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# CAN INCENTIVES FOR LONG-TERM CARE INSURANCE REDUCE MEDICAID SPENDING?

By Wei Sun and Anthony Webb*

## Introduction

The prospect of paying for nursing home care represents a significant financial risk for older Americans. Despite this risk, few individuals buy long-term care insurance and, since many lack the resources to pay out of pocket, they often turn to the means-tested Medicaid program.

Concerned about growing Medicaid costs, many states have initiated "partnership" programs that offer a unique incentive for those who buy long-term care insurance: the state relaxes Medicaid's asset test so that, if the private insurance benefits run out, individuals can retain more of their assets while still being eligible for Medicaid. This *brief*, which is based on a longer paper, estimates whether these enhanced insurance policies are likely to reduce Medicaid spending on single men and women.[1]

The *brief* is organized as follows. The first section describes the long-term care cost challenge and introduces the partnership programs. The second section explains the methodology for analyzing the programs' impact on Medicaid outlays. The third section presents the results, which suggest that most of the buyers are those who would otherwise have purchased a traditional – unenhanced – policy. Thus, the final section concludes that, on balance, Medicaid will lose money on the partnership programs.

## The Challenge of Long-Term Care Costs

Over one-quarter of men and over two-fifths of women are expected to enter a nursing home at some point after age 65.[2] And nursing home care is expensive – the average annual cost of a semi-private room in 2011 was $78,110.[3] Yet consumer demand for long-term care insurance is low.[4] One reason is that Medicaid is available to those unable to afford care.[5]

In an attempt to curb growth in Medicaid spending, governments offer incentives to individuals to buy long-term care insurance. One such initiative, and the focus of this study, is state partnership programs that offer enhanced long-term care insurance policies through private insurers.[6] Individuals who buy these policies receive insurance benefits for a limited duration, typically three years. Once these benefits are exhausted, participants can claim Medicaid but are subject to much less stringent asset limits, allowing them to preserve more of their wealth.[7] The amount of assets protected depends on the specific policy selected. "Total asset protection" policies exempt all of an individual's assets. Lower-coverage "dollar-for-dollar" policies exempt assets up to the amount of the private insurance benefits paid. The partnership programs began in 1987 as a demonstration project and, today, are offered in 40 states.

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Many believe that the partnership programs reduce Medicaid spending.[8] But it is equally possible that the programs mainly attract higher income individuals who would have bought insurance anyway. Therefore, using Medicaid to "top up" these individuals' insurance coverage could end up costing Medicaid more.[9] The study summarized here addresses this issue, examining how the programs affect Medicaid spending for single individuals.

# Methodology

The analysis uses numerical optimization techniques to first evaluate whether it is in the financial interest of single men and women to purchase traditional long-term care insurance. Couples are excluded, because the computations required are much more extensive. The enhanced policies offered through the partnership program are then introduced into the model to determine how they affect decisions to buy insurance and how the resulting decisions affect Medicaid costs.

The analysis models the decisions of single men and women from the 10th through the 90th percentile of the wealth distribution. Each individual has three options: buy no insurance coverage at all, purchase a traditional long-term care insurance policy, or purchase an enhanced policy. The model includes four types of traditional policies and three types of enhanced policies but, for ease of reporting, the results described below will cover one type of each policy – a traditional policy that provides three years of coverage at a daily rate of $158; and an enhanced policy with the same benefits plus the dollar-for-dollar protection from Medicaid's asset test equal to the amount of the policy benefits.[10]

