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Thomas C. Buchmueller *

Introduction

A defining feature of a country's health care system is the relative importance of public and private health insurance and the way the two sources of coverage interact. The United States stands out relative to other industrialized countries because of the central role played by private insurance in financing health care. Roughly three-quarters of the US population holds private insurance and that coverage accounts for over one-third of total health expenditures. To put this in perspective, in the Netherlands, the country that is ranked second in terms of the percentage of expenditures financed by private health insurance, that percentage is 15.5 %.[1] In France, a greater percentage of the population holds private insurance[2] but since that coverage complements a universal public system, private insurance accounts for only 12 % of total health expenditures.

Even with the strong market-orientation of the US health care system, public insurance plays a very important role in the financing of care. In fact, the public sector accounts for an even higher percentage of total health expenditures (45 % in 2000) than private insurance.[3] The federal Medicare program, which is the primary source of insurance for Americans over the age of 65, is the largest single purchaser of health care in the US. In 2000, Medicaid, the joint federal/state program for the poor was the source of payment for over one-third of all births in the US (National Governors Association 2001).

As in many countries, in the past two decades there have been significant changes in the relationship between public and private health insurance in the US.

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1. Author's calculations using 2001 figures from the OECD Eco-Sante' database.

2. Prior to the implementation of the *Couverture Maladie Universelle* (CMU), 86 % of the French population had private complementary health insurance (Buchmueller and Couffinhal 2004). The CMU raised the percentage with complementary coverage to over 90 %, though much of this new coverage is best categorized as public.

3. This figure actually understates the importance of the public sector as employer-sponsored health insurance, the predominant source of coverage in the US, is heavily subsidized through the tax code. The tax expenditure associated with this subsidy is nearly $200 billion (Shiels and Haught 2004).

The overall direction of these changes is not easily signed. Certain developments, such as the expansion of public insurance eligibility for lower income women and children, represent a growth in the importance of the public sector. However, at the same time that more Americans were gaining access to Medicaid and the new State Children's Health Insurance Program (SCHIP), more beneficiaries in those programs were being enrolled in private health insurance plans. Similarly, in the 1990s, there was dramatic growth in the percentage of elderly Americans who took their Medicare coverage through private managed care plans. While this trend began to reverse in the last years of the decade, over the longer term the importance of private health plans in Medicare is unlikely to diminish.

The recently enacted Medicare prescription drug legislation may be the best example of a policy that increases the importance of both public and private health insurance, albeit in different ways. That legislation, which was signed into law in December 2003, extends taxpayer-financed prescription drug coverage to all Medicare beneficiaries. But this new benefit will not be implemented as a simple enrichment of the existing Medicare benefit package. Instead, beneficiaries will access the new benefits by enrolling in either HMOs that provides a full range of benefits, or new private plans providing only prescription drug coverage.

This paper analyzes the relationship between private and public health insurance in the US, with a particular emphasis on changes in that relationship brought about by recent policy developments. Since there are major differences in the public programs and market options available to non-elderly and elderly Americans, these two market segments are discussed separately.

1. Public and Private Insurance Coverage for the Non-Elderly

For non-elderly Americans, the most important public insurance program is Medicaid, a means-tested program. Prior to the mid-1980s, Medicaid and private health insurance covered distinctly different populations. Eligibility for Medicaid was tightly linked to welfare participation and income eligibility limits, which varied across states, were generally quite low. As a result, full-time workers and their dependents were generally not eligible. The vast majority of private health insurance in the US is employer-sponsored and most firms limit eligibility for that coverage to full-time workers. Among full-time workers, access to employer-sponsored insurance is positively related to income.

