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Financing Long-Term Services And Supports: Options Reflect Trade-Offs For Older Americans And Federal Spending

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ABSTRACT About half of older Americans will need a high level of assistance with routine activities for a prolonged period of time. This help is commonly referred to as long-term services and supports (LTSS). Under current policies, these individuals will fund roughly half of their paid care out of pocket. Partly as a result of high costs and uncertainty, relatively few people purchase private long-term care insurance or save sufficiently to fully finance LTSS; many will eventually turn to Medicaid for help. To show how policy changes could expand insurance's role in financing these needs, we modeled several new insurance options. Specifically, we looked at a front-end-only benefit that provides coverage relatively early in the period of disability but caps benefits, a back-end benefit with no lifetime limit, and a combined comprehensive benefit. We modeled mandatory and voluntary versions of each option, and subsidized and unsubsidized versions of each voluntary option. We identified important differences among the alternatives, highlighting relevant trade-offs that policy makers can consider in evaluating proposals. If the primary goal is to significantly increase insurance coverage, the mandatory options would be more successful than the voluntary versions. If the major aim is to reduce Medicaid costs, the comprehensive and back-end mandatory options would be most beneficial.

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Many older Americans need long-term services and supports (LTSS) to help them with basic activities that they cannot complete on their own because of chronic illness or disability. In 2011, 7.7 million adults ages sixty-five and older received help with activities of daily living (ADLs),¹ which include such tasks as bathing, dressing, eating, using the toilet, and getting out of bed. About 6 million adults in the same age group—nearly one-sixth of that population—have severe LTSS needs, requiring help with at least two ADLs for ninety or more days or having severe cognitive impairment.^{2,3}

LTSS needs will grow over time as the population ages. Urban Institute projections indicate that the number of older Americans with severe LTSS needs will increase 140 percent between 2015 and 2055, reaching 15.1 million.⁴ Over the same period, there will be an 80 percent increase in the US population ages sixty-five and older and a 190 percent increase in the population ages eighty-five and older.⁵

The average American turning sixty-five today will incur about \$138,100 in future lifetime expenses for severe long-term care needs, according to Urban Institute projections.⁴ These future expenses could be financed by investing \$69,500 at age sixty-five, under the assumption that the

investment earns average returns. This average spending estimate masks a large degree of uncertainty, which complicates retirement planning. Forty-eight percent of adults turning sixty-five today will likely never experience severe LTSS needs, while 15 percent will incur more than \$250,000 in lifetime expenses. These estimates cover only those costs associated with severe LTSS needs and exclude the often substantial sums spent on coping with less severe disabilities.

Few Americans can protect themselves against this financial risk. Medicare does not provide coverage for extended LTSS.⁶ Medicaid does, but only for people who meet state-specific eligibility standards that limit benefits to those who have disabilities and very limited income and wealth.⁷ However, because people with LTSS needs may qualify for Medicaid after they deplete most of their resources, Urban Institute projections indicate that Medicaid will pay for about one-third of lifetime costs associated with severe LTSS needs for people turning sixty-five today.⁴

Private insurance could help shield middle-income people from this financial risk. However, the market penetration of private long-term care insurance has been limited because of high premiums, the potential for Medicaid to crowd out demand for private coverage, and adverse selection—which limits the size of the market and drives up premiums.⁸ Indeed, sales of private long-term care policies and certificates declined from 528,000 in 2005 to 395,000 in 2012.⁹

In addition, private carriers are no longer selling true catastrophic insurance, which helps protect consumers from financial risk. Instead, most of the carriers limit benefits to five years or less. As a result, private long-term care insurance pays less than a tenth of LTSS expenses for older people with severe needs.⁴

Because private insurance is not widespread and public financing is available only for people who have few financial resources or who have already spent nearly all of their resources, older adults with severe LTSS needs will pay about half of their expenses out of pocket.⁴ These expenses impose financial burdens on many older adults with LTSS needs. In 2014, people ages sixty-five and older had median financial assets of only \$76,000 and median home equity of only \$80,000.¹⁰

People who lack the resources for LTSS can receive poor or inappropriate care. This care gap can not only harm those who need assistance but also increase costs for Medicare, which pays for the hospitalizations and other medical treatments that often result from acute episodes caused by inadequate assistance.¹¹

Insufficient financial resources can also bur-

den family caregivers, the primary support for most frail older adults. One in five family caregivers report high levels of emotional and financial stress, and more than three in five say that caregiving limits their ability to do paid work.^{12,13} The lifetime financial cost for a woman who leaves employment in her fifties to care for a parent may exceed \$300,000,¹⁴ and she may be more likely as a result to fall into poverty than someone who did not leave employment to provide care.¹⁵