# Results

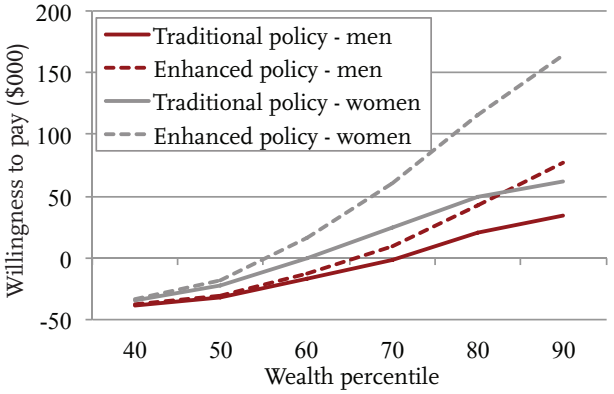
The results are discussed in three steps. The first step is to identify the type of individuals who will optimally choose to buy a traditional or enhanced policy. The second step is to determine how the type of buyer can affect Medicaid's costs. The final step brings the two strands together by estimating the total percentage of individuals, by wealth and gender, who would buy the enhanced policies and the net effects on Medicaid spending.

## *Who Is Likely to Buy Enhanced Policies?*

Consistent with prior research, this analysis finds that whether it is optimal for an individual to buy coverage is heavily influenced by both wealth and gender. Individuals with low wealth place little value on insurance coverage because much of the cost of their care would otherwise be paid for by Medicaid, while high-wealth individuals, who must pay out-of-pocket for their care, place a higher value on insurance. Women, who are more likely to need nursing home care, also place a higher value on long-term care insurance than men.[11]

Figure 1 shows estimates – for both traditional and enhanced policies – of how people value different options, defined as the minimum lump sum that the individual would be willing to pay at age 65 for the right to purchase a long-term care insurance policy at market premiums. A positive willingness to pay means that the value of the policy to the individual exceeds the cost of the premiums. A negative willingness to pay means that the value of the policy is less than the cost of the premiums. A few significant findings emerge from this analysis. First, those in the bottom half of the wealth distribution would not buy either type of policy as their willingness to pay is below $0.[12] Second, among those who place some value on long-term care insurance, willingness to pay for the enhanced policy is consistently higher than for the traditional policy, indicating that individuals value protection against the risk of requiring more than

Figure 1. Willingness to Pay for Long-Term Care Insurance by Policy Type, Gender, and Wealth




*Source:* Sun and Webb (2013).

three years of care. Finally, as expected, middle- and upper-wealth women have a higher willingness to pay than men, particularly for the enhanced policy.

## *How Does the Type of Buyer Affect Medicaid Spending?*

Individuals' decisions on long-term care insurance can substantially influence Medicaid's costs. These decisions include both whether to buy a policy and, if so, what type of policy. Table 1 shows estimates, for single men, of how these decisions affect Medicaid's cost burden, defined as Medicaid outlays as a percentage of the present value of an individual's total long-term care costs. The first three columns each cover a distinct decision: those who do not buy any coverage, those who buy a traditional policy covering three years at a daily rate of $158, and those who buy an enhanced policy with the equivalent private insurance benefits.

Table 1. Medicaid's Share of Long-Term Care Costs for Men, by Type of Insurance Coverage and Wealth Decile

| Wealth decile | No policy | Traditional policy | Enhanced policy |
|---|---|---|---|
| | (1) | (2) | (3) |
| 20th | 89.4 % | 27.5 % | 27.6 % |
| 30th | 82.3 | 24.1 | 24.4 |
| 40th | 73.6 | 20.7 | 21.9 |
| 50th | 63.3 | 17.7 | 20.6 |
| 60th | 50.7 | 13.7 | 19.4 |
| 70th | 36.5 | 8.6 | 18.2 |
| 80th | 21.0 | 3.0 | 14.4 |
| 90th | 7.8 | 0.3 | 7.8 |

*Source:* Sun and Webb (2013).

