A Medicare Buy-In for the Near-Elderly:

Design Issues and Potential Effects on Coverage

Prepared by

Richard W. Johnson, Marilyn Moon, and Amy J. Davidoff
The Urban Institute

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The Henry J. Kaiser Family Foundation

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THE URBAN INSTITUTE 2100 M STREET, NW, WASHINGTON DC 20037

ABSTRACT

A Medicare buy-in allowing persons below the age of full eligibility to purchase Medicare coverage has been discussed as one way to help uninsured near-elderly persons obtain health insurance coverage. This report describes estimates of participation rates in Medicare buy-ins and measures the potential impact of buy-in plans on uninsurance. The report also examines some key issues that arise in designing buy-in plans. The results suggest that many near-elderly Americans would purchase Medicare coverage, but the introduction of a buy-in would substantially reduce uninsurance rates only if premiums were related to income.

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EXECUTIVE SUMMARY

The problems of the uninsured remain an important concern for health policy and have again been raised as a pressing national issue. Insurance coverage is particularly critical for near-elderly Americans, because the risk of serious illness for adults rises with age and those younger than 65 are not eligible for Medicare benefits unless they receive Social Security disability. In addition, near-elderly persons without employer-sponsored health benefits or public insurance often have difficulty acquiring coverage in the private market. Because many of the near-elderly have pre-existing conditions, private insurers often deny them coverage or charge premiums that are unaffordable. This report examines the possible effects on coverage of a proposal to allow Americans ages 62 to 64 to buy into the Medicare program.

Although the near-elderly are often mentioned as a group in need of help, a Medicare buy-in plan, raised by the Clinton Administration, has largely gone out of favor. At present, much of the discussion about reducing the number of uninsured in the U.S. has centered on incremental approaches, often through the tax system. However, the lack of attention to private insurance reforms in many of these incremental plans means that the resources made available through tax credits, for example, might aid only those in good health who can find affordable insurance. If private insurance reforms are not considered feasible, then relying on Medicare as a source of insurance may again be seen as a viable alternative.

Buy-in proposals could be designed to achieve a variety of goals. Eligibility for all members of a particular age group, coupled with general premium subsidies to compensate for any risk selection, would improve access to insurance for those who could afford it, many of whom pay high prices for non-group coverage under the current system. But it would do little to help those for whom the costs of insurance are unaffordable. Subsidies for low-income persons would more effectively reduce the size of the uninsured population, but they could be expensive. A more limited goal of a Medicare buy-in program could be to create a special insurance pool for near-elderly Americans with health problems who are difficult to insure. Although it would provide coverage for only a small number of individuals, these high-risk pools might help hold down insurance costs for others who remain in the private market.

This report describes estimates of participation rates in Medicare buy-ins, measures the potential impact of the buy-in plan on rates of uninsurance, and examines some of the key issues that arise in designing a buy-in plan. To evaluate the merits of alternative approaches to a Medicare buy-in, we developed a model to simulate the effects of several different plans on insurance coverage for the near-elderly. The model estimates how private non-group coverage responds to changes in price, family income, and health status, controlling for demographic characteristics. These estimated effects are used to simulate participation in a Medicare buy-in and the impact of the buy-in plan on private non-group coverage at ages 62 to 64. The model is based on data from the Health and Retirement Study, a large nationally representative survey of noninstitutionalized Americans ages 51 and older. It also incorporates premium data collected over the Internet from non-group insurance providers.

The model also accounts for possible changes in labor supply that might result from the introduction of a Medicare buy-in plan. The availability of a Medicare buy-in option at ages 62

to 64 may encourage some workers without retiree health insurance to retire early, instead of waiting until they reach age 65 and qualify for full Medicare benefits.

To measure the sensitivity of participation in the buy-in plan to price, the model considers a range of premium prices. The moderate premium is set at $300 per month in 1998, similar to the CBO-estimated level necessary to achieve cost-neutrality. The low premium is set at $200 per month and the high premium is set at $400 per month. The model also examines participation under an income-related premium that would charge only $43.80 per month (the monthly Medicare Part B premium in 1998) for those with family incomes below 150 percent of the poverty line and $300 per month for everyone else. The analysis assumes that only persons without access to employer-sponsored insurance or other types of public insurance could participate in the buy-in plan.

The results of the simulation indicate that:

- The availability of a cost-neutral Medicare buy-in would have small effects on retirement decisions. The proportion of persons ages 62 to 64 at work would decline slightly, from 36.7 percent under current law to 36.5 percent under a buy-in.

- Substantial numbers of near-elderly Americans would purchase Medicare if it were available. The model indicates that 37 percent of eligible persons, or 490,000 in 1998, would participate in a buy-in program with moderate premiums of $300 per month.

- Under the moderate premium assumption, the buy-in plan would not substantially reduce uninsurance. Most buy-in participants would drop private non-group coverage when the buy-in option became available. Few of the uninsured could afford to purchase Medicare coverage. Thus, rates of uninsurance would only fall to 9 percent of the near-elderly population, from 10 percent under current law.

- If premiums were related to income, many uninsured persons could acquire coverage through a buy-in program, causing the share of near-elderly without health insurance to fall from 10 percent to 6 percent. The share would fall from 28 percent to 12 percent for the poor and from 22 percent to 12 percent for the near-poor.

- The buy-in would be especially attractive to those with health problems, raising the per-enrollee costs of the program. Under the moderate premium assumption, about 46 percent of those in fair or poor health eligible for the buy-in would participate, compared with 37 percent of those in excellent or very good health. This adverse selection, in which insurance costs are driven up because those most likely to utilize health services are also most likely to purchase insurance, highlights the difficulty of designing a cost-neutral buy-in program. Higher subsidies would be needed to avoid selection concerns.

Other key issues in design need to be considered when developing this type of proposal as well. As the simulations indicate, the size and structure of the subsidy are extremely important. Two

types of subsidy would likely be needed to achieve the broadest participation: an across-the-board subsidy to prevent problems with risk selection if Medicare attracts a sicker than average population, and additional subsidies directed at low-income persons to make even a subsidized premium affordable. The low-income subsidy, in particular, raises a number of administrative issues. For example, who would determine eligibility and how restrictive would it be? Other key issues are whether private insurance reform would be used in tandem with a buy-in, whether the benefit package for Medicare could be improved, whether family or just individual coverage would be offered, and how subsidies would be financed.

I. INTRODUCTION

The problems of the uninsured remain an important concern for health policy and have again begun to attract the attention of policy makers. Insurance coverage is particularly critical for the near-elderly, because the risk of serious illness for adults rises with age and those younger than 65 are not eligible for Medicare benefits unless they receive Social Security disability. Some lose employer-sponsored coverage when they retire, and others still in the labor force work for employers who do not offer coverage or require contributions that low- and moderate-wage workers cannot afford. In addition, near-elderly persons without job-related health benefits or public insurance often have difficulty acquiring coverage in the private market. Because many of the near-elderly have pre-existing conditions, private insurers often deny them coverage or charge premiums that are unaffordable.

The current policy debate over how to improve coverage rates generally focuses on the merits of offering tax credits to help the uninsured buy private insurance. The Bush administration has proposed refundable tax credits of up to $2,000 for low- and moderate-income families and up to $1,000 for individuals who purchase non-group coverage. However, even with these financial incentives, many near-elderly Americans would be unable to afford non-group coverage, especially those with health problems. Others would continue to face pre-existing condition exclusions or would be denied coverage altogether because of their health problems. Tax credits, then, are unlikely to improve substantially insurance coverage for the near-elderly.

An alternative approach to help older uninsured Americans obtain coverage is to create a Medicare buy-in plan, in which persons below the age of full-eligibility would be allowed to purchase Medicare coverage. The Clinton administration offered several versions of a Medicare buy-in, and it was one of Al Gore's campaign promises during the 2000 presidential election. More recently, Sen. Rockefeller (D-WV) introduced a bill in March 2001 to create a buy-in program for near-elderly Americans. Although there has not yet been serious discussion in Congress about these proposals, a Medicare buy-in may well re-emerge as an important option in the effort to reduce the number of uninsured Americans.

Most buy-in proposals have been designed to hold down the costs of expanding Medicare by offering coverage at prices similar to average insurance costs for the near elderly. However, these proposals would not help the many uninsured individuals who could not afford substantial premiums. A buy-in plan with subsidies for those with low-incomes would likely attract more participants and better improve coverage, but it would also be more costly for taxpayers.

One of the challenges in projecting participation in a buy-in plan is that it may encourage some workers to retire and drop their employer-sponsored coverage. In the absence of a buy-in plan, many workers with employer-sponsored health benefits that do not continue after retirement may be reluctant to retire before 65, because they would have to turn to the expensive private non-group market to remain insured. If individuals would buy into the Medicare program at age 62, however, some workers might choose to retire early and replace their employer-sponsored benefits with Medicare benefits. Thus, the pool of potential buy-in participants could include some with employer-sponsored coverage, not just the uninsured or those in private non-group

plans. Moreover, policies that encourage early retirement merit special scrutiny as concerns about the burden of supporting the rapidly growing retired population intensify. Several recent studies have shown that the availability of employer-sponsored health insurance after retirement encourages workers to withdraw from the labor force (Johnson, Davidoff, and Perese, 1999; Rogowski and Karoly, 2000), but it is not clear how much a Medicare buy-in might affect employment decisions.

Research on the potential impact of a Medicare buy-in has been limited and has focused principally on the Clinton administration's proposal.[1] The impact of alternative premium structures on the number and characteristics of persons who would participate in the buy-in and the resulting effect on retirement have not been explored. This report models the potential effects of expanding Medicare by permitting near-elderly persons, defined as those between the ages of 62 and 64, to purchase Medicare coverage under a range of buy-in programs. It also examines some of the key issues that arise in designing a buy-in policy and explores the relative advantages of various approaches.

II. BACKGROUND

Most Medicare buy-in proposals focus on those ages 62 to 64. For example, the primary proposal from the Clinton administration would expand coverage from age 65 to age 62, although some younger persons would also be eligible under certain conditions. Age 62 is often used as a cutoff for an expansion of Medicare coverage because many workers retire at 62, the age at which Social Security retirement benefits first become available.

Current Coverage Options for the Near-Elderly

Although Americans in their early 60s are no more likely to lack coverage than other non-elderly adults (GAO, 1998), they have a strong stake in policies to assure coverage because they tend to have more health problems than younger persons. For example, the incidence rate for cancer at ages 55 to 64 is 1,052 per 100,000, compared with only 172 per 100,000 at ages 35 to 44 (Ries, et al., 2000). Similarly, the prevalence of heart disease in 1996 increases from 31 per 1,000 among men under age 45 to 134 per 1,000 among men between the ages of 45 and 64 (National Center for Health Statistics, 1999). The high prevalence of health problems at older ages translates into high health care expenses and strong demand for health insurance at older ages. Average health care expenditures are twice as high at ages 55 to 64 than at ages 35 to 44 (GAO, 1998).

[1]The Congressional Budget Office (CBO) simulated rates of participation in the proposed Clinton buy-in program (CBO, 1998). CBO assumed that all uninsured persons in poor health with high incomes would purchase Medicare benefits. Other uninsured persons would also participate if the buy-in were pricedsubstantially below private non-group coverage. CBO estimated that 320,000 persons ages 62 to 64 would participate in the program in 1999, including 9 percent of the uninsured and 35 percent of those with private non-group coverage.

Employer-Sponsored Insurance and Retiree Health Benefits

By the time individuals reach their early sixties, many have stopped working. Only 51 percent of men at age 62 participated in the labor force in 1995, compared with 81 percent of men at age 55 (Burkhauser and Quinn, 1997). Because most insurance coverage is tied to employment, retirement complicates patterns of health insurance. Many firms continue to subsidize health benefits for their workers after retirement. This benefit, known as retiree health insurance (RHI), was available in 1992 to 72 percent of middle-aged men who received employer-sponsored coverage as active full-time workers (Karoly and Rogowski, 1998). RHI benefits generally continue until age 65, when Medicare coverage begins, and sometimes supplement Medicare benefits after age 65. However, RHI benefits are usually less generous than health benefits provided to active workers. In 1995, for example, large firms that offered health benefits paid an average of 77 percent of the premium costs for active workers, but those that offered RHI paid only 52 percent of the premium costs for retired workers (Foster Higgins, 1996). About one in ten early retirees who were offered RHI benefits turned it down in 1994 because they said it was too expensive (Loprest, 1998).