Policy makers, advocates, and researchers have tried unsuccessfully for decades to create alternative LTSS financing mechanisms. In 1990, for example, the US Bipartisan Commission on Comprehensive Health Care—also known as the Pepper Commission after its first chair, Rep. Claude Pepper (D-FL)—proposed social insurance for home and community-based care and for the first three months of nursing home care for all Americans, regardless of income.¹⁶ The unsuccessful 1993 health reform plan of the administration of President Bill Clinton included a new state-run home care program for people with severe disabilities, with no restrictions on eligibility based on age or financial resources.¹⁷

In the most recent attempt, Congress passed the Community Living Assistance Services and Supports (CLASS) Act as part of the Affordable Care Act in 2010, creating a national program of voluntary long-term care insurance. However, the law was never implemented by the administration of President Barack Obama and was repealed by Congress in 2013.

To better understand how policy changes could expand the role of insurance in the financing of long-term services and supports, we modeled several alternative programmatic options and compared likely outcomes under each to expected outcomes under current policies. Building on previous efforts to analyze LTSS financing policy options,^{18–20} we estimated overall costs and benefits and examined how they varied by multiple characteristics, including income. Our efforts represent the first look at some simplified options and highlight both the capabilities of our microsimulation model and its potential to inform the policy debate.

Study Data And Methods

THE MODEL Our projections come from the Dynamic Simulation of Income Model (DYNASIM3), the Urban Institute's dynamic microsimulation model. The model begins by taking a representative sample of individuals and families from the pooled 1990–93 panels of the Survey of Income and Program Participation. Then it “ages” the data year by year to generate a pro-

Policy makers will have to choose between imperfect options that achieve quite different goals.

file of what the population looks like today and will look like in the future.²¹

The model simulates such demographic events as births, deaths, marriages, and divorces and such economic and health events as labor-force participation, hourly earnings, hours of work, disability onset and recovery, retirement, and use and costs of LTSS. These simulations are based on transition and other equations that are estimated using various high-quality longitudinal data sources. The data sources include the Health and Retirement Study from 1994 to 2012, used to project disability status, cognitive impairment, nursing home care, paid home care, residential care, and private long-term care insurance coverage;²² the Medicare Current Beneficiary Survey from 2007 to 2009, used to project selected LTSS payments and build algorithms to simulate eligibility for public insurance programs;²³ the Medicaid Statistical Information System from 2010 to 2011, used to calibrate Medicaid coverage;²⁴ and the 2014 annual report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, whose assumptions we used in projecting mortality and economic conditions.²⁵

The model projects outcomes through 2087. Because some of the underlying data that go into the model are available only for older adults, we projected LTSS needs, use, and costs only for adults ages sixty-five and older, although we acknowledge that as many as half of the people with LTSS needs are younger than sixty-five.²⁶

Additional details on the model and its sources can be found in the online Appendix.²⁷ There is a great deal of uncertainty surrounding these projections, of course, and they require making many assumptions, many of which affect the outcomes.²⁸

POLICY SIMULATIONS We analyzed the following three new insurance options: a program with a front-end benefit that begins after a ninety-day waiting period and covers a maximum of two years of need, a catastrophic-only or back-end

program that begins after a waiting period of two years but provides a lifetime benefit thereafter, and a comprehensive program that begins after a ninety-day waiting period and provides a lifetime benefit. Each option was modeled as voluntary insurance and as a universal mandatory program for workers. For the voluntary options, we included subsidized and unsubsidized versions.

Each program, which could be operated by the government or private carriers, is very simplified and thus excludes many details. However, we specified enough provisions so that the programs can be compared across key dimensions.

► **BENEFITS:** The three new insurance options have a common benefit structure. Each would provide a daily cash benefit of \$100 in 2015 that would increase 3 percent per year. Cash benefits could be used for both traditional services (such as paying providers in care settings) and non-traditional services (such as paying family caregivers, purchasing transportation, or modifying a home). Enrollees would qualify for benefits once they developed severe LTSS needs—that is, requiring help with at least two ADLs for ninety or more days or having severe cognitive impairment. This is the same high level of need that currently triggers private long-term care insurance benefits. The programs differ, however, by when benefits begin and how long they last.