This situation began to change in the mid-1980s with a series of laws that broke the link between Medicaid and cash welfare and raised Medicaid income

eligibility limits.[4] As these income limits were increased, the populations who were eligible for Medicaid and who had access to employer-sponsored insurance became less distinct. According to one study, 65 % of women and children who gained Medicaid eligibility between 1987 and 1992 had private insurance (Cutler and Gruber 1996). With the enactment of the State Children's Health Insurance Program (SCHIP) in 1997, eligibility for public insurance moved further up the income distribution.[5] Prior to SCHIP, most children in families with incomes greater than 100 to 150 percent of the Federal Poverty Level (FPL) were not eligible for public coverage. By 2000, when all states had SCHIP programs in place, the income limits in most states were between 200 and 300 % of the FPL. In 2004, the latter figure corresponds to an income of $56,550 for a family of four. As a result of these expansions, roughly 40 % of all US children are now eligible for public insurance. As with the earlier Medicaid expansions, many of the children who gained SCHIP eligibility already had private insurance. Just before the program went into effect, roughly 70 % of children in families with incomes between 100 % and 300 % of the FPL – i.e., the SCHIP target group – were privately insured. (LoSasso and Buchmueller 2004).

Thus, for many low- and middle-income families, public and private insurance are now substitutes, albeit imperfect ones. The main trade-off between the two options is essentially one of cost vs. quality. Medicaid requires no premiums and little or no cost-sharing at the time services are received. In some states, SCHIP requires sliding scale premiums for some families, but these amounts are generally small. Medicaid coverage can be seen as lower quality than private insurance because many providers limit the number of Medicaid patients they will see or even refuse to treat them at all. In contrast, privately insured patients generally do not face such access problems, though they face sizeable out-of-pocket costs. The stigma associated with means-tested programs may also reduce the attractiveness of Medicaid or SCHIP relative to private insurance.

The results from several studies indicate that the Medicaid expansions did result in substitution of public insurance for private insurance, though the exact magnitude of this effect is the subject of some debate (Cutler and Gruber 1996 ; Dubay and Kenney 1997 ; Ham and Shore-Sheppard 2000 ; Blumberg, Dubay and Norton 2000). More recent work indicates that perhaps as many as one-half of children who enrolled in the SCHIP program would have had private insurance

4. For more detail on the Medicaid program and the recent eligibility expansions, see Gruber (2000) and Shore-Sheppard (2003).

5. The Medicaid expansions were motivated in part by efficiency concerns relating to the labor market. The tight link between Medicaid eligibility and cash welfare created a "notch" in the budget constraint of potential beneficiaries, which created a disincentive to work. The evidence is mixed on whether breaking the link increased the labor supply of single mothers who represent the bulk of welfare recipients (Yelowitz 1995 ; Meyer and Rosenbaum 2001).

had the program not existed (LoSasso and Buchmueller 2004). This substitution effect reduced the target efficiency of the expansions and thereby increased the cost to the government of increasing insurance coverage as a significant fraction of new program spending went to insure people who already had coverage. From a societal perspective, however, this represents a transfer rather than a net cost. The increase in public spending on covering previously insured children is offset by a reduction in private spending. Since the recipients of the transfer are working poor families to whom it is often difficult to target government aid, the result might even be viewed as a positive one. [6]

Nonetheless, policymakers interested in using scarce public funds to increase insurance coverage tend to view crowd-out as a problem. As a result, the SCHIP legislation included specific provisions to prevent families from dropping private insurance for their children to enroll in SCHIP. The most common provision is the requirement that children must be uninsured for a certain number of months before enrolling in the public program. The length of these waiting periods varies across states and their impact on coverage is as would be expected. States with longer waiting periods experience less crowd-out, but also have lower SCHIP take-up rates, whereas states with shorter waiting periods had higher take-up, but many of the new enrollees are children that would have been covered by private insurance if the SCHIP program did not exist (LoSasso and Buchmueller 2004).

Since both Medicaid and SCHIPs are administered at the state level, there is variation across states in several program features including eligibility rules. This creates horizontal inequities as families with the same income may be treated quite differently depending on where they live. The Medicaid expansions of the 1980s and early 1990s significantly reduced this variation in income limits for younger children [7] , who became subject to national standards, though differences persisted for older children (Shore-Sheppard 2003). The SCHIP expansions eliminated nearly all the within-state variation in eligibility related to age and greatly reduced the cross-state variation for older children.