When RHI benefits are not available, retirees are able to continue their employer-sponsored coverage for a limited time. Under federal law, employers with 20 or more employees are required to provide continuation coverage to former workers for up to 18 months (or 29 months if the worker is disabled). However, the cost to the beneficiary of COBRA coverage, as it is called, can be high because former workers assume full responsibility for 102 percent of the employer's group rate. These costs contribute to the low take-up rate for COBRA coverage (Flynn, 1994). Because of the limited availability of RHI coverage, the limited duration of COBRA coverage, and the relatively high costs of both types of coverage, the near-elderly are less likely than younger adults to have employer-sponsored coverage. According to data from the Urban Institute's National Survey of America's Families, 73 percent of persons ages 55 to 64 received coverage from an employer in 1997, compared with 76 percent of those ages 35 to 54 (Brennan, 2000). Recent declines in the availability of RHI may further erode employer-sponsored coverage for the near-elderly in upcoming years. Between 1991 and 1999, the prevalence of retiree health benefits for pre-65 retirees sponsored by large employers fell from 88 percent to 76 percent (Hewitt Associates, 2000).

Public Sources

Near-elderly persons who lack job-related health benefits have limited insurance options. Nonelderly adults can qualify for Medicare or Medicaid benefits only if they are blind or disabled. In addition, Medicaid benefits are subject to strict income and asset tests, and Medicare benefits do not begin until at least 29 months after the onset of disability.

Private Non-Group Coverage

As a result, many near-elderly persons without coverage from employers are forced to turn to the private non-group market. Private non-group coverage rates are almost twice as high at ages 55 to 64 than at ages 35 to 54 (Brennan, 2000). Premiums are generally higher for private non-group plans than for comparable group policies because there is more limited risk pooling and higher administrative loading in non-group plans. In addition, retirees often enter the non-group market when their health is declining, increasing the risk-rated premiums they face and reducing the likelihood that insurers will underwrite polices for them (Chollet and Kirk, 1998). With the passage of the Health Insurance Portability and Accountability Act (HIPAA) in 1996, federal law now requires insurers to offer policies to retirees who have exhausted COBRA coverage, but there are no restrictions on the premiums they can charge. State regulations may ameliorate the effect of risk rating on private premiums by limiting variation in price across age or health groups, but these restrictions are not present in every state.

Coverage Rates for the Near-Elderly

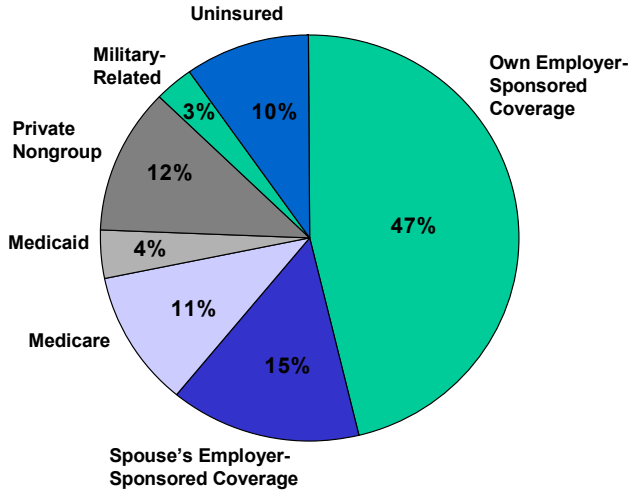
Because private non-group coverage is expensive, especially for those with health problems, a Medicare buy-in could be important to many of the near-elderly who would otherwise lack access to public insurance or job-related health benefits. As reported in Exhibit 1, 47 percent of persons between the ages of 62 and 64 received coverage in 1998 from their own employers, either as active workers or as retirees.[2] Another 15 percent received coverage through their spouse's current or past employers, and 15 percent received coverage from the public sector, primarily in the form of disability-related Medicare benefits. About 12 percent of near-elderly persons purchased private non-group coverage in 1998, while 10 percent were uninsured. Thus, about one in five persons between the ages of 62 and 64—those who lack coverage or rely on the private non-group market—could potentially benefit from the introduction of a Medicare buy-in.

Coverage rates are closely related to income, limiting the effectiveness of policies designed to increase coverage by simply encouraging individuals to purchase insurance. As reported in Exhibit 2, 28 percent of persons ages 62 to 64 with family incomes below the poverty line were uninsured in 1998, compared with only 3 percent of those with family incomes exceeding 400 percent of the poverty line. Only 11 percent of persons in poverty and only 35 percent of the near poor (with incomes between 100 percent and 200 percent of the poverty line) reported employer-sponsored coverage in their own names or their spouses' names. By contrast, three-fourths of persons with incomes above 400 percent of the poverty line received benefits from their own current or former employers or their spouses' employers. Rates of coverage by public insurance, in the form of Medicare and Medicaid benefits, are much higher among the poor than those with substantial incomes, but not high enough to offset the low rates of employer-sponsored coverage by those with limited incomes.

[2] Unless otherwise noted, the results in this section are based on data from the Health and Retirement Study, a nationally representative survey of Americans born between 1931 and 1941.

Exhibit 1

Health Insurance Coverage for Persons Ages 62 to 64, 1998



Source: Urban Institute computations from the 1998 Health and Retirement Study.

Exhibit 2

Health Insurance Coverage for Persons Ages 62 to 64, by Family Income Relative to the Poverty Level

	Less than 100% of poverty	100-200% of poverty	200-400% of poverty	More than 400% of poverty
Public	57.0%	27.7%	10.8%	5.6%
Own Employer-Sponsored	7.3	26.7	51.1	57.5
Spouse's Employer-Sponsored	3.4	7.8	15.5	18.2
Military-Related Benefits	1.3	1.8	3.4	2.4
Private Non-Group	2.7	14.1	10.4	13.8
Uninsured	28.3	21.9	8.8	2.6
Total	100.0	100.0	100.0	100.0
Percent of Overall Sample	9.7	14.2	26.3	49.8

Source: Urban Institute computations from the 1998 Health and Retirement Study.

Exhibit 3 reports coverage by health status at ages 62 to 64. Lack of coverage is especially rare among those with few health problems. Only 7 percent of persons reporting excellent or very good health were uninsured in 1998, compared with 11 percent of those in fair or poor health. Those in better health were more likely to report employer-sponsored coverage, while those in worse health were more likely to report public insurance. Rates of coverage by private non-group plans were also higher among persons in better health than those in poor health.

Exhibit 3

Health Insurance Coverage for Persons Ages 62 to 64, by Overall Health Status

Coverage	Fair/Poor	Good	Very Good/Excellent
Public	40.9%	8.0%	4.3%
Own Employer-Sponsored	26.6	47.0	58.5
Spouse's Employer-Sponsored	10.3	18.5	14.0
Military-Related Benefits	2.1	2.6	2.6
Private Non-Group	8.9	11.2	13.9
Uninsured	11.1	12.6	6.8
Total	100.0	100.0	100.0
Percent of Overall Sample	26.2	31.5	42.3

Source: Urban Institute computations from the 1998 Health and Retirement Study.

The close association between poor health and low income among the near-elderly complicates efforts to improve coverage rates for those with health problems. Exhibit 4 reports the distribution of family income by overall health status, for those ages 62 to 64. Among those who described their health as fair or poor, 23 percent had incomes below the poverty line, compared with only 4 percent of those with excellent or very good health. Similarly, those with excellent or very good health were more than twice as likely as those with fair or poor health to report incomes exceeding 400 percent of the poverty line. In sum, those most in need of a Medicare buy-in have low or modest incomes and some health concerns.

Motivations Behind a Buy-In Option

In evaluating whether a Medicare buy-in constitutes good public policy and how it should be structured, it is useful to consider the goals that a buy-in seeks to achieve. The most direct and obvious goal is to decrease the number of uninsured persons, thereby improving the quantity and quality of care available to them. But instead of merely aiming to reduce the total number of uninsured, the goal could be to target reductions to the neediest individuals, such as those with low incomes or substantial health problems. Employment-based options such as COBRA extensions or subsidies could help reduce the number of uninsured overall, but these options

would not target those most in need because they could improve coverage only for those with some recent employment history and generally carry no subsidies. Guarantees of insurance offerings would not be useful to those who cannot afford the costs of coverage.

Exhibit 4

Distribution of Family Income at Ages 62 to 64, by Overall Health Status

	Fair or Poor	Good	Excellent or Very Good
Less than 100% of poverty	22.5%	7.1%	3.8%
100% - 200% of poverty	21.6%	12.4%	11.1%
200% - 400% of poverty	27.9%	29.4%	22.9%
More than 400% of poverty	28.0%	51.2%	62.3%
Total	100.0%	100.0%	100.0%

Source: Urban Institute computations from the 1998 Health and Retirement Study.

If the explicit goal is to aid low-income persons, the approach chosen might be to build on means-tested programs, either through Medicaid or through block grants analogous to those established for the State Child Health Insurance Program (S-CHIP). However, this approach would address only affordability problems stemming from a lack of resources, not the high price of insurance faced by those with health problems. A variant of this approach would be a type of spend-down eligibility that incorporates both income and health care costs associated with chronic health conditions.

Alternatively, if a buy-in is viewed as one incremental step towards universal coverage, then establishing it in a program such as Medicare could emphasize expansions to all persons in the relevant age group, including special protections for persons with low incomes. This could combine access guarantees for everyone with subsidies that vary by income.

Under either a targeted or broader approach, the most feasible way to help those with the lowest incomes is through the direct provision of insurance, and the most straightforward way to provide subsidized coverage is through a public program. Thus, one of the strongest rationales for a Medicare buy-in program as opposed to one relying on the private sector is the ability of the public sector to subsidize insurance to all or part of the population.

A more limited motivation for a Medicare buy-in might be to improve the functioning of the non-group insurance market by creating a subsidized high-risk pool for the near-elderly. The existence of a Medicare pool that covered those with health problems might encourage insurance

companies to lower premiums for the seemingly healthy near-elderly. These pools would likely be most effective in states that require insurers to issue policies to all applicants and that restrict rating based on demographics or health status. In fact, the availability of a subsidized Medicare high-risk pool might provide leverage for passage of non-group market reforms in additional states.

The introduction of a Medicare buy-in plan could make high-risk pools universally available to the near-elderly. Currently, only about half of all states have some form of high-risk pools, and they have not been particularly successful. In general, premiums in these risk pools range from 125 to 200 percent of private insurance rates, too high to attract many participants (Communicating for Agriculture, 1998). To be effective, Medicare high-risk pools require substantial subsidies to hold down insurance costs. Otherwise, Medicare's share of the age-eligible population might remain small, although the plan could be effective in eliciting more affordable insurance from the private sector.

III. SIMULATING THE LIKELY EFFECTS OF A MEDICARE BUY-IN

To explore the likely effects of a Medicare buy-in for the near-elderly, we created a model that simulates the individual purchase of insurance coverage through a buy-in or in the private non-group market. The model accounts for the possibility that the introduction of a Medicare buy-in at age 62 might encourage early retirement for those without access to employer-sponsored RHI, which in turn might increase the pool of potential buy-in participants. The simulation model draws on the results of two regression equations. The first estimates the effect of insurance costs on retirement decisions, and the second estimates the effect of insurance premiums on the demand for coverage. The two regression models are linked to simulate the number of persons who would participate in the buy-in and the impact of the program on rates of uninsurance.

The model considers a range of premium prices for the buy-in. The moderate premium was set at $300 per month in 1998, similar to the CBO estimate of what a buy-in plan for persons aged 62 to 64 would have to charge to achieve cost-neutrality.[3] Since both the Clinton and Gore proposals were designed to be cost-neutral, the analysis focuses primarily on this price. The low premium was set at $200 per month and the high premium was set at $400 per month. The model also examines participation under an income-related premium that would charge only $43.80 per month (the monthly Medicare premium faced by elderly beneficiaries in 1998) for those with family incomes below 150 percent of the poverty line and $300 per month for everyone else. The analysis further assumes that only persons without access to employer-sponsored insurance or other types of public insurance could participate.

