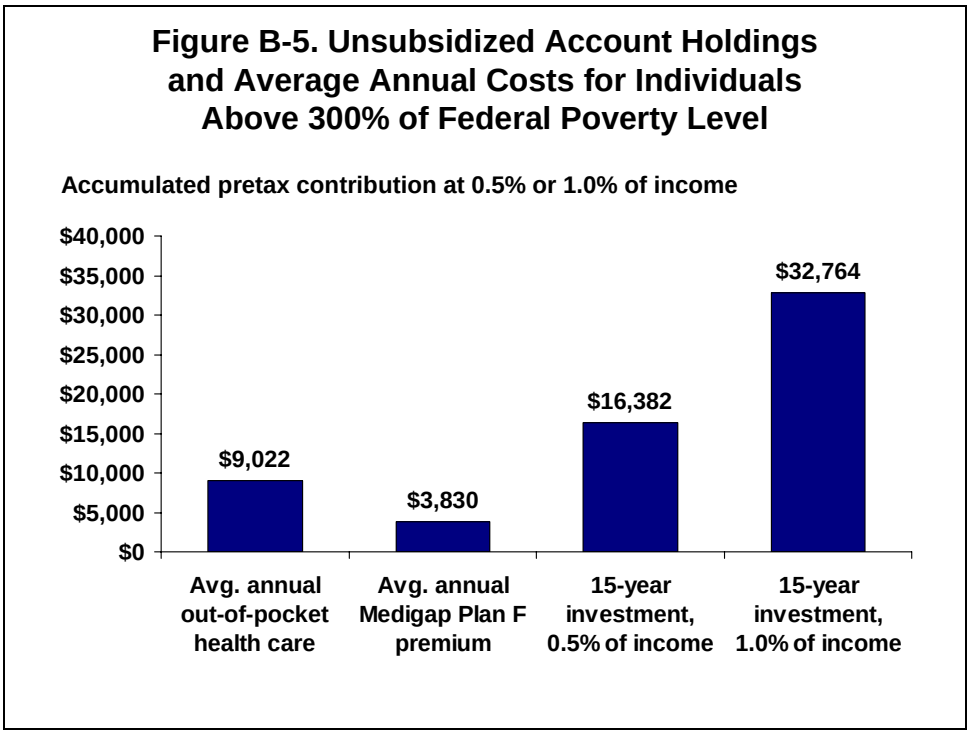


Figure B-5 shows accumulated account holdings and projected costs for individuals with incomes greater than 300 percent of the FPL.



NOTES

[1] *Out-of Pocket Spending on Health Care by Medicare Beneficiaries Age 65 and Older in 2003* (Washington, D.C.: AARP Public Policy Institute Data Digest, 2003), http://assets.aarp.org/rgcenter/health/dd101_spending.pdf (Aug. 1, 2006).

[2] *The Burden of Out-of-Pocket Health Spending Among Older Versus Younger Adults: Analysis from the Consumer Expenditure Survey, 1998–2003* (Washington, D.C.: Henry J. Kaiser Family Foundation, Sept. 2007), http://www.kff.org/medicare/upload/7686.pdf (Oct. 10, 2007).

[3] Medigap benefit packages are standardized by government regulations at various levels that are each assigned a letter—Plan A, B, C, etc. Medigap Plan F, which we use as a benchmark in this report, is the most popular Medigap option, providing Part A and B coinsurance, 365 additional hospital days during lifetime, blood products, skilled nursing facility coinsurance, Part A and B deductibles, Part B balance billing, and foreign travel emergencies.

[4] *Medicare Chartbook* (Washington, D.C.: Henry J. Kaiser Family Foundation, Summer 2005), http://www.kff.org/medicare/upload/Medicare-Chart-Book-3rd-Edition-Summer-2005-Report.pdf (Aug. 1, 2006).