► **PREMIUMS:** Enrollee premiums would fund the voluntary programs, and a payroll tax would fund the mandatory programs. Like the current Medicare payroll tax (but unlike the Social Security tax), the LTSS tax would not be subject to a wage cap. Only employees—not employers—would be subject to the payroll tax.

The levels of premiums and payroll tax would be set to cover all program costs (including administrative expenses). However, the subsidies available to low-income enrollees in the voluntary programs would be financed by general tax revenues collected outside the LTSS program. The voluntary insurance programs would fully subsidize people with incomes below 150 percent of the federal poverty level.²⁹ This assistance would be gradually phased out and end when income reached 200 percent of poverty. In the mandatory programs, the progressive uncapped payroll tax would subsidize premiums for people with low incomes.

The mandatory programs would levy administrative costs equal to 2.5 percent of taxes and 3.75 percent of benefits paid. We assumed that the voluntary programs would require 50 percent higher administrative costs than mandatory programs.³⁰

► **PARTICIPATION:** Adults ages seventy and younger would be eligible to enroll in the new

programs, but no enrollees would be eligible for benefits until age sixty-five. Participants would not be subject to underwriting, unlike people who have private insurance. However, to help limit the number of enrollees in the voluntary programs who had preexisting disabilities and who would drive up costs, enrollees in these programs would not qualify for benefits until they had paid premiums for at least five years. Similarly, participants in the mandatory programs would need to have forty quarters covered by Social Security (about ten years of work) to qualify for benefits.

Payments into the programs would begin in 2016, with benefits commencing in 2018. The new insurance programs would be the primary LTSS payer, with Medicaid the secondary payer.

Impacts of voluntary insurance programs depend heavily on participation levels and on how they vary by LTSS need. However, because these LTSS financing options do not yet exist, there are no reliable data on how many people would likely participate in them. Consequently, we based our participation rates on judgment informed by theories about and experience with adverse selection and affordability of premiums.

In setting participation rates, we focused on how the mix of enrollees would change with program features, particularly those features that would affect adverse selection. Because premiums would account for a high share of income for many enrollees, we assumed that no one would enroll in the voluntary front- or back-end programs unless his or her household income was in the top 40 percent nationally, and that no one would enroll in the comprehensive program unless his or her household income was in the top 20 percent.

We assumed that those wealthy adults who had higher probabilities of using services and surviving the benefit waiting periods would be more likely to purchase coverage. For illustrative purposes, we assumed comparable participation in the voluntary front- and back-end programs. We acknowledge, however, that financially sophisticated consumers might be more likely to purchase back-end coverage at the prices in our model, given their greater ability to self-insure against front-end risk. A sophisticated approach to modeling demand would significantly improve our understanding of the likely impact of new insurance programs. However, the exercise here was focused on developing the illustrative effects of each financing option under plausible scenarios to get a sense of the trade-offs involved in, and the relative benefits of, each alternative.

As explained above, program premiums and tax rates were set iteratively to cover program

benefits and administrative costs, given assumed participation rates and the health mix of enrollees. To calculate premiums for the voluntary front- and back-end designs, we used both DYNASIM's premium estimates and Milliman Inc.'s premium estimates. These estimates were based on assumed participation levels and health and LTSS need status output from DYNASIM and on the 2014 *Milliman Long-Term Care Guidelines*.³¹ The database supporting these guidelines reflects the private insurance market's experience of more than twenty-nine million life-years of exposure, including more than \$25 billion in incurred claims for approximately 475,000 claimants. Milliman's premium estimates incorporated assumed participation levels that varied by health and LTSS need status and reflected the resulting morbidity levels based on those participation levels.

► **OUTCOMES:** We computed a range of outcomes for enrollees and the population ages sixty-five and older, both at a point in time and from age sixty-five to death. For example, to explore redistribution of income by the program, we considered net subsidies from the program by computing the difference between the present value of contributions and the present value of benefits. We calculated these values using a real discount rate of 2.9 percent and evaluated them as of age sixty-five. We express all monetary amounts in real 2015 dollars.

Study Results

In this section we report prices, participation rates, cost offsets, and Medicaid savings for each of the new insurance programs we modeled. We also compare lifetime benefits received by program enrollees and their lifetime contributions. Although we simulated outcomes for all years and birth cohorts, we focus on results in 2050 (when the programs would be nearly fully phased in) and for people born between 1976 and 1980 (who would be eligible for the programs for most of their adult lives).