[3] In 1998, CBO estimated that a cost-neutral Medicare buy-in plan would charge participants ages 62 to 64 $316 per month, beginning in 1999 (Congressional Budget Office, 1998). CBO revised its estimate the next year to $324 per month, beginning in 2001 (Congressional Budget Office, 1999). CBO also estimated that participants would pay monthly surcharges on their Medicare premiums of about $23 from ages 65 to 84 to cover the costs of adverse selection into the buy-in program. To simplify our model, we did not incorporate the post-65 surcharges into our estimates.

The model simulates the effects of a Medicare buy-in for persons aged 62 to 64, as if the plan were fully implemented in 1998. The analysis assumes throughout that employers would not change their health insurance plans in response to the introduction of a buy-in. Results apply only to the noninstitutionalized population and do not include the insurance coverage of nursing home residents.

The Health and Retirement Study

The model is based on a sample of respondents in the 1998 wave of the Health and Retirement Study (HRS). Conducted by the University of Michigan for the NIA, the HRS is a large longitudinal survey of middle-aged Americans born between 1931 and 1941.[4] In 1998 respondents were between the ages of 57 and 67. They were questioned about a wide variety of subjects, including their health insurance, health status, income, employment, and demographics. A special strength of the HRS is the richness of its data on health insurance. At each wave, the survey asked respondents whether they were covered by private non-group health insurance, Medicare, Medicaid, any military health care plan, or employer-sponsored health insurance. Unlike most other surveys, the HRS also asked respondents about the availability of RHI.

Health Insurance Premiums

Health insurance premium costs are an important part of the simulation model. The price of insurance that individuals face can have substantial effects on retirement behavior and the decision to purchase non-group insurance or participate in a buy-in. The HRS asked all respondents with health insurance coverage about the premiums they paid for their plans, but non-group premium information is not available for those who did not purchase coverage. Accurate imputation of non-group premiums is difficult, because premiums paid by those who actually purchased non-group coverage might differ substantially from the premiums faced by those who did not purchase policies.

Instead of relying on select non-group premium data in the HRS, we collected premium data from insurance providers using an online service that provides consumers with premium quotes from a number of leading insurance companies around the country. To generate a premium quote, users access the service's website and input personal data, including sex, date of birth, marital status, number of dependents, occupation, tobacco use, height and weight, detailed medical history, state of residence, and zip code. They can also specify preferred plan type (traditional fee-for-service or managed care) and deductibles and copayments for their plan.[5] We

[4] In 1992 the HRS interviewed a nationally representative sample of noninstitutionalized men and women ages 51 to 61. Spouses were also interviewed, regardless of their ages. Blacks, Hispanics, and Florida residents were interviewed at twice their rate in the population. The survey re-interviewed respondents every two years. The HRS collected data from 12,652 persons in the baseline 1992 survey and from 10,557 persons in the 1998 survey. Our estimates are based on 2,011 respondents ages 62 to 64 in 1998. Additional information about the HRS is available at www.umich.edu/~hrswww/.

[5] When we collected our premium data in November 1999, the following ten insurers participated in the online service: Golden Rule Insurance, Hartford Life, Mutual of Omaha, Pacificare, Trigon, United

collected premium data for random respondents from the 1998 HRS and used them to impute premiums for the entire sample.[6]

Exhibit 5 reports non-group premiums in 1998 for each of our different groups. Monthly premiums ranged from a low of $224 for female non-smokers ages 57 to 59 with no serious health problems to a high of $908 for male smokers ages 63 to 64 with more than one serious health problem. Premiums increased with age and health problems. They were also higher for smokers than non-smokers and for men than women.

Exhibit 5

Estimated Monthly Non-Group Premiums in 1998

Age	Number of Health Problems	Men		Women	
		Non-Smoker	Smoker	Non-Smoker	Smoker
57-59	Zero	$ 358	$ 420	$ 224	$ 361
	One	536	630	336	541
	Two or more	716	840	448	721
60-62	Zero	$ 377	$ 451	$ 268	$ 386
	One	565	676	401	579
	Two or more	753	902	535	771
63-64	Zero	$ 395	$ 454	$ 270	$ 396
	One	593	681	405	593
	Two or more	790	908	540	791

Source: Urban Institute tabulations of data collected from an on-line insurance service.

Retirement Decisions and Medicare Buy-Ins

An important aspect of our modeling efforts is the recognition that the presence of a Medicare buy-in program might increase the likelihood that some workers retire before age 65. Economic theory predicts that workers weigh the costs of labor market compensation against the benefits of increased leisure time when making retirement decisions. Although some workers continue to receive employer-sponsored insurance after they retire, for others the loss of job-related health benefits can be an important cost of retirement. In the absence of coverage through a spouse, workers who lose employer-sponsored coverage when they retire before age 65 would have to purchase COBRA continuation benefits or private non-group insurance to avoid becoming

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Security Life Insurance, and Blue Cross/Blue Shield of California, Florida, New Jersey, and Virginia. Quotes were available for 41 states and the District of Columbia. We were unable to obtain quotes for residents in Kentucky, Idaho, Maine, Massachusetts, New Hampshire, New York, Vermont, Washington, and Wyoming.

[6] The imputation procedure is described in the Appendix.

uninsured. As noted above, the cost of coverage from these alternative sources can be high, especially after continuation benefits run out.

The availability of a Medicare buy-in would reduce the length of time for which many early retirees without RHI would have to rely upon expensive private non-group coverage. As a result, introducing a buy-in plan may lead some workers to retire early. We quantified the potential labor effects of a Medicare buy-in plan by computing the premium costs associated with retirement. Following the approach developed in Johnson, Davidoff, and Perese (1999), we defined this cost as the monthly increase in premium expenses that workers would pay if they retired, compared to what they would pay if they remained at work, and computed the total value of the stream of costs from the age at which workers considered retirement until they reached the Medicare eligibility age. The model measured the impact of premium costs of retirement on retirement behavior for a sample of workers in the HRS ages 57 to 64 in 1996, controlling for individual characteristics known to affect labor supply decisions, including pension coverage, health, future expected earnings, age, race, gender, education, and marital status.

Finally, we simulated the impact of a buy-in by re-computing premium costs under different buy-in scenarios and using the estimated parameters from the model to predict the probability of retirement. The model adjusts income and identifies post-retirement insurance alternatives for persons newly predicted to retire. This information is incorporated into the second phase of the model, which simulates demand for insurance coverage.[7]

The Demand for Insurance Coverage

Our estimates of the effects of Medicare buy-in plans depend critically upon our ability to model participation in the program and to estimate the sensitivity of participation rates to the price of the buy-in plan. Little is known about the demand for insurance coverage by the near-elderly, and most existing studies on other populations are based on outdated or incomplete data. Consequently, we estimated a regression model of the demand for non-group insurance coverage for persons ages 57 to 64 without public insurance who were not offered employer-sponsored health benefits. The regression model estimated the effects of premium costs, income, health status, and demographic characteristics on private non-group coverage.

The simulation model used the estimated parameters from the insurance demand regression to predict purchase of insurance at various premiums, assuming that individuals would choose the less expensive of the buy-in plan or a private non-group policy (if they purchased at all). If the price of the buy-in were set below the premium that the individual faced in the private non-group market, we applied the parameters of the model to the buy-in price and predicted the probability of participation. If the buy-in price were set above the private premium cost, the model assumed that the individual would not participate in the buy-in. We also assumed that those with access to employer-sponsored health benefits, either as active workers or as retirees, would not be eligible

[7] The retirement model is described in more detail in the Appendix.

for the buy-in plan and that those with other types of public insurance would retain their original coverage.[8]

The model indicates that individuals are more likely to purchase coverage (either through the Medicare buy-in or through private insurers) as their health declines and their income rises. Because many persons in poor health have limited income, the model sometimes predicted that individuals would purchase coverage even though the premium costs would consume a large share of total income. If the model assigns them coverage but they cannot afford the premiums for standard policies, we assigned them to limited private non-group plans that provide little more than catastrophic health insurance coverage. The standard policies, in contrast, offer benefits similar to those provided by Medicare, covering most services (but not necessarily prescription drugs) with 20 percent copays and substantial deductibles. We assumed that premium costs for an individual could not exceed 10 percent of family income for a married person or 20 percent of family income for a single person.[9]

IV. RESULTS

The model generated estimates of the impact of the buy-in on retirement decisions, the number of persons who would participate in the Medicare buy-in plans, and the effects of the buy-in on the uninsured population.

The Impact of Medicare Buy-In Plans on Retirement Decisions

The retirement model indicated that health insurance costs associated with retirement have significant but small effects on labor force withdrawals. According to our estimates, a 10 percent increase in the premium cost of retirement would reduce retirement rates by 4.1 percent.[10] Because the introduction of a $300 buy-in plan would reduce the premium cost of retirement for workers with employer-sponsored coverage but without RHI offers by about 14 percent, it would increase their retirement rates by only about 6 percent. Our estimates might understate the true effect of a buy-in plan on retirement decisions, however. Premium costs in our model are imprecisely measured, variation in premium costs does not reflect all of the differences in types of insurance coverage, and the model does not capture the effects of risk aversion. Retirement decisions for workers concerned about the availability of private non-group coverage after retirement may be particularly influenced by the introduction of a Medicare buy-in. Nonetheless, our estimates strongly suggest that the effects of a buy-in on retirement will be relatively small.

[8] Participation in the buy-in plans proposed by the Clinton Administration and the Gore campaign was restricted to persons who were not offered job-related health benefits.

[9] In the 1998 Consumer Expenditure Survey, we found that health insurance costs accounted for 20 percent or less of total household expenditures in 98 percent of households.

[10] By comparison, the model indicated that a 10 percent increase in expected future wages from continued employment would reduce retirement rates by 21.9 percent.

Exhibit 6 reports the employment status of persons ages 62 to 64 before and after the introduction of a Medicare buy-in program. In 1998, 36.7 percent of the sample spent at least 20 hours per week working for pay. The introduction of a buy-in plan would slightly reduce the fraction of the population at work. If a buy-in plan priced at $300 per month were offered, an additional 11,500 persons would retire, reducing the employed portion of the population to 36.5

Exhibit 6

Predicted Percentage of Persons Ages 62 to 64 at Work in 1998, Under Current Law and Alternative Medicare Plans, By Type of Insurance

Type of Insurance	Percent of Sample	Current Law	Monthly Premium for Buy-In Plan			
			$400	$300	$200	Income-Related
All	100.0%	36.7%	36.6%	36.5%	36.3%	36.3%
ESI from own employer, no RHI offered	10.2%	69.3%	68.1%	67.4%	65.4%	64.9%

Note: The income-related premiums would be set at $43.80 per month for those <150% of poverty and at $300 per month for everyone else. Individuals were considered to be at work if they were employed more than 20 hours per week in 1998. Insurance coverage was measured in 1996. Employment rates in 1998 were high for those with ESI from their own employers because they were all working in 1996, by definition. Estimates were weighted to account for the sample design of the HRS.
Source: Urban Institute computations based on the 1996 and 1998 HRS.

percent. The effects would be somewhat greater if the buy-in were priced at $200 per month or as a function of income and somewhat smaller if priced at $400.

In percentage terms, the retirement effects were larger for workers with job-related health benefits but without RHI offers, because a buy-in plan would not generally affect labor supply for other workers. We estimated that the proportion of workers with employer-sponsored coverage but without RHI offers in 1996 who remained at work in 1998 would fall from 69.3 percent to 67.4 percent if a $300 buy-in plan were introduced. However, because only 10 percent of workers ages 62 to 64 in 1998 had job-related health benefits but no RHI offers, few workers would actually be affected.

Participation in Medicare Buy-In Plans

Exhibit 7 reports simulated participation rates in private non-group plans and Medicare buy-in plans under current law and under alternative buy-in scenarios. The estimates were restricted to persons ages 62 to 64 without access to employer-sponsored insurance, Medicaid, disability-related Medicare benefits, or military health benefits. (Detailed tables describing our results are available in the appendix.)