Not only are the populations who have access to public and private insurance more similar today than twenty years ago, but the nature of the coverage offe-

6. Crowd-out should be viewed less positively if the decisions of firms employing Medicaid-eligible adversely impacted other workers who were not eligible. Total insurance coverage could fall if such employers stopped offering insurance altogether and workers who were not eligible for Medicaid were unable to purchase insurance elsewhere. While limited, the empirical evidence suggests that such spillover effects are not an issue. It appears that the decline in private coverage associated with the Medicaid expansions was caused by eligible workers declining employer-sponsored coverage rather than a reduction in employer offers (Cutler and Gruber 1997 ; Shore-Sheppard, Buchmueller and Jensen 2000).

7. To be more precise, in most cases the Medicaid legislation targeted children born after certain dates. Therefore, age-related differences in eligibility would decrease over time as children born after the cut-off date grew older.

red by the two types of insurance are more similar as well. For both types of insurance, the major trend was away from indemnity/fee-for-service coverage to managed care. For Medicaid, this meant an increasing number of beneficiaries enrolled in private health plans. The participation of commercial health plans in Medicaid is the subject of some debate. On one hand it is argued that commercial plans improve access to mainstream providers and thereby reduce the two-tiered nature of the US health system. On the other hand, because many commercial plans and affiliated providers have limited experience with Medicaid, they may not be well attuned to the special needs of this population. In addition, their involvement may divert patients and resources from academic medical centers and other "traditional safety net providers" that have a long commitment to serving the Medicaid population. The withdrawal of many commercial plans from Medicaid in the late 1990s raised additional concerns about program stability and continuity of coverage for enrollees.

Other trends in Medicaid managed care further blur the distinction between private and public health insurance. In recent years, many states have designed their Medicaid and SCHIP programs to resemble private health plans in order to reduce the stigma associated with public program and increase take-up. New Jersey's SCHIP program, NJ FamilyCare program, which offers beneficiaries a menu of five private managed care plans, is a good example. The main page of its web site states that "[i]t is not a welfare program. NJ FamilyCare is for hard-working families who cannot afford to privately pay the high cost of health insurance." [8]

2. Public and Private Insurance for the Elderly

The relationship between public and private health insurance is quite different for the elderly. For Americans over the age of 65, Medicare, a federal program, provides universal coverage. However, because that coverage is incomplete, most beneficiaries also hold complementary coverage ; more than half have private

8. The blurring of the line between public and private insurance has implications for research in this area. In a recent paper using data from the US Census Bureau's Current Population Survey, Anthony LoSasso and I found that increases in eligibility for SCHIP were positively associated with the number of respondents who claimed their children were covered by a non-group private health insurance policy. Since there is no theoretical basis for such an effect – indeed, if anything, non-group coverage should be negatively related to SCHIP eligibility – we interpret this result as evidence that many parents whose children are enrolled in a private plan through SCHIP or in a state program that "looks like" a private plan view that coverage as private.

complementary insurance.[9] This is similar to the situation in France, though Medicare coverage is less comprehensive than what is provided by France's Social Security system and a lower percentage of the elderly in the US hold private complementary coverage.

The interaction between public and private insurance for this population have implications for economic efficiency. It is generally believed that the Medicare program solves the problem of adverse selection that would likely be a serious issue if the coverage of this population were determined entirely by private markets. However, it is theoretically possible that the partial public insurance provided by a program like Medicare may exacerbate the problem of adverse selection in the residual private market. The logic behind such an effect is that compulsory public insurance may reduce the willingness of low-risk consumers to pool with higher risk consumers in the residual market. A recent paper by Finkelstein (2004) tests for such effects by considering whether private insurance coverage for services not covered by Medicare drops as consumers turn 65, and become eligible for the program. She finds no evidence that gaining Medicare eligibility reduces the probability of having any private insurance or having private coverage for prescription drugs.[10]