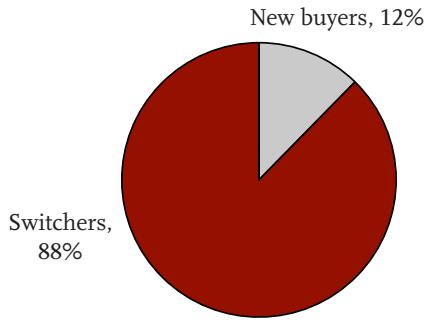
The main takeaways from Table 1 are as follows. It is always advantageous to Medicaid to have an *uncovered* individual buy either type of insurance policy, particularly individuals in the low end to the middle of the wealth distribution. This finding is apparent by comparing column 1 (no policy) to columns 2 (traditional policy) and 3 (enhanced policy). For example, for a household at the 40th wealth percentile, having insurance coverage reduces Medicaid's share of spending from 74 percent to about 20 percent – over 50 percentage points. The reduction for higher wealth individuals, while much smaller, is also significant. However, from Medicaid's perspective, the situation changes if those who purchase an enhanced policy *would otherwise have bought a traditional policy* (compare column 3 to column 2). In this case, an enhanced policy *increases* Medicaid spending – by insignificant amounts for low-wealth individuals, and by significant amounts for middle- and high-wealth individuals, due to the cost of providing the asset protection subsidy. These results are even more pronounced for single women (who are not shown in the table).

## *What Is the Net Effect of Enhanced Policies on Medicaid Costs?*

The results for all wealth levels can be combined to estimate whether the enhanced policies produce any savings for Medicaid. As indicated above, the key issue is the nature of the purchaser – are the enhanced policies likely to attract individuals who would otherwise go without coverage ("new buyers") or those who would simply have bought a traditional policy ("switchers")? And what is the wealth and gender of the buyers?

According to the optimization model analysis, the enhanced policies would persuade only a modest number of new buyers to purchase coverage – an additional 5 percent of men and 4 percent of women. For these first-time buyers, Medicaid's share of the expected costs declines by about $5,000 per man and by nearly $20,000 per woman. However, a much larger share of those estimated to buy enhanced policies are expected to simply switch from a traditional policy – about 30 percent of men and 40 percent of women.[13] And the switchers tend to be those with the highest wealth who would otherwise have paid most of their uninsured costs out-of-pocket; this tendency drives up the cost of the asset protection subsidy provided by the enhanced policies. The resulting cost increases to Medicaid for these switchers are about $1,800 per man and over $7,000 per woman. On balance, among those projected to buy enhanced policies, only 12 percent are new buyers while 88 percent are switchers (see Figure 2 on the next page).

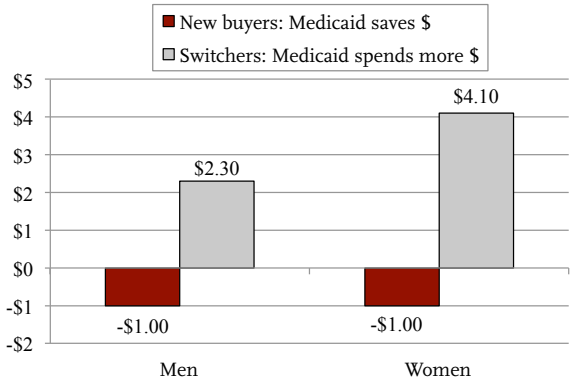
Figure 2. Individuals Buying Enhanced Policies, New Buyers vs. Switchers




*Source:* Sun and Webb (2013).

Given the very small percentage of new buyers, the cost savings to Medicaid are small compared to the additional costs associated with the subsidies provided to the switchers. Every dollar in reduced Medicaid spending on new purchasers requires additional costs for switchers of $2.30 for single men and $4.10 for single women (see Figure 3). So, on balance, enhanced policies lead to higher, not lower, Medicaid costs.

Figure 3. Estimated Cost of Subsidies to Medicaid per Dollar of Savings from New Buyers




*Source:* Sun and Webb (2013).

# Conclusion

State partnership programs were designed to encourage more people to buy long-term care insurance in order to shift some of Medicaid's rising expenditures to individuals and insurance companies. However, for single people, the above simulations indicate that the cost to Medicaid of the asset-protection subsidy exceeds any savings from those who are persuaded to buy insurance for the first time.

Two caveats to these estimates are warranted. First, it is possible that the partnership programs may increase the salience of the decision to buy long-term care insurance, leading to a greater increase in the percentage of new buyers than predicted by the model. Second, as noted, the results of this study are for single individuals only. The story for married couples might be different.