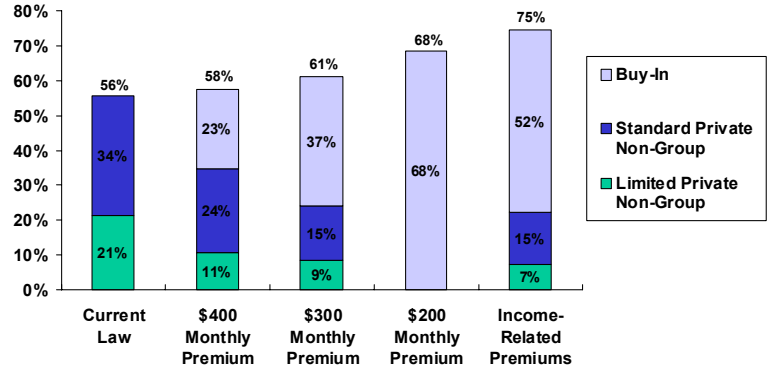
Substantial numbers of near-elderly Americans would purchase Medicare coverage if it were available. According to our estimates, 37 percent of eligible persons, or 490,000 in 1998, would

participate in a Medicare buy-in priced at $300 per month. Participation rates would fall to 23 percent (or 293,000 persons) if the monthly price were set at $400 and rise to 68 percent (or 897,000 persons) if the monthly price were set at $200.

However, few buy-in participants would have been uninsured before purchasing Medicare coverage. Instead, most participants would drop private non-group coverage in favor of less

Exhibit 7

Simulated Participation Rates in Private Non-Group Plans and Medicare Buy-Ins, Among Eligible Persons Ages 62 to 64



Note: Numbers may not sum to 100% due to rounding. Income-related premiums set at $43.80/month for those <150% of poverty and at $300/month for everyone else. "Standard" coverage defined as benefits similar to Medicare coverage (i.e., not necessarily prescription drugs) with 20 percent co-pays and substantial deductibles. "Limited" coverage defined as essentially catastrophic only.
Source: Urban Institute estimates, 2001.

expensive Medicare coverage. For example, with the introduction of a $300 buy-in plan, the portion of near-elderly Americans who purchase private non-group coverage would fall from 56 percent to 24 percent, among those without access to other types of public insurance or to employer-sponsored coverage. As a result, the portion of this group with coverage would increase only modestly, from 56 percent to 61 percent. If the buy-in were priced at $200 per month, no near-elderly Americans would purchase private non-group plans because the buy-in would be less expensive than all private plans.

Although an unsubsidized buy-in would have small effects on coverage rates, it would lower costs and improve the quality of coverage for many near-elderly persons. Under current law, without a Medicare buy-in, only 34 percent of near-elderly persons without access to public or employer-sponsored insurance purchased standard non-group coverage in 1998. However, 52 percent would have standard coverage, through either the public or private sector, if individuals were able to purchase Medicare coverage at a cost of $300 per month.

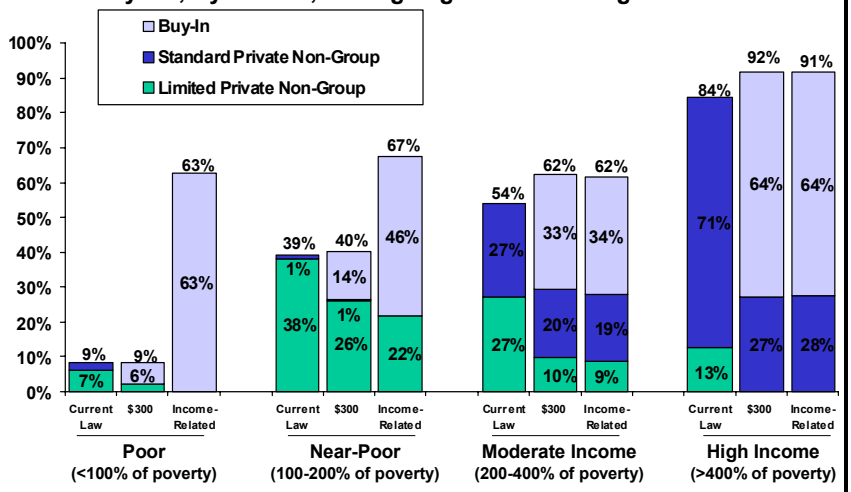
Unless premiums were related to income, few low-income Americans would participate in the buy-in (see Exhibit 8). If all participants, regardless of income, were charged monthly premiums of $300, only 6 percent of eligible persons with incomes below the poverty line and only 14 percent of those with incomes between 100 percent and 200 percent of the poverty line would

buy into Medicare. However, if premiums were related to income, so that those with incomes below 150 percent of the poverty line were charged $43.80 per month and everyone else were charged $300 per month, 63 percent of eligible persons with incomes below the poverty line and 46 percent of those with incomes between 100 percent and 200 percent of the poverty line would participate in the buy-in plan.

Regardless of how the buy-in were priced, most participants would have high incomes. Exhibit 9 reports the income distribution of buy-in participants and compares it to the distribution for all

Exhibit 8

Simulated Participation Rates in Private Non-Group Plans and Medicare Buy-ins, By Income, Among Eligible Persons Ages 62 to 64

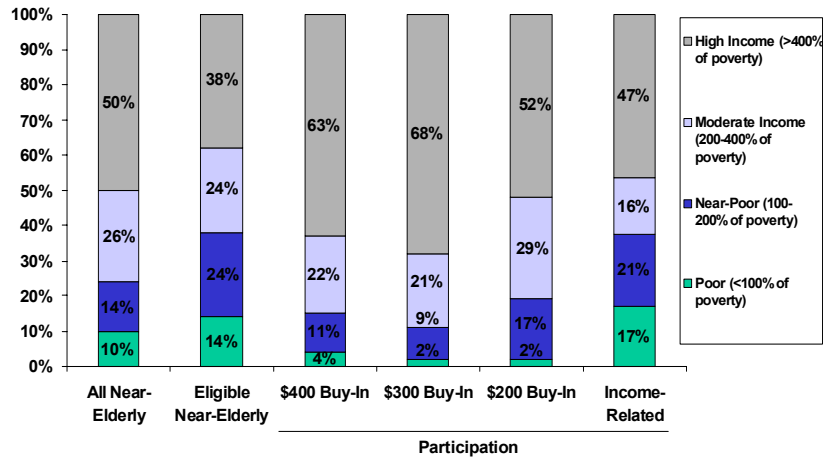


Note: Numbers may not sum to 100% due to rounding. Income-related premiums set at $43.80/month for those <150% of poverty and at $300/month for everyone else. "Standard" coverage defined as benefits similar to Medicare coverage (i.e., not necessarily prescription drugs) with 20 percent co-pays and substantial deductibles. "Limited" coverage defined as essentially catastrophic only.
Source: Urban Institute estimates, 2001.

near-elderly persons and for those eligible for the buy-in. If the plans were priced at $300 per month, about two-thirds of participants (68 percent) would have family incomes exceeding 400 percent of the poverty line. Only 11 percent of participants would have incomes below 200 percent of the poverty line, although they represent 38 percent of those eligible to participate. Thus, a buy-in designed to be cost-neutral would attract participants with disproportionately high incomes. However, the plan would attract disproportionate numbers of low-income participants if premiums were instead related to income. With income-related premiums, 17 percent of participants would be poor and another 21 percent would be near poor (with incomes between 100 percent and 200 percent of the poverty line). Nonetheless, even with income-related premiums, almost half of participants would have incomes exceeding 400 percent of the poverty line.

Exhibit 9

Income Distribution of Persons Ages 62 to 64 and Buy-In Participants, Under Alternative Plans



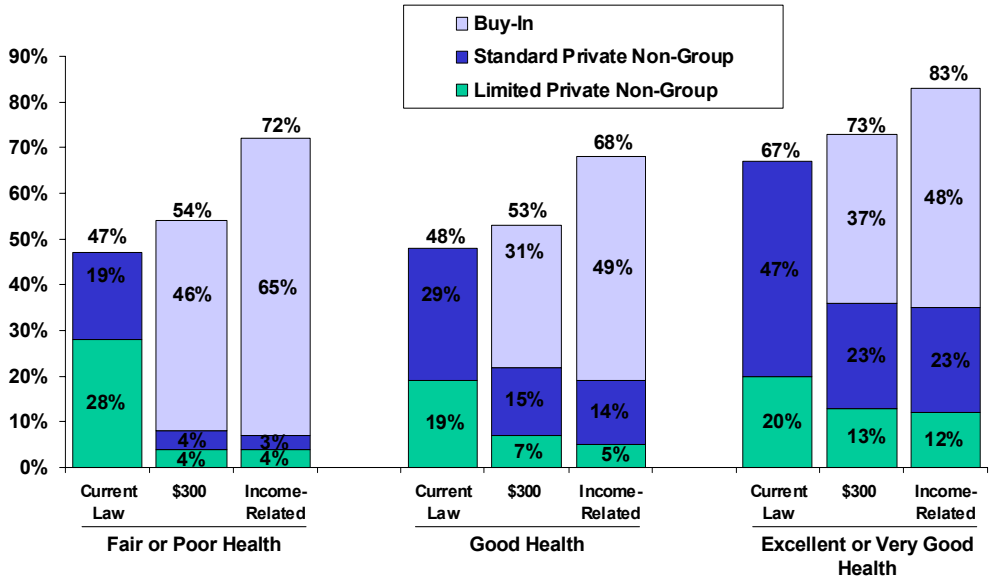
Note: Income-related premiums are set at $43.80 per month for those <150% of poverty and at $300 per month for everyone else.
Source: Urban Institute estimates, 2001.

The introduction of a buy-in would increase coverage rates for those with health problems. Exhibit 10 reports simulated participation rates in private non-group plans and Medicare buy-in plans by health status, for near-elderly persons eligible for the buy-in program. Under current law, in the absence of a buy-in, only 19 percent of near-elderly persons in fair or poor health without access to employer-sponsored or public insurance purchased standard private non-group coverage. With the introduction of a Medicare buy-in plan with premiums set at $300 per month, 46 percent would participate, thereby acquiring standard coverage. By contrast, only 37 percent of eligible persons in excellent or very good health would participate in the buy-in. If premiums were related to income, 65 percent of those in fair or poor health eligible for the buy-in would participate, because many persons with health problems have limited incomes. Because premiums for private non-group plans are expensive for those with health problems, participation rates in the buy-in would be high among those in poor health even if premiums were set at $400 per month.

Because persons in poor health exhibit strong demand for health insurance, the prevalence of health problems would be somewhat higher among those who participate in the buy-in than all those eligible for the buy-in plans (see Exhibit 11). For example, 64 percent of participants in the $300 buy-in plan would have at least one serious health problem, defined as a history of diabetes, cancer, chronic lung disease, heart problems, or stroke. By comparison, only 38 percent of those eligible for the buy-in, and 45 percent of the entire near-elderly population, report serious health problems. This adverse selection problem, in which insurance costs are driven up when those most likely to utilize health services are also most likely to purchase insurance (particularly when prices do not vary with health status), highlights the challenge of designing a cost-neutral buy-in program. Raising the price to cover costs would only further discourage healthier people from

Exhibit 10

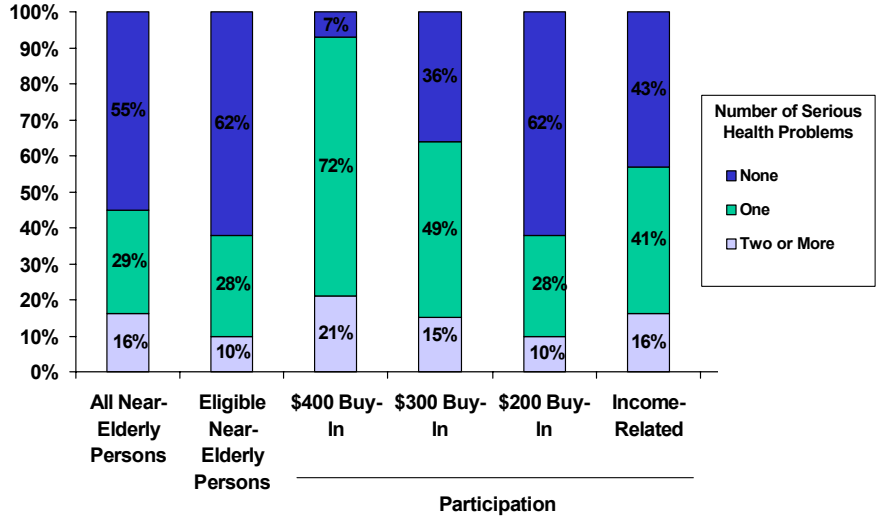
Simulated Participation Rates in Private Non-Group Plans and Medicare Buy-Ins, By Health Status, Among Eligible Persons Ages 62 to 64



Note: Income-related premiums are set at $43.80/month for those <150% of poverty and at $300/month for everyone else. Standard" coverage defined as benefits similar to Medicare coverage (i.e., not necessarily prescription drugs) with 20 percent co-pays and substantial deductibles. "Limited" coverage defined as essentially catastrophic only.
Source: Urban Institute estimates, 2001.