[5] J. Blustein, "Medicare Coverage, Supplemental Insurance, and the Use of Mammography by Older Women," *New England Journal of Medicine*, Apr 27, 1995 332(17):1138–43; O. Carrasquillo et al., "Preventive Services among Medicare Beneficiaries with Supplemental Coverage versus HMO Enrollees, Medicaid Recipients, and Elders with No Additional Coverage," *Medical Care*, June 2001 39(6):616–26.

[6] J. Cubanski and J. Kline, *In Pursuit of Long-Term Care: Ensuring Access, Coverage, Quality* (New York: The Commonwealth Fund, Apr. 2002); E. Z. Fishman, J. D. Penrod, and B. C. Vladeck, "Medicare Home Health Utilization in Context," *Health Services Research*, Feb. 2003 38(1 Pt 1):107–12.

[7] R. Friedland, "Planning For and Financing Long-Term Care," in D. Blumenthal et al., eds., *Long-Term Care and Medicare Policy* (Washington, D.C.: Brookings Institution, 2003).

[8] Note that these individual accounts, because they represent Treasury obligations to individual account holders rather than to the Medicare program, would likely entail accounting procedures different than those used for the Medicare Trust Fund currently.

[9] More specifically, we use the AARP's Medicare Cost Model for out-of-pocket medical costs and MedPAC data to estimate annual Medigap Plan F premium levels.

[10] *2006 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund and Federal Supplementary Medical Insurance Trust Fund*, House Document (Washington, D.C.: U.S. Government Printing Office, 2006), 1–225.

[11] Current Population Survey; Health and Retirement Study.

[12] The HRS is a longitudinal study of health, retirement, and aging that surveys more than 22,000 Americans over the age of 50 every two years, conducted by the University of Michigan with support from the National Institute on Aging. See *The Health and Retirement Study*, The University of Michigan http://hrsonline.isr.umich.edu/ (Aug. 1, 2006).

[13] R. Johnson, L. Burman, and D. Kobes, "Annuitized Wealth at Older Ages: Evidence from the Health and Retirement Study," Final Report to the Employee Benefits Security Administration, United States Department of Labor (Washington, D.C.: Urban Institute, May 2004).

[14] "Out-of-Pocket Spending on Health Care by Medicare Beneficiaries Age 65 and Older in 2003," in *Out-of-Pocket Costs, Health Care Spending, 2003* (Washington, D.C.: AARP, 2005).

[15] K. Davis, M. Moon, B. Cooper, and C. Schoen, "Medicare Extra: A Comprehensive Benefit Option for Medicare Beneficiaries," *Health Affairs* Web Exclusive (Oct. 4, 2005):w5-442–w5-454.

[16] Medigap premiums based on nonage rated premiums purchased at age 65.

[17] K. Tritz, *Long-Term Care: Trends in Public and Private Spending*, Congressional Research Service, Apr. 11, 2006; *National Spending for Long-Term Care*, Georgetown University, Long-Term Care Financing Project, Jan. 2007 fact sheet, http://ltc.georgetown.edu/pdfs/whopays2006.pdf; *Medicaid and Long-Term Care Services*, Kaiser Commission on Medicaid and the Uninsured, July 2006, http://www.kff.org/medicaid/upload/Medicaid-and-Long-Term-Care-Services-PDF.pdf; *Financing Long-Term Care for the Elderly*, Congressional Budget Office, Apr. 2004, http://www.cbo.gov/ftpdocs/54xx/doc5400/04-26-LongTermCare.pdf.

[18] *Medicare Chartbook* (Washington, D.C.: Henry J. Kaiser Family Foundation, Summer 2005), http://www.kff.org/medicare/upload/Medicare-Chart-Book-3rd-Edition-Summer-2005-Report.pdf (Aug. 1, 2006).

[19] *Out-of Pocket Spending on Health Care by Medicare Beneficiaries Age 65 and Older in 2003* (Washington, D.C.: AARP Public Policy Institute Data Digest, 2003), http://assets.aarp.org/rgcenter/health/dd101_spending.pdf (Aug. 1, 2006).