► **PRICES** The payroll tax and premiums required to finance LTSS benefits would vary widely across programs. For the mandatory programs, we estimate that the payroll tax rates would be roughly 0.60 percent of earnings for the plan offering the front-end benefit, roughly 0.75 percent for the plan with the back-end benefit, and about 1.35 percent for the plan with the comprehensive benefit. On average, workers born after 1990, who would contribute to the programs for nearly their entire careers, would pay these taxes for thirty-five years. Workers born earlier would contribute for fewer years, because the programs would not have existed at the beginning of their

working lives. High-wage workers would contribute more than low-wage workers to each program.

Premiums for voluntary programs would depend on the age at which participants enrolled. For those who enrolled at age forty-five (who would, on average, pay premiums for thirty-four years), annual premiums in 2015 would range from \$1,210 for the front-end program to \$2,400 for the comprehensive program (Exhibit 1). People who enrolled at a later age would pay higher annual premiums because on average they would contribute for fewer years.

Workers with earnings at roughly the seventieth percentile nationally—who are more likely than people with lower earnings to participate in voluntary programs—would contribute more each year to each voluntary insurance plan than they would to the corresponding mandatory plan. In the front-end program, for example, annual contributions to the voluntary plan would be four times as high as those to the mandatory plan for people who enrolled at age forty-five and twelve times as high for those who enrolled at age sixty-five (data not shown).

Annual payments would be higher in the voluntary plans than in the corresponding mandatory plans. This is because, compared to participants in the mandatory plans (once they were fully phased in), participants in the voluntary plans generally would contribute for fewer years,

be more likely to use LTSS, and would not benefit from subsidies from high earners or from people born later who would contribute for more years. Premiums would also be relatively high in the voluntary plans because we assumed that carriers would have to maintain large reserves to protect themselves against adverse outcomes—a cost that the near-universal mandatory programs do not face as acutely.

PARTICIPATION We assumed that nearly everyone would enroll in the mandatory programs, except for those who did not work the required ten years. Overall, 96 percent of the cohort born between 1976 and 1980 would participate in the mandatory programs or a private insurance alternative at age sixty-five (Exhibit 2). The mandatory programs would exclude 11 percent of adults in the bottom decile of household income nationally and 3–4 percent of adults with slightly more income because they would not have worked the required ten years to qualify. However, we assumed that no more than one-fifth of the US population would enroll in any of the voluntary programs and that many enrollees would have otherwise purchased private long-term care insurance.

Enrollment in the voluntary programs would exceed private insurance coverage under current law by roughly 10 percentage points for the subsidized programs but by no more than a few percentage points for the unsubsidized pro-

EXHIBIT 1

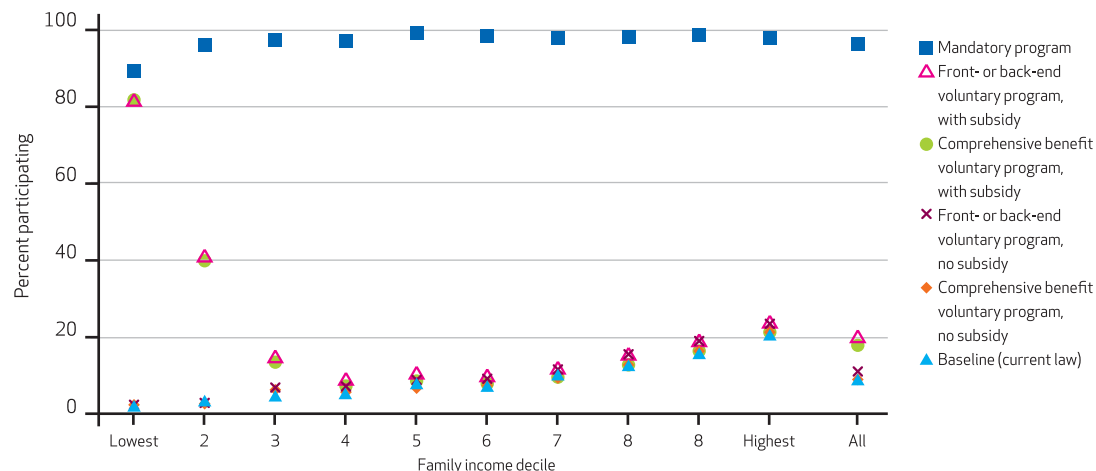
Annual Premiums For Unsubsidized New Voluntary Long-Term Services And Supports (LTSS) Insurance Programs, By Enrollment Age And Type Of Program