Exhibit 11

Distribution of Health Problems for Persons Ages 62 to 64 and Buy-In Participants, Under Alternative Buy-In Plans



Note: Income-related premiums are set at $43.80 per month for those <150% of poverty and at $300 per month for everyone else. Serious health problems include diabetes, cancer, chronic lung disease, heart problems, and stroke.
Source: Urban Institute estimates, 2001.

participating in the program and may make the plan unaffordable to those who need it most. If the buy-in were priced at $400 per month, for example, 93 percent of participants would have serious health problems.

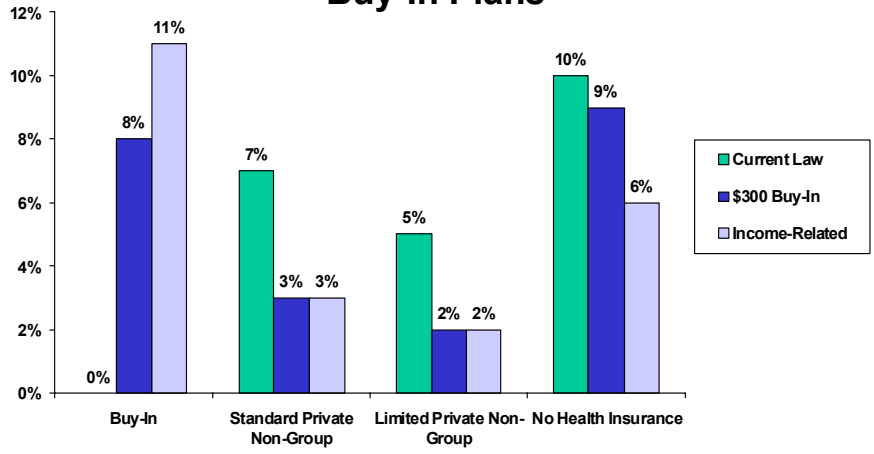
Effects of the Buy-In on the Uninsured

Exhibit 12 reports simulated rates of insurance coverage for the near-elderly under current law and under the different Medicare buy-in plans we analyzed. The introduction of a buy-in would reduce the share of uninsured near-elderly, but the effects would be fairly small if the buy-in were designed to be cost neutral because most participants would have otherwise purchased private plans. Uninsurance rates would fall from 10 percent under current law to 9 percent after the introduction of a $300 buy-in plan, reducing the number of uninsured near-elderly Americans by about 60,000. Overall, 8 percent of the near-elderly would participate in a $300 buy-in plan, and 5 percent would purchase private non-group coverage. However, the buy-in plan would likely improve the overall quality of coverage, with many participants replacing limited private non-group coverage with more comprehensive Medicare benefits. As a result, a moderately priced buy-in option would reduce the portion of the near-elderly population without coverage or with only limited coverage from 14 percent to 11 percent.

The effect on coverage would be larger if monthly premiums for the buy-in were set lower than $300 or if they were related to income. With income-related premiums, for example,

Exhibit 12

Simulated Coverage Rates Among Persons Ages 62 to 64, Under Current Law and Alternative Buy-In Plans



Note: Income-related premiums set at $43.80/month for those <150% of poverty and at $300/month for everyone else. "Standard" coverage defined as benefits similar to Medicare coverage (i.e., not necessarily prescription drugs) with 20 percent co-pays and substantial deductibles. "Limited" coverage defined as essentially catastrophic only.
Source: Urban Institute estimates, 2001.

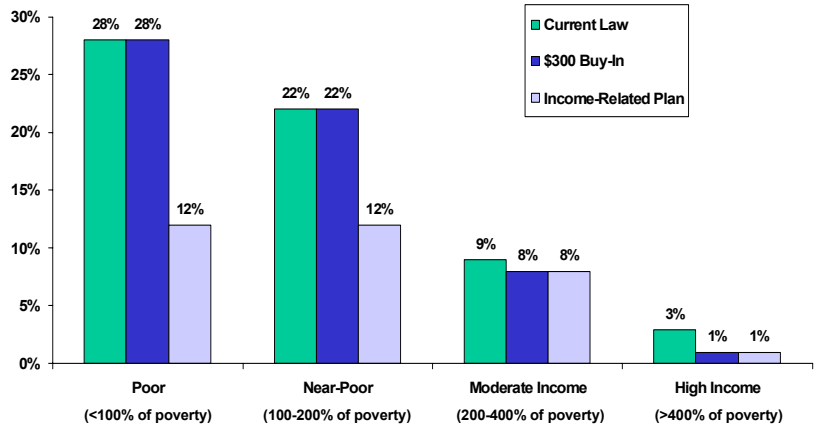
uninsurance rates for the near-elderly would fall to 6 percent, with about 180,000 people acquiring coverage (relative to coverage in 1998 under current law).

Exhibit 13 reports simulated rates of uninsurance in 1998 by income for the near-elderly population under current Medicare rules and after the introduction of different buy-in plans. Unless premiums were related to income, the buy-in would not improve coverage rates for those with limited incomes. For example, a buy-in plan that charged all participants $300 per month would not reduce uninsurance rates at all for the poor or near poor, although the quality of their coverage would improve slightly, as some low-income individuals drop limited private non-group coverage for more comprehensive Medicare benefits. Coverage rates would improve substantially, however, if premiums were related to incomes. If premiums were set at $43.80 per month for those with incomes below 150 percent of the poverty line and at $300 per month for everyone else, the buy-in would reduce rates of uninsurance to 12 percent (from 28 percent) for those with incomes below the poverty line. Thus, a buy-in plan could better target benefits to the vulnerable near-elderly by relating premiums to income than by charging the same premium for all participants.

The introduction of a Medicare buy-in at ages 62 to 64 would substantially improve coverage rates for those with health problems, even if premiums were set fairly high (see Exhibit 14). Under a $300 buy-in plan, uninsurance rates would fall from 9 percent to only 6 percent for those with two or more serious health problems and from 8 percent to 5 percent for those who described their overall health status as poor. Coverage rates would improve further if premiums were related to income. Increases in coverage rates resulted from the strong demand for health insurance evident among those with health problems and from the high premiums they face in the private non-group market.

Exhibit 13

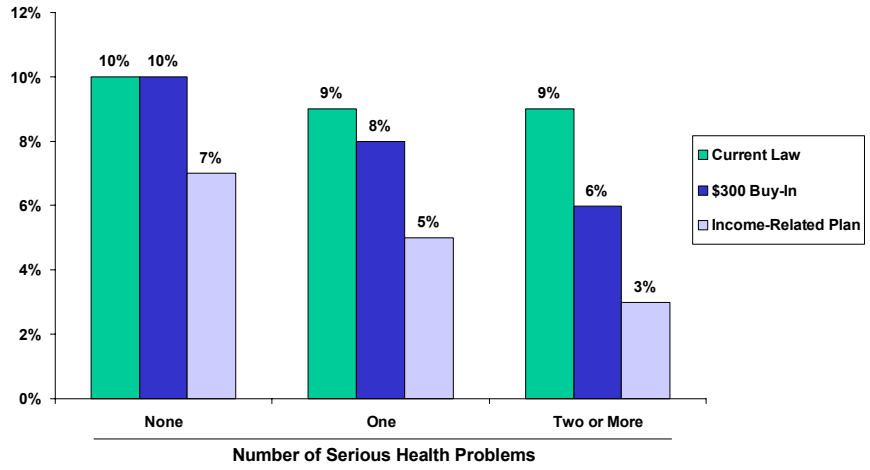
Simulated Uninsured Rates Ages 62 to 64, By Income, Under Current Law and Alternative Buy-Ins



Note: Income-related premiums are set at $43.80 per month for those <150% of poverty and at $300 per month for everyone else.
Source: Urban Institute estimates, 2001.

Exhibit 14

Simulated Uninsured Rates Ages 62 to 64, By Health Status, Under Current Law and Alternative Buy-Ins



Note: Income-related premiums are set at $43.80 per month for those <150% of poverty and at $300 per month for everyone else.
Serious health problems include diabetes, cancer, chronic lung disease, heart problems, and stroke.
Source: Urban Institute estimates, 2001.

Exhibit 15 reports the characteristics of the newly insured population ages 62 to 64 after the introduction of a buy-in under different premium scenarios. If near-elderly persons were offered the opportunity to buy into the Medicare program with premiums set at $300 per month, 64 percent of the newly insured would have family incomes exceeding 400 percent of the poverty line and 21 percent would be in poor health. If premiums were related to income, on the other

Exhibit 15

Characteristics of the Newly Insured Population Ages 62 to 64, Under Alternative Medicare Buy-In Plan

		Participation			
	Percent of Overall Sample	$400 Buy-In	$300 Buy-In	$200 Buy-In	Income-Related
All	100.0%	100.0%	100.0%	100.0%	100.0%
Income Relative to Poverty Line					
<100%	9.7	0.0	0.0	0.0	40.6
100%-200%	14.2	0.0	0.0	20.4	35.9
200%-400%	26.3	13.1	36.2	47.6	8.5
>400%	49.8	86.9	63.8	32.0	15.0
Self-Rated Overall Health Status					
Poor	8.7	21.2	20.9	8.2	9.7
Fair	17.6	19.4	12.3	15.9	21.7
Good	31.3	20.8	21.9	43.1	37.2
Very Good	29.2	38.6	43.6	24.4	24.5
Excellent	13.2	0.0	1.3	8.4	6.9
Number of Serious Health Problems					
None	55.2	12.2	16.5	50.1	46.9
One	29.3	25.9	32.2	22.7	28.6
Two or more	15.5	61.9	51.3	27.2	24.5
Race					
Black	7.7	7.9	4.3	8.1	12.3
Hispanic	4.0	0.0	4.1	10.0	6.6
White and other races	88.3	92.1	91.6	81.9	81.1

Note: The first data column reports the percentage of all persons ages 62 to 64 with the given characteristic. The other data columns report the percentage of the newly insured with the given characteristic, under each buy-in plan. Estimates were weighted to account for the sample design of the HRS.
Source: Urban Institute estimates, 2001.

hand, only 15 percent of newly insured individuals would have family incomes above 400 percent of the poverty line and 10 percent would be in poor health.

V. OTHER KEY ISSUES

The analysis above provides projections of enrollment in a buy-in under several alternative premium levels. In practice, other issues besides price arise in contemplating how to design a buy-in option for Medicare that could also affect its costs and effectiveness.

Subsidies

The results of our model indicate that participation in a Medicare buy-in depends on the price of the plan. Since many of the uninsured have low incomes, a buy-in plan may need to subsidize premiums for the poor and near poor in order to improve coverage rates. Even the $43.80 monthly premium that our model assumes for low-income persons under the income-related premium scenario discourages many uninsured from participating in the buy-in. If one of the goals of a Medicare buy-in is to reduce uninsurance rates, then a mechanism for creating a subsidy targeted at the low-income must be considered.

Several different types of subsidies are possible. Perhaps the most basic approach would be to charge lower premiums to persons with limited incomes than to those with high incomes. However, differential pricing schemes can be difficult to implement, especially because of the problems posed by determining program eligibility. Mechanisms such as tax credits may not be successful because beneficiaries generally do not realize any savings until the year after premiums are paid. Thus, tax credits may not help them make their immediate premium payments.

An alternative mechanism would be to use a program like Medicaid to administer the buy-in subsidies. The Qualified Medicare Beneficiary (QMB) and Specified Low-Income Medicare Beneficiary (SLMB) programs are run by Medicaid and provide subsidies to persons who have reached the Medicare eligibility age. However, rates of participation in the QMB and SLMB programs are low, suggesting that Medicaid may also have difficulty attracting participants to a subsidized buy-in plan. Medicaid would probably be even less effective at facilitating enrollment in a buy-in plan if the income cutoffs are fairly generous. Persons at 200 percent of poverty, for example, may be reluctant to apply for a "welfare" program and participate in what they perceive to be a burdensome and demeaning process for establishing eligibility. A better model for a low-income subsidy might be the more relaxed application process used by a number of state programs to expand insurance or offer special benefits such as prescription drugs. The trade-off, of course, is that some ineligible persons may obtain subsidies.