A second way that the interaction between Medicare and private complementary coverage affects efficiency is through the effect of the latter on utilization. Assuming that services covered by the two types of insurance are complements, the moral hazard effect of private "Medigap" insurance will lead to higher Medicare expenditures. In this case, Medicare essentially subsidizes private insurance because private premiums need not reflect the full cost of the additional utilization it induces. A number of studies find a positive relationship between Medigap coverage and Medicare expenditures, though there is some uncertainty as to the extent to which this represents moral hazard rather than adverse selection (Wolfe and Goddeeris 1991 ; Cartwright Hu and Wang 1992 ; Ettner 1997 ; Atherly 2002).

Since the mid-1980s, Medicare beneficiaries have had the option of enrolling in a private managed care plan. Since these plans provide additional benefits beyond those provided by the basic fee-for-service program, this is an alternative to purchasing private complementary coverage. Medicare managed care enrollment increased dramatically in the 1990s, peaking in 1998 at 17 % of total

9. In 2001, only 11 % of Medicare beneficiaries relied on Medicare alone. Twelve percent qualified for additional coverage through Medicaid. Thirty-four percent had private coverage through a former employer and 23 % purchased Medigap coverage. The remaining 12 % were in Medicare HMOs, which provide additional benefits beyond those covered by fee-for-service Medicare (Kaiser Family Foundation 2004a).

10. Another recent paper by Card, Dobkin and Maestas (2004) also examines what happens when people turn 65 and gain access to the universal coverage provided by Medicare. They find that after age 65, there is a narrowing of race and education-related disparities in access to care and utilization.

beneficiaries. Today, 12 % of elderly Medicare beneficiaries are covered through a managed care plan (Kaiser Family Foundation 2004b).

As in the private sector, policy makers have looked to managed care as a means for controlling health spending. However, it seems that in the Medicare program, increased managed care penetration has had the opposite effect. The reason is that while capitated payments to private plans are based on the average fee-for-service spending in a county, individuals who enroll in HMOs tend to have lower than average utilization. Thus, total public spending is higher under this approach than if these lower cost individuals had stayed in the fee-for-service sector.

This favorable selection, combined with real cost advantages associated with managed care mean that in many areas HMOs can deliver the basic Medicare benefit package for less than the amount they are paid. In these cases, plans must use the surplus to fund supplemental benefits. As a result, competition in this market takes place largely on the basis of benefits, rather than price (Feldman et al. 1993). This is inefficient relative to a situation where plans can return savings to consumers in the form of lower premiums as consumers presumably end up receiving some benefits that they value at less than their cost.

There are also important equity implications of the way Medicare pays private health plans. Since capitation payments are based on average fee-for-service spending in an area, there is substantial geographic variation in the amount that plans are paid, which in turn leads to large variation in the availability of plans and the level of benefits provided. The fact that it is difficult to organize managed care networks in sparsely populated area, leads to further geographic disparities. As a result, the enrollment in Medicare managed care plans is highly concentrated, resulting in an uneven distribution of benefits. A recent study by Town and Liu (2003) estimates the consumer surplus generated by the managed care option in Medicare. According to their calculations, in 2000 the total consumer surplus generated by the program was $113 per Medicare beneficiary. However, for the roughly one-third of all beneficiaries living in areas where no Medicare HMOs are available, the average consumer surplus is zero. In contrast, for the roughly 25 % of all beneficiaries who live in areas where 5 or more plans are available, the mean consumer surplus per beneficiary was more than twice the national average ($241). [11]