Age at enrollment (years) ^a	Type of program		
	Front-end, with 2-year benefit	Back-end, with 2-year waiting period	Comprehensive
ANNUAL PREMIUM (2015 \$)			
45	1,210	1,900	2,400
55	1,870	2,940	3,570
65	3,680	5,250	7,480
ANNUAL PREMIUM AS A SHARE OF GROSS PRETAX EARNINGS^b			
45	2.5%	4.0%	5.0%
55	3.9	6.1	7.4
65	7.7	11.0	15.6

SOURCE Authors' calculations based on data from the following sources: (1) Dynamic Simulation of Income Model (DYNASIM), run 918. (2) Milliman Inc. 2014 Milliman long-term care guidelines (Note 31 in text). (3) Social Security Administration. Wage statistics for 2013 [Internet]. Washington (DC): SSA; 2015 Oct 30 [cited 2015 Oct 30]. Available from: <https://www.ssa.gov/cgi-bin/netcomp.cgi?year=2013>. **NOTES** Premiums are rounded to the nearest \$10. The front-end program has a ninety-day waiting period and covers a maximum of two years of care. The back-end program has a two-year waiting period and provides a catastrophic-only benefit with no lifetime limit. The comprehensive program has a ninety-day waiting period and no lifetime limit. If there were a low-income subsidy, premiums would be reduced by less than 1 percent to 13 percent, depending on age. Additional details on DYNASIM3 can be found in the online Appendix (see Note 27 in text). Additional details on Milliman's premium estimates can be found in Giese CJ and Schmitz AJ. Premium estimates for policy options to finance long-term services and supports (Note 38 in text). ^aFor people currently sixty-five years old, those who enrolled at age forty-five are expected to pay premiums for thirty-four years, those who enrolled at age fifty-five are expected to pay for twenty-six years, and those enrolled at age sixty-five are expected to pay for eighteen years. ^bFor people with earnings at the 70th percentile nationally.

EXHIBIT 2

Share Of Adults Born During 1976–90 Participating In Each Of The New Insurance Programs Or Having Alternative Private Insurance, By Family Income Decile



SOURCE Authors' analysis of data from the Dynamic Simulation of Income Model (DYNASIM), run 918. **NOTES** Adults are classified as participants in a program if they have paid sufficient payroll tax, are currently paying premiums and have not lapsed, or receive a subsidy. Income is measured relative to the federal poverty level. Adults are also included in each series if they have an alternative form of private insurance.

grams. Our assumed participation rates in the voluntary programs rose with income, except for the very high participation rates among low-income adults qualifying for subsidies.

COST OFFSETS Program spending would reduce Medicaid costs, spending by private long-term care insurance, and family out-of-pocket costs. It would also finance additional paid LTSS. Exhibit 3 shows how spending for each program would be distributed across these categories in 2050, when the programs would be nearly fully phased in. Our projections show that 26–40 percent of program benefits would pay for LTSS that enrollees would not otherwise receive or that would otherwise be provided by unpaid caregivers.

Unsubsidized voluntary programs would reduce family out-of-pocket expenses and private long-term care insurance benefits more than other programs would. However, compared to other programs, unsubsidized voluntary programs would have little impact on Medicaid costs because they would disproportionately enroll high-income adults who would otherwise finance LTSS themselves or with private insurance. For example, 60 percent of spending by the unsubsidized voluntary comprehensive program would offset family out-of-pocket expenses, and the program would not meaningfully offset Medicaid expenses.

By contrast, subsidized voluntary programs and all mandatory programs would offset more Medicaid costs because they would enroll many

people with low incomes and little wealth. For example, 43 percent of the spending by the subsidized voluntary comprehensive benefit program and 37 percent of the spending by the mandatory back-end benefit program would reduce Medicaid LTSS spending for older adults.

Another important difference is between front- and back-end programs. The former generate more out-of-pocket savings and funds for new services than Medicaid savings, whereas the opposite is true for the latter.

MEDICAID SAVINGS Our projections of how much each program would reduce Medicaid LTSS spending for elderly beneficiaries in 2050 show that the voluntary programs would not reduce this Medicaid spending by much, especially without subsidies (Exhibit 4). For example, the subsidized voluntary comprehensive benefit would reduce such Medicaid spending in 2050 by only 8 percent, while its unsubsidized counterpart would not meaningfully reduce spending. However, we estimate that the mandatory comprehensive benefit would cut Medicaid spending by 39 percent, while the mandatory back-end benefit program would reduce Medicaid spending by 33 percent.³² These programs would substantially reduce Medicaid LTSS spending because they would cover many low-income older adults.