Another issue is whether low-income subsidy proposals should exclude persons with access to employer-sponsored coverage. Both the Clinton and Gore proposals included this restriction. A substantial portion of the uninsured are low-wage workers employed by firms that offer coverage

but require expensive contributions. Instead of excluding them from the buy-in plan, a more equitable approach would be to offer them a subsidy equal to what the buy-in would provide, which they could apply towards the purchase of employer-sponsored coverage. This subsidy would reduce the incentive for employees, and perhaps even employers, to drop employer-sponsored coverage.

In addition to low-income subsidies, an across-the-board subsidy would likely be needed to reduce the effects of risk selection. Our results suggest that buy-in participants are more likely to have health problems, unless premiums are priced lower than private non-group premiums offered to the most healthy individuals. Even persons with moderate and high incomes would find premiums expensive if there were no subsidies to adjust for risk selection. Setting premiums equal to the actual average health care costs of participants creates a vicious cycle that can undermine the insurance market. As premiums increase, those in good health drop out of the plan, raising the proportion of participants with health problems. In turn, the average cost of care for participants would rise, driving premiums higher and further increasing the proportion of participants in poor health. Subsidizing the basic premium to keep costs low could mitigate this spiral and help to attract healthier enrollees to the buy-in.

An across-the-board subsidy could be set in several different ways. One approach would be to set the premium at the actuarially fair level that would prevail if everyone in the age group enrolls. Charging that amount, instead of the premiums necessary to cover costs for those who actually participate, would likely reduce the degree of risk selection, because many lower risk persons would still choose to participate (Loprest and Moon, 1999). Another approach would be to set the premium for a Medicare benefit as if the government would pick up the costs of catastrophic expenses, with the individual paying only for costs up to some expenditure limit. The reinsurance level could be adjusted to be more or less generous than the actuarially fair premium. Similar catastrophic approaches are being discussed in other areas, such as prescription drug coverage under Medicare.

Any across-the-board subsidy could be implemented alone or in conjunction with a low-income subsidy. In fact, only a combination of subsidies could address both barriers to insurance coverage—the affordability issue and adverse risk selection. However, if all participants received high subsidies, it is difficult to offer generous low-income protections without creating very high program costs. On the other hand, as low-income subsidies are phased out, a generous across-the-board subsidy reduces the burden on those who are ineligible for the low-income protections.

Private Alternatives to a Medicare Buy-In?

Instead of allowing older persons to buy into Medicare, a buy-in program could use private plans. For example, several policy makers and analysts have proposed using the Federal Employees Health Benefits Program (FEHBP) as the mechanism for offering expanded coverage (Kendall, 1998). The use of private plans instead of a public entitlement may reduce the likelihood that subsidies or services would expand over time and raise the burden on taxpayers. A second type of proposal sometimes suggested for older uninsured persons is to extend the deductibility of

insurance premiums to those who purchase individual policies, again relying on the private sector to make insurance available. House Ways and Means Chairman Bill Archer, for example, has suggested this approach.[11] Tax proposals can also be linked to public programs. In its 2001 budget submission, the Clinton Administration proposed tax credits to make a non-subsidized Medicare buy-in more affordable.

For a private approach to work well, both substantive market reforms and a mechanism for establishing subsidies would probably be needed. Thus far, reforms stringent enough to assure everyone reasonable access to the insurance market have been difficult to pass at either the state or federal levels. And even where they do exist, affordability remains a major issue (Chollet and Kirk, 1998). Without reforms that assure reasonable premiums for those with health problems, higher premium prices would simply offset subsidies or tax credits. Furthermore, tax credits are unlikely to increase coverage rates, especially for persons for whom a credit at the end of the year would not be sufficient to allow them to buy-insurance today. At best, subsidies established through the tax system would improve the market for those who could afford coverage (and may already be buying it), but they may not serve the neediest uninsured (Gruber and Levitt, 2000).

The Benefit Package

Since virtually all near-elderly persons will be eligible for Medicare once they reach age 65, an option that smoothes the transition into Medicare would be easier to administer and less disruptive for individuals than an option that creates an entirely new program for the near-elderly. However, the existing Medicare benefits package is limited—particularly in its exclusion of prescription drug coverage and catastrophic protection—leaving many Medicare enrollees to supplement their coverage with products from the private market or to enroll in a Medicare+Choice HMO that provides more comprehensive benefits. Enhancing the benefits package for those who buy into Medicare but not for full Medicare beneficiaries would not make sense, especially since elderly beneficiaries have an even greater need for such protection than do the near-elderly. Yet, if the benefit packages were identical, the same types of supplemental products could become part of the standard coverage options for the near-elderly. Although concerns about the comprehensiveness of Medicare have been around for a long time, the expense of catastrophic protection has impeded an expansion of services. However, some recent proposals to restructure Medicare have included catastrophic protections, and there is now serious discussion about adding prescription drug coverage to Medicare.

Instead of expanding traditional fee-for-service Medicare benefits, the buy-in could rely upon private managed care plans to provide comprehensive benefits to participants. Many of the managed care plans that enroll current Medicare beneficiaries provide services that are not included in the standard Medicare benefits package. If buy-in participants were also permitted to enroll in managed care, they may receive better coverage than the traditional Medicare package. In addition, many individuals in the pre-Medicare age group are already accustomed to managed care, making Medicare-qualified managed care plans a natural way to extend coverage to the

[11]Tax proposals can also be linked to public programs. In its 2001 budget submission, the Clinton Administration proposed tax credits to help make a non-subsidized Medicare buy-in more affordable.

near-elderly. It would also allow them to keep the same coverage after age 65. Many managed care plans have withdrawn from Medicare over the last three years, however, raising concerns about whether these plans will continue to offer the additional benefits that enhance the Medicare benefit package.

Family Versus Individual Benefits

Another key decision is whether to offer a buy-in as an individual or a family benefit. Eligibility for Medicare is determined on an individual basis. Although eligibility may be tied to a spouse's work history, people can only participate in Medicare when they meet age and other criteria. Thus, 65-year-olds qualify for Medicare if eligible for Social Security benefits, but their spouses would not be able to participate until they reach age 65. Would a buy-in operate the same way? An individual benefit would diminish the attractiveness of a buy-in by effectively splitting up families, requiring them to have multiple insurance policies. If couples could enroll, some persons in their 30s or 40s with older spouses might participate, extending the reach of the plan far beyond what most policymakers intend. Ironically, however, one justification for a buy-in is to cover spouses of full Medicare beneficiaries who have not yet reached the age of eligibility themselves. One solution might be to offer family coverage through the buy-in, but to limit any subsidies to age-eligible individuals. However, to be fair to elderly persons, coverage of age-ineligible family members would also have to be extended to elderly participants in the Medicare program.

Cutoff Age

Setting the proper lower age limit for the buy-in is somewhat arbitrary. While 62 is the age at which retired persons may collect Social Security income, many younger persons face voluntary and involuntary separations from the labor force and could benefit from improved health insurance coverage. In practice, there is little to distinguish 62-year-olds from 60-year-olds or even younger persons. The need for a buy-in rises with age, but only gradually, not in discrete steps. The lack of a natural cutoff may raise concerns about future expansions of the entitlement and discourage implementation.

Financing the Benefit

Given financing concerns about the basic Medicare program, it is important to consider how to pay for a buy-in proposal. One possible source of financing could be an assessment on private plans that write individual policies in the market and skim off good risks, implicitly raising the costs of buy-in proposals. The tax could be applied universally to all insurers, or selectively to those who underwrite policies only for good health risks. The assessment could be structured so that insurance companies could avoid the tax by offering individuals reasonable access to private coverage.[12] The selective approach could achieve two goals: raising revenues to offset the

[12] This is analogous to the "pay or play" tax used by New Jersey to encourage insurance companies to offer individual coverage. Those who choose not to "play" are subject to a tax.

problems of adverse risk selection for the buy-in program, and helping to level the playing field across private insurers.

Other revenue sources would be needed to finance subsidies to low-income individuals. Special aid to those with limited incomes is usually provided through general revenues, on the grounds that progressive taxes are the best way to finance these benefits. Dedicated taxes might also be considered. Whatever the strategy, it is probably unwise and politically unpalatable to expect Medicare to absorb the costs of this new program.

Finally, a buy-in plan for persons below age 65 could possibly be financed by increasing the age of full eligibility for Medicare beyond 65. Whether a delay in the full eligibility age could finance a buy-in depends in large measure on the generosity of the buy-in subsidies. Even if some savings could be achieved by delaying the full eligibility age, an important issue would be to balance the winners and losers under these changes. Some persons ages 65 and older would be hurt by a buy-in coupled with a delay in full eligibility, while others who would be uninsured without the buy-in would benefit from the policy changes.

VI. CONCLUSIONS

A buy-in to the Medicare program for persons below the age of 65 could help to reduce the number of persons without insurance in the United States. Without subsidies, this approach would largely be limited to persons who could afford to pay substantial premiums and who have trouble buying insurance in the private market because of health problems. With subsidies, the benefits of a buy-in could extend to those with limited incomes, who have much higher rates of uninsurance. However, while the level of participation in a Medicare buy-in would depend critically on the subsidies it provided, higher subsidies would raise the costs of the program.

A Medicare buy-in for persons aged 62 to 64 would reduce the number of near-elderly Americans without insurance, but the effects would be modest unless taxpayers bear some of the costs of the buy-in. Although many of the near-elderly would choose to participate in a cost-neutral buy-in, most participants would replace expensive private non-group coverage with less expensive (and often more comprehensive) Medicare coverage. Very few of them would have been uninsured in the absence of a buy-in plan, and two-thirds of participants would have incomes above 400 percent of the poverty line.

The buy-in plan could better improve coverage by targeting benefits to the poor and near poor. Many of the near-elderly who lack coverage under current law have limited incomes and would be unable to afford Medicare benefits if premiums cost several hundred dollars per month. If premiums were related to income, so that those with family incomes below 150 percent of the poverty line were charged $43.80 per month, uninsurance rates for the poor would fall from 28 percent to 12 percent. However, even under this income-related pricing scheme, premium costs for the poor would still be substantial. Under our income-related plan, annual premiums for an unmarried person with income equal to 75 percent of the poverty line in 1998 would amount to $526 per year and consume more than 8 percent of her income. The effects of the Medicare buy-

in plan on coverage rates for the poor would be even larger if premiums were more heavily subsidized for low-income persons.

The results also suggest that adverse selection into the buy-in program would complicate efforts to keep costs down while also maintaining access for those with limited incomes. Participation rates would be higher among persons in poor health who use more health services and incur more costs than those in good health. An across-the-board subsidy that encouraged participation by healthy individuals with lower expected costs would limit the adverse selection problem, but it would raise the costs to taxpayers.

Additional details—including administrative issues, the roles of private insurance and the Medicaid program, the cutoff age and other design features—will alter both the cost and effectiveness of any buy-in plan. Policy makers will need to examine these issues carefully when and if they seriously consider a by-in as a means of improving coverage rates.

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APPENDIX

Our estimates of the potential effects on coverage of the introduction of a Medicare buy-in plan were generated from a model that simulated the demand for insurance coverage for the near-elderly and the impact of insurance costs on retirement behavior. The model was based on a sample of respondents from the 1998 wave of the HRS. It also incorporated premium data collected over the internet from non-group insurance providers. This appendix provides details about the imputation of non-group premiums and how our model simulated retirement behavior and the demand for insurance coverage.

Measuring Premium Costs for Private Non-Group Plans

Premium costs for private non-group plans are important inputs to our model, because they help predict how the introduction of a buy-in plan might affect retirement and coverage decisions. However, non-group premium data are not available in the HRS for those without non-group coverage. Instead of attempting to impute non-group premiums from purchasers to nonpurchasers in the HRS, we utilized an online service to collect premium data from insurance providers for a random subset of HRS respondents, and used these data to impute premiums for the entire sample. The online service is described in the body of the report.

To impute premiums, we first stratified the HRS sample into 24 groups, defined by age (57-59, 60-62, and 63-64), gender, tobacco use, and the presence of serious health problems. We randomly selected 30 HRS respondents from each group and collected premiums for them by entering their personal characteristics at the service's website. We generated quotes for fee-for-service plans with $500 deductibles and a 20 percent copay. We then assigned to all HRS respondents the median of the premiums collected for their particular group. To estimate costs for 1998, we deflated the premium data we collected in 1999 by 4.5 percent, which is the sum of the 2.2 percent increase in the Consumer Price Index (CPI) in 1999 and the average 2.3 percent per year real change in premium costs over the period 1990-98.