11. These figures are averaged over all beneficiaries including those in the fee-for-service sector.

3. The New Medicare Prescription Drug Legislation

In December 2003, President Bush signed the Medicare Prescription Drug Improvement and Modernization Act, which introduces a prescription drug benefit into the program. With an estimated cost of over $500 billion for the first 10 years, this benefit represents the largest expansion of Medicare since it was established in 1965. The bill was the culmination of many years of intense and rancorous political debate and its provisions are more reflective of political rather than economic considerations. [12] One point on which ideological divisions were most pronounced is the relative roles played by the federal government and private insurers. Republicans were insistent that the new benefit be provided by risk-bearing private plans. Indeed, the Bush administration had at one time favored requiring that beneficiaries had to leave the traditional Medicare program altogether in order to access the new drug benefit, though this approach proved to be politically unpalatable to many Republican legislators. Democrats preferred the benefit to be folded into the existing fee-for-service program. The final legislation more closely resembles the Republican vision, though the government will be required to offer a plan in areas where there are fewer than two private plans are available.

The legislation also calls for demonstration projects to test a more market-oriented approach to paying managed care health plans. Like many aspects of this bill, liberals and conservatives found something to dislike about this provision. Some liberals view these demonstration projects, along with the role played by private plans in delivering the drug benefit, as one more step toward the privatization of Medicare. However, similar demonstrations have been proposed in the past, but were scuttled for political reasons. In light of this history, some conservative analysts argue that the promise of demonstration projects pay lip service to the idea of market competition, while reducing the pressure to make real progress on such reforms (See, for example, Moffit 2003).

In thinking about the economic impact of the legislation, it is important to note that roughly 60 % of Medicare beneficiaries already had coverage for prescription drugs, either through a Medicare HMO, an employer-sponsored retiree health plan

12. For example, consider the structure of the benefit. After a $250 annual deductible, Medicare pays 75 % of the next $2,000 in drug spending. The beneficiary then pays 100 % up to a total of $5,100, after which point Medicare pays 95 %. This scheme reflects two political considerations. The first is to increase political support among seniors by ensuring that a large percentage of enrollees receive at least some reimbursement for drug spending. The second is that many conservative legislators refused to vote for a bill with a cost of more than $400 billion. The "doughnut hole" in the plan's benefit structure, for which there is no economic rationale, allows both objectives to be met.

or an individually-purchased Medigap policy (Laschober et al. 2002). Thus, the impact on total spending on prescription drugs and total health spending for the elderly is likely to be small (Pauly 2003). The bill will, however, cause a significant shift of the distribution of that spending away from Medicare beneficiaries to taxpayers.[13] This shift in financing will exacerbate an already strong trend in that direction caused by demographic factors, most notably the aging of the baby boomers.

4. Recent Policy Proposals

Arguably the most critical health policy issue facing the US is the fact that nearly one in five Americans has no health insurance at all. Recent policy proposals include a mix of public and private strategies, with the degree of emphasis placed on one or the other following predictable political lines. Many Congressional Democrats advocate further expansions of existing public programs. Democrats in the House of Representatives recently introduced a plan to extend coverage to parents of children who are already covered by Medicaid or SCHIP and to allow individuals between the ages of 55 and 64 to buy into the Medicare program. They also proposed new tax credits for the purchase of private insurance, which is the one area of overlap with Republicans. Congressional Republicans also favor legislation that would make it easier for small businesses to pool together to purchase private insurance. The main source of savings relative to alternatives currently available to small firms would be that these new "association" health plans would be exempt from certain state insurance regulations.

One policy proposed by Senator John F. Kerry, the 2004 Democratic Presidential candidate, represents a significant change in the relationship between private and public insurance. Under his plan, the government would have essentially provide reinsurance, picking up 75 % of the cost of high cost medical cases for individuals in employer-sponsored private plans. Senate Majority Leader Bill Frist, a Republican, recently floated his own proposal based on the idea of publicly sponsored reinsurance. Had Kerry been elected, there may have been movement toward a compromise plan. With the reelection of George W. Bush, major initiatives targeted at reducing the number of uninsured Americans are unlikely.

13. Employers with large retiree health benefits programs may also be net beneficiaries as the legislation calls for public subsidies for such coverage in order to reduce the incentive of employers to drop coverage.

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