[20] Note that these individual accounts, because they represent Treasury obligations to individual account holders rather than to the Medicare program, would likely entail accounting procedures different than those used for the Medicare Trust Fund currently.

[21] Because of the small cell size, we based our projections of accrued savings on those age 50 in 2002, rather than in 2007.

[22] Figure 9a derives from the SIPP, while Figure 9b derives from the HRS.

[23] E. Duflo, W. Gale, J. Liebman et al., *Saving Incentives for Low- and Middle-Income Families: Evidence from a Field Experiment with H&R Block* (Cambridge, Mass.: National Bureau of Economic Research, Sept. 2005), working paper 11680.

[24] Figure 18 and the analysis in this paragraph are based on *Distribution of Individual Income Tax Returns and Earnings, by Statutory Marginal Tax Bracket* (Tax Policy Center, 2006), and authors' analysis of projected income levels for eligible individuals assuming initial investment at age 50.

[25] Current Population Survey; Health and Retirement Study.

[26] Because of the small cell size, we based our projections of account holdings on those age 50 in 2002, rather than in 2007.

[27] The broader implication is that the Medicare Trust Fund is currently projected to increase 0.8 percent faster than underlying medical inflation.

RELATED PUBLICATIONS

Publications listed below can be found on The Commonwealth Fund's Web site at www.commonwealthfund.org.

Medicare Advantage Special Needs Plans for Dual Eligibles: A Primer (February 2008). Charles J. Milligan, Jr., and Cynthia H. Woodcock.

Coordinating Care for Dual Eligibles: Options for Linking State Medicaid Programs with Medicare Advantage Special Needs Plans (February 2008). Charles J. Milligan, Jr., and Cynthia H. Woodcock.

How Disease Burden Influences Medication Patterns for Medicare Beneficiaries: Implications for Policy (February 2008). Bruce C. Stuart.

The Medicare Physician Group Practice Demonstration: Lessons Learned on Improving Quality and Efficiency in Health Care (February 2008). Michael Trisolini, Jyoti Aggarwal, Musetta Leung, Gregory Pope, and John Kautter.

Rewarding Excellence and Efficiency in Medicare Payments (September 2007). Karen Davis and Stuart Guterman. *Milbank Quarterly*, vol. 85, no. 3.

Medicare's Quality Improvement Organization Program Value in Nursing Homes (Spring 2007). Anthony Shih, Diane M. Dewar, and Thomas Hartman. *Health Care Financing Review*, vol. 28, no. 3.

Medicare Physician Group Practices: Innovations in Quality and Efficiency (December 2006). Michael Trisolini, Gregory Pope, John Kautter, and Jyoti Aggarwal.

The Cost of Privatization: Extra Payments to Medicare Advantage Plans—Updated and Revised (November 2006). Brian Biles, Lauren Hersch Nicholas, Barbara S. Cooper, Emily Adrion, and Stuart Guterman.

On the Front Lines of Care: Primary Care Doctors' Office Systems, Experiences, and Views in Seven Countries (November 2, 2006). Cathy Schoen, Robin Osborn, Phuong Trang Huynh, Michelle M. Doty, Jordon Peugh, and Kinga Zapert. *Health Affairs* Web Exclusive.

Why Not the Best? Results from a National Scorecard on U.S. Health System Performance (September 2006). The Commonwealth Fund Commission on a High Performance Health System.

Assessing Medicare Prescription Drug Plans in Four States: Balancing Cost and Access (August 2006). Erika Heaton, Tanisha Carino, and Heidi Dix.

Medicare Physician Payment: Are We Getting What We Pay For? Are We Paying for What We Want? (July 25, 2006). Stuart Guterman. Testimony.

Medicare Beneficiary Out-of-Pocket Costs: Are Medicare Advantage Plans a Better Deal? (May 2006). Brian Biles, Lauren Hersch Nicholas, and Stuart Guterman.