NET BENEFITS We also compared lifetime benefits received under each program with lifetime contributions (premiums or taxes) for people born in the period 1976–80. The new insurance

programs would disproportionately benefit people who survived to older ages, spent two or more years with severe cognitive impairment or needed help with two or more ADLs, and had low family incomes at age sixty-five (Exhibit 5). People who never developed severe LTSS needs would never collect benefits, and people who died at relatively young ages would be less likely to experience severe LTSS needs than those who survived to later ages. (Those who died before age sixty-five could never collect benefits.)

Compared to high-income participants, low-income participants would gain more from the programs because they would be more likely to develop severe LTSS needs and, in the mandatory and subsidized programs, would contribute less. In general, only people in the top 30 percent of the income distribution would pay more in contributions than the program would pay in benefits on their behalf. It is also important to bear in mind that even participants who never collected cash payments would benefit from having insurance that would have protected them if they had developed severe LTSS needs.^{33,34}

Average net gains and losses varied systematically across the different program types. They would be higher under the mandatory programs than under their voluntary counterparts because the mandatory programs would be larger. The unsubsidized voluntary programs generally exhibit relatively low average gains and losses because they would attract relatively few participants, particularly among low-income adults. Net benefits would be relatively low for the voluntary programs, especially when unsubsidized, because adverse selection and reserve requirements would drive up premiums.

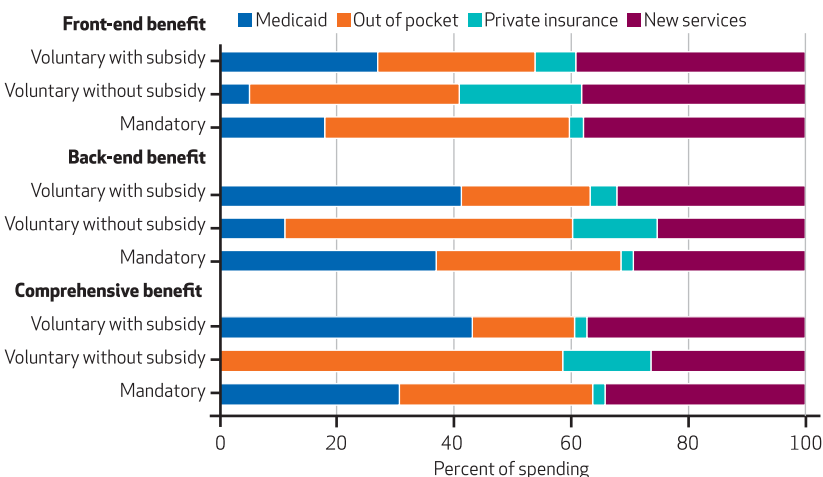
Discussion

We found no ideal solution to what has been a decades-long policy challenge. However, by carefully comparing alternatives to each other and the current situation (the baseline), we found important differences among the new insurance programs that could help guide policy makers as they seek viable ways to finance LTSS. Exhibit 6 summarizes how the baseline and proposed approaches to LTSS financing would perform in terms of enrollment, affordability, progressivity (the extent to which they favor low-income participants), and out-of-pocket and Medicaid savings (relative to program size), based on our simulation results.

The most significant contrast that we found was between voluntary and mandatory insurance programs. Any successful voluntary program must overcome several challenges, including price, perceived value, adverse selection

EXHIBIT 3

Share Of Program Spending That Would Offset Other Financing Sources Or Fund New Services, 2050



SOURCE Authors' analysis of data from the Dynamic Simulation of Income Model (DYNASIM), run 918.

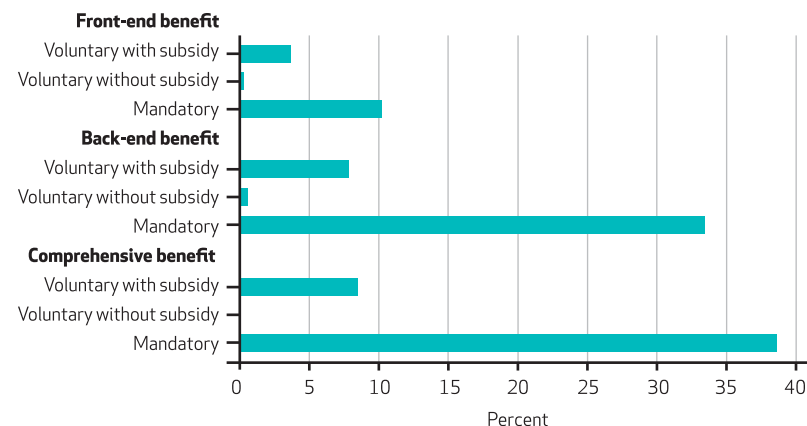
NOTE "New services" are those that enrollees would not otherwise receive or that would otherwise be provided by unpaid caregivers.