# Endnotes

1 Sun and Webb (2013).

2 Brown and Finkelstein (2008).

3 MetLife Market Institute (2012).

4 Brown and Finkelstein (2007) report that only about 10 percent of individuals over age 60 had long-term care insurance in 2000.

5 In 2011, individuals were required to contribute assets in excess of $2,000 and monthly income in excess of $704 for home health care or $30 for a nursing home. Pauly (1990) and Brown and Finkelstein (2008) find that Medicaid is likely a major reason for the low demand for private long-term care insurance.

6 Another approach is offering tax subsidies for buying long-term care insurance. However, previous studies (Goda 2011 and Courtemanche and He 2009) suggest that these subsidies have not been effective in reducing budgetary pressures, because any cost savings were more than offset by lost tax revenue from the subsidy.

7 Individuals must still meet Medicaid's income test to become eligible.

8 America's Health Insurance Plans (2007) estimated that the state programs could reduce Medicaid costs by $6 billion per year by 2050, and the National Conference of State Legislatures (2013) reports that Connecticut's partnership program has saved $3.75 million to date.

9 Evidence from prior studies suggests that the partnership programs may cost Medicaid more. Lin and Prince (2012) find, using data from the *Health and Retirement Study*, that most who purchase the policies are wealthy. Similarly, the U.S. Government Accountability Office (2005) reported that the majority of purchasers in California, Connecticut, and Indiana had relatively high assets and incomes.

10 For more details on the methodology, see Sun and Webb (2013).

11 Though women are more likely to need nursing home care due to their longer life expectancy, the insurance policies are priced the same for both men and women, making them more attractive to women.

12 At low wealth percentiles, willingness to pay is undefined, because the individual would be willing to hand over all his assets in order *not* to buy insurance.

13 In reality, as noted earlier, only about 10 percent of individuals are covered by long-term care insurance policies. The model in this study produces higher estimates, as it is designed to consider optimal behavior.

# References

America's Health Insurance Plans. 2007. "Long-Term Care Insurance Partnerships: New Choices for Consumers – Potential Savings for Federal and State Government." Available at: http://www.ahip.org/Savings-from-Expanded-Long-Term-Care-Partnerships.

Brown, Jeffrey R. and Amy Finkelstein. 2008. "The Interaction of Public and Private Insurance: Medicaid and the Long-Term Care Insurance Market." *American Economic Review* 98(3): 1083-1102.

Brown, Jeffrey R. and Amy Finkelstein. 2007. "Why Is the Market for Long-Term Care Insurance So Small?" *Journal of Public Economics* 91: 1967-1991.

Courtemanche, Charles and Daifeng He. 2009. "Tax Incentives and the Decision to Purchase Long-Term Care Insurance." *Journal of Public Economics* 93: 296-310.

Goda, Gopi Shah. 2011. "Do Tax Subsidies for Private Insurance Reduce Medicaid Costs? Evidence from the Market for Long-Term Care Insurance." *Journal of Public Economics* 95(7-8): 744-757.

Lin, Haizhen and Jeffrey Prince. 2012. "The Impact of the Partnership Long-Term Care Insurance Program on Private Coverage and Medicaid Expenditures." Working Paper. Bloomington, IN: Indiana University Kelley School of Business, Department of Business Economics and Public Policy.

MetLife Market Institute. 2012. "Market Survey of Long-Term Care Costs." New York, NY.

National Conference of State Legislatures. 2013. "A Guide to Long-Term Care for State Policy Makers: The Long-Term Care Partnership Program." Washington, DC.

Pauly, Mark V. 1990. "The Rational Non-Purchase of Long-Term Care Insurance." *Journal of Political Economy* 98(1): 153-168.

Sun, Wei and Anthony Webb. 2013. "Can Long-Term Care Insurance Partnership Programs Increase Coverage and Reduce Medicaid Costs?" Working Paper 2013-8. Chestnut Hill, MA: Center for Retirement Research at Boston College.

U.S. Government Accountability Office. 2005. *Overview of the Long-Term Care Partnership Program*. Report # GAO-05-102 2 1R. Washington, DC.

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