We were able to generate quotes for most individuals with no health problems but for only a small percentage of respondents with serious health problems. Instead of basing our premium costs on a small and possibly unrepresentative sample, we estimated non-group premiums for persons with health problems by inflating the premiums collected for healthy persons. For persons with one serious health problem, we set premiums equal to 150 percent of the median of premiums collected for respondents with no serious health problems in the appropriate age, gender, and smoking category. For persons with more than one serious health problem, we set premiums equal to 200 percent of the median for healthy respondents. These factors are approximately equal to the ratios we observed across all groups for those with zero, one, and more than one health problem. We recognize that some people would be unlikely to find any offer of coverage, particularly if they were not HIPAA eligible or lived in a state without guaranteed issue regulations for the private market. However, because we did not have access to state identifiers, we assumed what appeared to be a reasonable premium level if an offer were available.

Modeling the Impact of a Medicare Buy-In on Retirement Decisions

As discussed in the body of the report, our predictions of the impact of a buy-in on labor force withdrawals were based on the premium costs of retirement, defined as the monthly increase in premium expenses that workers would pay if they retired, compared to what they would pay if they remained at work. The premium cost to retire depends on insurance coverage. For workers who purchased non-group coverage, received employer-sponsored coverage through their spouses, or were uninsured, the premium cost was set equal to zero, since they would face no change in the insurance alternatives available to them when they retired.

Costs could be substantial for workers who received employer-sponsored insurance (ESI) from their own employers. After retirement, those with ESI who were not offered retiree health insurance (RHI) benefits would be eligible for COBRA continuation coverage for 18 months, after which they would have to purchase non-group insurance policies to remain insured before reaching the Medicare eligibility age. For them, the premium cost to retire for the first 18 months would equal 102 percent of total ESI premiums—the amount that federal regulations permit employers to charge for continuation benefits—minus the amount the worker contributed toward the cost of health benefits as an active employee. After the initial 18 months and until becoming eligible for Medicare, the premium cost of retirement would equal the difference in cost between private non-group coverage and employee contributions for ESI coverage. Respondent contributions for ESI coverage are available in the HRS, but total ESI premiums are not available. We used data from the 1996 KPMG Survey of Employer Sponsored Health Benefits to impute total premium costs, as a function of firm size, industry, region, and employee premium share. For workers with ESI coverage and RHI offers, the premium cost is the difference in contributions that workers must make for their health benefits as active employees and as retirees. We computed RHI contributions for our sample by inflating ESI contributions using data from the 1995 Foster Higgins National Survey of Employer-Sponsored Plans.

To generate the present value of the stream of premium costs of retirement, we summed premium costs each month from the time of the survey until the initial receipt of subsidized Medicare benefits. We used an annual interest rate of 2.8 percent, corresponding to the 1998 intermediate assumption used by actuaries at the Social Security Administration (SSA).

Workers who received health benefits from their current employers face steep increases in premium costs when they retire. However, cost increases are much larger for those with ESI only than for those with RHI offers. We estimated that mean premium costs would rise by $83 in the first month of retirement for workers with RHI offers, compared with $131 for those with ESI only. The mean cost differential was even larger 19 months after retirement, once mandated continuation coverage ran out for some retired workers. We estimated that at month 19 workers with RHI offers would pay on average $84 more per month for health insurance if retired than they would pay if they remained at work, while those with ESI but not RHI offers would pay $280 more per month, since they would have to purchase private non-group coverage to remain insured. The mean present value of the stream of the premium costs to retire was $5,066 for those with RHI offers, compared with $14,821 for those with ESI only.

Determinants of Retirement Decisions

To measure the impact of the premium cost to retire on labor force withdrawals, we estimated probit models of retirement. The sample was restricted to HRS respondents ages 55 to 64 in 1996 who were working at least 20 hours per week at the time of the 1996 interview. The dependent variable was set equal to one if the respondent was retired two years later, at the time of the 1998 interview, zero otherwise. We defined retirement as working fewer than 20 hours per week, because many employers offer health benefits only to those who work at least 20 hours per week. The sample consisted of 3,562 workers, 22 percent of whom retired during the two-year observation period.

The key independent variable in the model was the premium cost of retirement, which we expected would reduce the probability of withdrawing from the labor force before the Medicare eligibility age. The model also included measures of health, economic, and demographic characteristics of workers. All variables were measured at the time of the 1996 interview. Health was measured by an index of physical impairments, with higher scores indicating worse health. The model included indicators of defined benefit pension plan coverage and defined contribution pension plan coverage and a measure of the present value of the future stream of earnings that workers could expect to receive if they remained at work until age 65. We assumed that future earnings would increase at a real annual rate of 0.9 percent per year, equal to the SSA's intermediate wage growth assumption in 1998. The model also controlled for differences in age, marital status, race, gender, and education.

Table A.1 reports the parameters of our estimated retirement model. The first column reports means for the estimating sample and the second column reports estimated marginal effects on the probability of retiring. Asterisks denote statistically significant effects. Consistent with other retirement studies, we found that health problems, age, and defined benefit pension coverage substantially increased the likelihood of retirement. We also found that men were less likely to retire than women and married workers were more likely to retire than single workers. In addition, we found that the level of future earnings that workers could expect to receive if they remain at work reduced the probability of retiring.

The effect of the premium cost of retirement is the key result from our model. We found that the premium cost of retirement significantly reduced the probability of retirement. However, the effects were relatively small. An increase of $1,000 in the present value of the premium cost of retirement would reduce the probability of retiring by only 1.6 percentage points. Expressed another way, a 10 percent increase in the premium cost of retirement would reduce retirement rates by 4.1 percent. By comparison, we estimated that a 10 percent increase in future wages would reduce retirement rates by 21.9 percent.

Simulating Retirement After the Introduction of a Buy-In Plan

We used the estimated parameters from our model to simulate retirement behavior after the introduction of a Medicare buy-in plan. For each plan, we re-computed the premium cost to retire and used the new premium costs to predict retirement behavior. We assigned

Table A.1: Estimates of the Retirement Decision

	Sample Means	Marginal Effect
Present Value of Premium Cost of Retirement ($000)	4.996	-0.016***
Present Value of Future Earnings ($0000)	28.505	-0.015*
Covered by defined benefit pension plan	0.342	0.054***
Covered by defined contribution pension plan	0.328	-0.002
Index of physical impairments	2.162	0.038***
Age in 1998	60.612	1.577
Education		
[Reference: Did not complete high school]	0.167	…
Completed high school	0.364	-0.003
Some college	0.222	-0.016
Completed 4 or more years of college	0.247	0.011
Race		
Black	0.067	-0.004
Hispanic	0.040	-0.023
[Reference: White or other race]	0.893	…
Male	0.557	-0.044***
Married	0.716	0.051***

Note: The sample was restricted to 3,562 men and women ages 55 to 64 working at least 20 hours per week in 1996. The dependent variable equaled one if the respondent worked fewer than 20 hours per week in 1998, zero otherwise. Unless otherwise noted, all independent variables were measured in 1996. Asterisks denote statistically significant effects (*** $p < .01$; ** $.01 \leq p < .05$; * $.05 \leq p < .10$).

Source: Urban Institute computations from the 1996 and 1998 waves of the HRS.

retirement to a given respondent if the predicted probability of retirement, based on the respondent's individual characteristics and the model parameters, exceeded a certain threshold. The threshold was set so that the predicted rate equaled the observed retirement rate at ages 57 to 66 in 1998 under current Medicare rules.

The introduction of a buy-in plan would reduce the premium cost of retirement for workers with ESI and without RHI offers. If the buy-in plan were priced at $300 per month, the mean present value of the stream of premium costs for workers with ESI and without RHI offers would fall by $2,127. The decline would be steeper if the buy-in plan were priced less expensively or if it were means tested. The introduction of a buy-in plan at age 62 would not affect workers with RHI offers, because we assumed that the plan would not be offered to those who had access to employer-sponsored health benefits. We also assumed that a buy-in plan would not affect retirement decisions for workers without ESI, because they could participate whether or not they retired.

Based on the results of our retirement model, we simulated income in 1998 for some members of our sample. For those who were not actually retired in 1998 but whom we predicted would retire if a Medicare buy-in plan were introduced, we predicted their 1998 income by subtracting their actual 1998 labor income from the total income they reported in 1998 and adding predicted Social Security and employer-sponsored pension income. We set Social Security and private pension income equal to the amounts they expected to receive upon retirement, based on their self-reports in the 1996 HRS interview. Because some persons whom we classified as retired might remain employed but work fewer than 20 hours per week, we also predicted labor earnings for retirees, computed by multiplying predicted work hours by the hourly wage. We used actual income reported in 1998 when we predicted no change in retirement status.

Modeling the Demand for Private Non-Group Insurance and Participation in the Buy-In

Our simulations of participation in a Medicare buy-in were based on a probit model of private non-group coverage. The equation was estimated on a sample of 976 HRS respondents between the ages of 57 and 64 who were not covered by Medicaid, Medicare, military-related health benefits, or employer-sponsored insurance and were not offered insurance from an employer. About 51 percent of the sample purchased non-group coverage.

The model predicted coverage as a function of monthly premium costs, family income, health, attitudes toward risk, gender, age, race, and marital status. Because we expected that the probability of purchasing coverage would be especially low for persons in poverty, we specified a nonlinear relationship between income and non-group coverage by including in the equation a dummy variable indicating whether family income was below the poverty line. The equation also included the level of monthly family income, for those above the poverty line. We measured the effect of health by including in the model two dummy variables, one indicating the presence of exactly one serious health problem and another indicating more than one serious health problem. We considered heart problems, cancer, chronic lung disease, stroke, and diabetes to be serious health problems.

We also investigated how attitudes toward risk affect the decision to purchase non-group coverage. We expected that individuals who were more willing to accept risk would be less likely to purchase insurance. The HRS asked respondents a series of questions designed to measure their willingness to trade certain outcomes for risky but potentially more lucrative outcomes. Respondents were asked to choose between a job that would guarantee current total family income for life and one that offered higher pay on average, but with less certainty. If they took the second job, their current total family income would either double or it would be cut by a third, with both outcomes equally likely. We identified less risk averse respondents as those who accepted the lottery and chose the second job. About 26 percent of the respondents in our sample were willing to accept the job with the uncertain income stream.

Determinants of Private Non-Group Insurance Coverage

Table A.2 reports the parameters of our estimated model of non-group insurance coverage. The first column reports means for the estimating sample and the second column reports estimated marginal effects on the probability of purchasing coverage. Asterisks denote statistically significant effects.

We found that the price of insurance was negatively and significantly associated with non-group coverage for those without access to other types of insurance. Our estimates imply that a $100 increase in monthly premiums would reduce the probability of non-group coverage by 13 percentage points, and that a 10 percent reduction in price would increase coverage rates by 8.8 percent. Our estimated price effects are larger than those found by most other studies of non-group coverage and participation in employer-sponsored health plans. We also found that income has important effects on health insurance coverage. Respondents in our sample were significantly more likely to purchase insurance as their income increased above the poverty line. For those above the poverty line, we found that a $1,000 increase in monthly family income would raise the probability of coverage by 3.7 percentage points. Persons in poverty were less likely to purchase coverage, but the effects were not significant.

Consistent with our expectations, health problems and attitudes toward risk appear to play large roles in the decision to purchase non-group insurance. Controlling for price and income, those with more than one serious health problem were 28 percent more likely to purchase coverage than those with no serious health problems, while those with one serious health problem were 14 percent more likely to purchase coverage. Both effects were highly significant. Moreover, those who were less risk averse were significantly less likely to purchase non-group insurance than those who were more risk averse.

Demographic factors also have important effects on the purchase decision. We found that both blacks and Hispanics were substantially less likely than non-Hispanic whites to buy-insurance at late midlife. The probability of purchasing non-group coverage increased significantly with age, even within the narrow, eight-year age range that we examined. Non-group coverage rates were also significantly higher for married persons than for single persons.