(when those who purchase coverage have a disproportionate risk of claiming benefits), and moral hazard (when insured consumers may demand more care than those paying completely out of pocket). Some analysts argue, however, that the extra services that result from moral hazard may be beneficial.³⁵

In general, people who are in fair or poor health, have functional limitations, or are experiencing cognitive decline are much more likely to purchase voluntary insurance than peo-

EXHIBIT 4

Annual Medicaid Savings Generated By Each Long-Term Services And Supports (LTSS) Program, 2050



SOURCE Authors' analysis of data from the Dynamic Simulation of Income Model (DYNASIM), run 918.

NOTE Savings are expressed as a share of projected LTSS Medicaid spending on elderly adults under current law.

EXHIBIT 5

Mean Lifetime Benefits Of The New Long-Term Services And Supports (LTSS) Insurance Programs For Adults Born During 1976–80, Net Of Contributions, By Age At Death, Disability Status, And Family Income Decile At Age 65

	Front-end benefit programs			Back-end benefit programs			Comprehensive benefit programs		
	Voluntary			Voluntary			Voluntary		
	Subsidy	No subsidy	Mandatory	Subsidy	No subsidy	Mandatory	Subsidy	No subsidy	Mandatory
Age at death (years)									
<65									
65–74									
75–84									
85–89									
90–94									
95+									
Years severely cognitively impaired (from age 65)									
None									
Fewer than 2									
2 or more									
Years with severe LTSS needs (from age 65)									
None									
Fewer than 2									
2 or more									
Family income decile at age 65									
Lowest									
Second									
Third									
Fourth									
Fifth									
Sixth									
Seventh									
Eighth									
Ninth									
Highest									

Net benefit is \$10,000 or more

Net benefit is between \$1,000 and \$9,999

Net benefit is between –\$999 and \$999

Net benefit is between –\$1,000 and –\$9,999

Net benefit is –\$10,000 or less

SOURCE Authors' analysis of data from the Dynamic Simulation of Income Model (DYNASIM), run 918. **NOTES** The nine program models are described in the text. Contributions are payroll taxes (for mandatory programs) and premiums (for voluntary programs). Benefits are benefits from the new insurance programs and estimated potential offsets to federal and state income taxes as a result of Medicaid savings. Green cells indicate higher net benefit (benefits minus contributions).

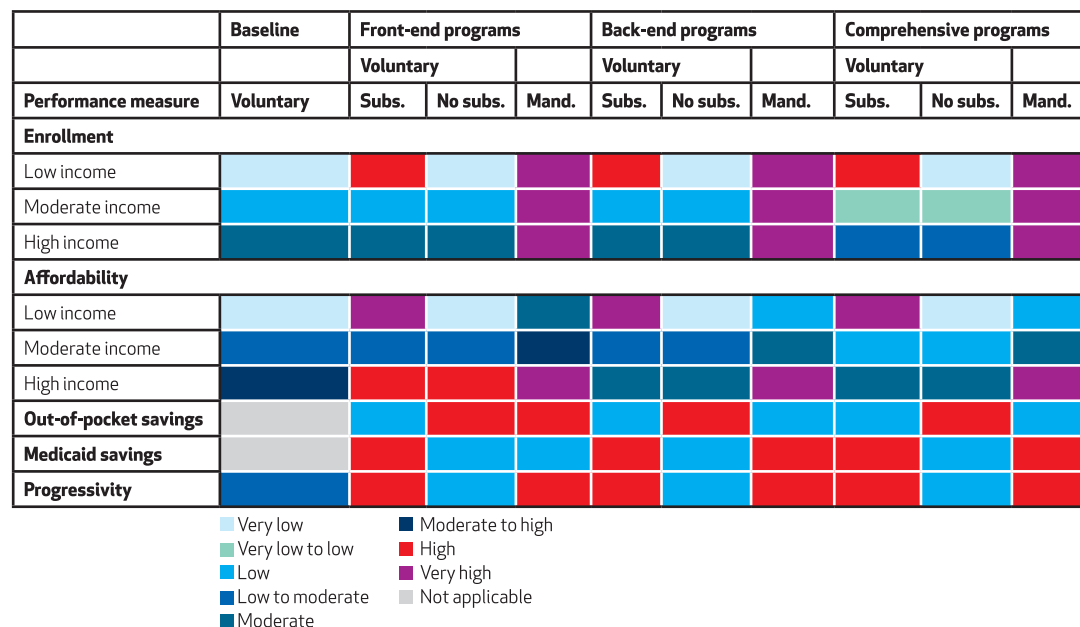
ple who are healthier. This problem is exacerbated in the absence of medical underwriting, which is standard in private insurance but which would be replaced with vesting in the new programs we modeled. Typically, as adverse selection increases, premiums rise and further discourage low- or average-risk consumers from buying. Any purely voluntary program that fails to control adverse selection is at risk of not being financially sustainable in the long term.

We assumed that participation in voluntary

programs would be significantly lower than in mandatory ones. However, take-up in the voluntary programs varied with plan design and the availability of subsidies. For example, assumed enrollment was similar for the front- and back-end programs but significantly lower for comprehensive programs. Indeed, participation among nondisabled people would be so low in the comprehensive programs that they may not be viable. Participation would be higher in subsidized programs than in comparable programs

EXHIBIT 6

Performance Of The Baseline Long-Term Care Financing System And The New Long-Term Services And Supports (LTSS) Insurance Programs



SOURCE Authors' analysis of data from the Dynamic Simulation of Income Model (DYNASIM), run 918. **NOTES** The nine program models are described in the text. This qualitative scorecard is based on our simulation results. The enrollment measure is based on the share of the population projected to enroll in each program. The affordability measure compares required annual contributions to annual income. We adjusted the out-of-pocket and Medicaid savings measures for program size. The progressivity measure indicates how much the program favors low-income participants. "Subs." is subsidy. "Mand." is mandatory.

without low-income subsidies. Surveys show that while consumers demand a balance between price and benefits, their top priority is low cost.³⁶ None of the alternatives we modeled were able to resolve this major challenge.

Each mandatory program would enroll more than 95 percent of the population. Access to this insurance would be especially beneficial to middle-income consumers, many of whom are unlikely to be able to afford voluntary insurance. Per beneficiary expenses—which reflect affordability—tended to be lower in mandatory programs than in voluntary programs because the former would avoid adverse selection. We estimated that annual enrollee contributions would be lower in the mandatory programs than in the voluntary options because the mandatory programs would both avoid adverse selection and require contributions that lasted throughout a person's career, instead of beginning in midlife or at an older age. Nonetheless, total program costs for mandatory insurance would be substantial and would require payroll tax increases of 0.60–1.35 percentage points.

Policy options also diverged in how they benefited different populations. For example, as the mandatory programs were phased in, younger people (who would pay the new LTSS

tax for a relatively long time) would subsidize older people (who would pay the new tax for a relatively short time). The distributional effects were especially pronounced when we compared enrollees by income. Low-income people were more likely than those with the highest incomes to have severe LTSS needs and thus would benefit the most from the mandatory and subsidized programs, especially when those programs provided comprehensive or back-end benefits.

By contrast, voluntary insurance, especially if unsubsidized, is largely unaffordable for low- and moderate-income consumers. Low-income people will buy fully subsidized insurance, but demand for it will shrink along with the subsidy.

An alternative approach to improving financing for LTSS is to reform the private long-term care insurance market, which would require little or no government spending. Reforms that substantially reduced premiums could significantly boost coverage rates,³⁷ but achieving those price reductions could be difficult. Coverage rates might also rise and premiums might fall if retirement plan sponsors diverted some 401(k) account contributions to insurance premium payments.³⁸ However, employees might opt out of such arrangements if the premiums were too high. Diverting funds from traditional

retirement savings could also reduce people's future financial security at older ages.

Conclusion

Policy makers will have to choose between imperfect options that achieve different goals. If the primary purpose is to significantly increase insurance coverage, the mandatory programs we modeled would be far more successful than the voluntary ones. If the major aim is to reduce Medicaid costs, the comprehensive and back-end mandatory programs would be most bene-

ficial.

We modeled only a small number of options. Other possibilities include a package of strong incentives aimed at increasing enrollment in voluntary programs or combined medical and LTSS insurance. Mandatory LTSS insurance could be financed in many alternative ways, including capped payroll taxes, consumption taxes, and a combination of nominal premiums and some of these other taxes. However, our project demonstrates that models can help ground discussions in evidence-based evaluations of these trade-offs. This exercise is only a first step. ■

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NOTES

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