Table A.2: Estimates of the Decision to Purchase Non-Group Insurance

	Sample Means	Marginal Effect
Monthly premium ($00)	4.01	-0.13***
Family income		
Indicator of income below the poverty line	0.184	-0.239
Level of income above poverty line ($000)	3.932	0.037***
Number of serious health		
[Reference: Zero]	0.643	…
One	0.274	0.144***
Two or more	0.083	0.278***
Attitudes toward risk		
[Reference: Risk averse]	0.726	…
Less risk averse	0.263	-0.095**
No response	0.011	-0.292
Age	60.7	0.023***
Race		
Black	0.080	-0.254***
Hispanic	0.092	-0.281***
[Reference: white and other]	0.828	…
Male	0.400	0.080
Married	0.624	0.091**

Note: The sample was restricted to 976 HRS respondents ages 57 to 64 without access to employer-sponsored health benefits or public insurance. Asterisks denote statistically significant effects (*** $p < .01$; ** $.01 \leq p < .05$; * $.05 \leq p < .10$).

Source: Urban Institute computations based on the 1998 HRS.

Simulating Participation in the Buy-Ins

We used the results of our model to simulate participation in the buy-in programs. We predicted that individuals without access to employer-sponsored coverage or other types of public insurance might buy into Medicare only if the plan were priced below the premiums they faced in the private non-group market. Applying the parameters of our model to the characteristics of each respondent, we predicted the probability that each eligible member of our sample would purchase coverage. We assumed that the individual participated in the buy-in program if the probability exceeded a certain threshold. The threshold was set so that the number of persons ages 62 to 64 predicted by our model to purchase non-group coverage equaled the number who were actually covered in 1998. However, as described in the body of the report, we also assumed that premium costs for an individual could not exceed 10 percent of family income for a married person or 20 percent of family income for a single person. For cases in which the model predicted that individuals would purchase coverage when the premium costs exceeded these thresholds, we assumed that they purchased limited private non-group coverage instead of participating in the Medicare buy-in.

Results of the Simulation Model

Appendix Tables A.3-A.7 present results from our simulations. These tables provide more detailed information than is available in the figures discussed in the body of the report.

Table A.3: Simulated Participation Rates in Private Non-Group Plans and Medicare Buy-In Plans by Family Income, Among Eligible Persons Ages 62 to 64

		Family Income Relative to the Poverty Level			
	All	Less than 100%	100% - 200%	200% - 400%	More than 400%
Current Law					
Standard Private Non-Group	34.3%	2.1%	0.8%	26.9%	71.4%
Limited Private Non-Group	21.4	6.5	38.3	27.2	12.9
Total Purchasing Coverage	55.7	8.6	39.1	54.1	84.3
Buy-In Plan With $400 Monthly Premium					
Buy-In Plan	22.8	6.3	10.6	21.4	37.4
Standard Private Non-Group	23.8	0.0	0.8	20.1	49.4
Limited Private Non-Group	10.9	2.3	27.7	14.0	1.5
Total Purchasing Coverage	57.5	8.6	39.1	55.5	88.3
Buy-In Plan With $300 Monthly Premium					
Buy-In Plan	36.9	6.3	13.8	32.8	64.4
Standard Private Non-Group	15.4	0.0	0.6	19.6	27.2
Limited Private Non-Group	8.8	2.3	25.9	9.9	0.0
Total Purchasing Coverage	61.1	8.6	40.3	62.3	91.6
Buy-In Plan With $200 Monthly Premium					
Buy-In Plan	68.3	8.6	49.7	79.8	94.5
Standard Private Non-Group	0.0	0.0	0.0	0.0	0.0
Limited Private Non-Group	0.0	0.0	0.0	0.0	0.0
Total Purchasing Coverage	68.3	8.6	49.7	79.8	94.5
Buy-In Plan With Income-Related Premiums					
Buy-In Plan	52.2	62.7	45.6	33.9	63.8
Standard Private Non-Group	14.9	0.0	0.0	18.7	27.5
Limited Private Non-Group	7.4	0.0	21.8	9.0	0.0
Total Purchasing Coverage	74.5	62.7	67.3	61.6	91.3
Percent Composition of Eligible Sample		14.1	24.0	23.5	38.4

Note: Cell entries indicate the percentage of persons with specified coverage, among those ages 62 to 64 ineligible for Medicaid, disability-related Medicare, military-related benefits, or employer-sponsored insurance. The income-related premiums would be set at $43.80 per month for those with incomes below 150 percent of the poverty line and at $300 per month for everyone else. Buy-in plans are not available under current law.

Source: Urban Institute simulations based on the 1998 HRS.

Table A.4: Simulated Participation Rates in Private Non-Group Plans and Medicare Buy-In Plans by Health Status, Among Eligible Persons Ages 62 to 64

	Overall Health Status				
	Excellent	**Very Good**	**Good**	**Fair**	**Poor**
Current Law					
Standard Private Non-Group	49.3%	46.4%	29.1%	19.0%	18.1%
Limited Private Non-Group	17.8	21.5	18.8	30.3	15.8
Total Purchasing Coverage	67.1	67.9	47.9	49.3	33.9
Buy-In Plan With $400 Monthly Premium					
Buy-In Plan	5.7	20.7	20.6	37.9	43.8
Standard Private Non-Group	46.2	32.8	19.6	7.7	0.0
Limited Private Non-Group	15.2	17.9	8.5	4.7	0.0
Total Purchasing Coverage	67.1	71.4	48.7	50.3	43.8
Buy-In Plan With $300 Monthly Premium					
Buy-In Plan	29.6	41.3	30.7	43.3	56.3
Standard Private Non-Group	25.8	21.0	14.7	4.3	0.0
Limited Private Non-Group	12.8	13.6	7.0	4.6	0.0
Total Purchasing Coverage	68.2	75.9	52.4	52.2	56.3
Buy-In Plan With $200 Monthly Premium					
Buy-In Plan	75.4	79.9	64.6	56.1	58.8
Standard Private Non-Group	0.0	0.0	0.0	0.0	0.0
Limited Private Non-Group	0.0	0.0	0.0	0.0	0.0
Total Purchasing Coverage	75.4	79.9	64.6	56.1	58.8
Buy-In Plan With Income-Related Premiums					
Buy-In Plan	38.8	52.8	48.9	61.8	76.3
Standard Private Non-Group	26.4	20.4	14.2	3.4	0.0
Limited Private Non-Group	10.9	11.8	5.0	4.7	0.0
Total Purchasing Coverage	76.1	85.0	68.1	69.9	76.3
Percent Composition of Eligible Sample	14.6	26.6	35.1	19.3	4.5

Note: Cell entries indicate the percentage of persons with specified coverage, among those ages 62 to 64 ineligible for Medicaid, disability-related Medicare, military-related benefits, or employer-sponsored insurance. The income-related premiums would be set at $43.80 per month for those with incomes below 150 percent of the poverty line and at $300 per month for everyone else. Buy-in plans are not available under current law.

Source: Urban Institute simulations based on the 1998 HRS.

Table A.5: Characteristics of Buy-In Participants Ages 62 to 64, Under Alternative Medicare Buy-In Plans

	Percent of All Persons	Percent of Eligible Persons	$400 Buy-In	$300 Buy-In	$200 Buy-In	Income-Related Plan
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Income Relative to Poverty Line						
Less than 100%	9.7	14.1	3.9	2.3	1.8	16.8
100%-200%	14.2	24.0	11.1	8.9	17.3	20.9
200%-400%	26.3	23.5	22.2	21.1	28.5	15.5
More than 400%	49.8	38.4	62.8	67.7	52.4	46.8
Self-Rated Overall Health Status						
Excellent	13.2	14.6	3.7	11.8	16.2	10.9
Very good	29.2	26.6	24.1	29.7	30.7	26.7
Good	31.3	35.1	31.6	29.4	33.4	32.8
Fair	17.6	19.3	31.9	22.2	15.6	22.6
Poor	8.7	4.5	8.7	6.8	4.1	6.9
Number of Serious Health Problems						
None	55.2	62.4	6.9	35.7	61.7	43.3
One	29.3	27.9	72.1	49.2	28.1	41.1
Two or more	15.5	9.7	21.0	15.1	10.3	15.5
Race						
Black	7.7	7.6	0.8	1.5	1.9	5.4
Hispanic	4.0	7.4	0.0	1.7	2.1	2.9
White and other race	88.3	85.0	99.2	96.8	96.0	91.6

Note: The first data column reports the percentage of all persons ages 62 to 64 with the given characteristic. The second data column reports the percentage of persons ages 62 to 64 eligible for the buy-in plan with the given characteristic. The other data columns report the percentage of those predicted to participate in the buy-in plan with the given characteristic, under each buy-in plan. Estimates were weighted to account for the sample design of the HRS. The buy-in plan would be available at the specified monthly price to persons ages 62 to 64 without access to other types of public insurance or to employer-sponsored insurance. The income-related plan would be priced at $43.80 per month for those with incomes below 150 percent of the poverty line and at $300 per month for everyone else.

Source: Urban Institute simulations based on the 1998 HRS.

Table A.6: Simulated Insurance Coverage Rates at Ages 62 to 64, Under Current Law and Alternative Medicare Buy-In Plans

Type of Coverage	Current Law	$400 Buy-In Plan	$300 Buy-In Plan	$200 Buy-In Plan	Income-Related Plan
Medicaid and/or disability-related Medicare	15.1%	15.1%	15.1%	15.1%	15.1%
Own employer-sponsored	46.5	46.5	45.9	46.3	46.4
Spouse's employer-sponsored	14.4	14.4	14.4	14.4	14.4
Military-related insurance	2.5	2.5	2.5	2.5	2.5
Medicare buy-in	0.0	4.9	8.2	15.0	11.2
Standard private non-group	7.2	5.0	3.3	0.0	3.2
Limited private non-group	4.5	2.3	1.9	0.0	1.6
No insurance	9.7	9.3	8.7	6.8	5.7

Note: The buy-in plan would be available at the specified monthly price to persons ages 62 to 64 without access to other types of public insurance or to employer-sponsored insurance. The income-related plan would be priced at $43.80 per month for those with incomes below 150 percent of the poverty line and at $300 per month for everyone else. Buy-in plans are not available under current law. Estimates were weighted to account for the sample design of the HRS.

Source: Urban Institute simulations based on the 1998 HRS.

Table A.7: Simulated Uninsurance Rates At Ages 62 to 64, Under Current Law and Alternative Medicare Buy-In Plans

	Percent of Sample	Current Law	$400 Buy-In	$300 Buy-In	$200 Buy-In	Income-Related Plan
All	100.0%	9.7%	9.3%	8.7%	6.8%	5.7%
Income Relative to Poverty Line						
Less than 100%	9.7	28.3	28.3	28.3	28.3	11.6
100%-200%	14.2	21.9	21.9	21.9	18.1	11.8
200%-400%	26.3	8.8	8.6	7.5	4.0	7.5
More than 400%	49.8	2.6	1.9	1.4	0.9	1.4
Self-Rated Overall Health Status						
Excellent	13.2	7.7	7.7	7.6	5.8	5.6
Very good	29.2	6.3	5.7	4.8	3.8	2.9
Good	31.3	12.6	12.3	11.9	8.5	7.8
Fair	17.6	12.8	12.3	12.1	10.1	7.8
Poor	8.7	7.6	6.5	5.2	4.8	3.1
Number of Serious Health Problems						
None	55.2	10.4	10.3	10.1	7.7	7.0
One	29.3	8.7	8.3	7.6	6.4	4.8
Two or more	15.5	9.1	7.3	5.8	3.9	2.8
Race						
Black	7.7	20.8	20.3	20.2	17.6	14.1
Hispanic	4.0	39.1	39.1	38.0	31.5	32.3
White and other race	88.3	7.5	7.0	6.4	4.7	3.7

Note: The first data column reports the percentage of those ages 62 to 64 with the given characteristic. Other cell entries indicate the percentage of those ages 62 to 64 who would be uninsured under each buy-in plan scenario. Estimates were weighted to account for the sample design of the HRS. The buy-in plan would be available at the specified monthly price to persons ages 62 to 64 without access to employer-sponsored insurance. The income-related plan would be priced at $43.80 per month for those with incomes below 150 percent of the poverty line and at $300 per month for everyone else. Buy-in plans are not available under current law.

Source: Urban Institute simulations based on the 1998 HRS.

The Henry J. Kaiser Family Foundation
2400 Sand Hill Road
Menlo Park, CA 94025
(650) 854-9400 Fax: (650) 854-4800

Washington Office:
1450 G Street NW, Suite 250
Washington, DC 20005
(202) 347-5270 Fax: (202) 347-5274

www.kff.org

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