

Ownership and Average Premiums for Medicare Supplementary Insurance Policies

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This article describes private supplementary health insurance holdings and average premiums paid by Medicare enrollees. Data were collected as part of the 1992 Medicare Current Beneficiary Survey (MCBS). Data show the number of persons with insurance and average premiums paid by type of insurance held—individually purchased policies, employer-sponsored policies, or both. Distributions are shown for a variety of demographic, socioeconomic, and health status variables. Primary findings include: Seventy-eight percent of Medicare beneficiaries have private supplementary insurance; 25 percent of those with private insurance hold more than one policy. The average premium paid for private insurance in 1992 was \$914.

INTRODUCTION

This article examines the distribution of private supplementary health insurance and average premiums paid by elderly and disabled persons entitled to Medicare in 1992. Data are presented on the variation in private insurance holdings and average premiums for various subgroups of Medicare enrollees, including low-income persons, the oldest old (persons 85 years of age or over), persons living alone, and persons with functional disabilities. These data were collected as part of the MCBS, a continuous panel survey of a representative sample of program enrollees.¹

The authors are with the Office of the Actuary, Health Care Financing Administration (HCFA). The opinions expressed are those of the authors and do not necessarily reflect those of HCFA.

¹ For a complete description of the survey design, see Adler (1994).

Supplemental insurance is an important economic resource in protecting the elderly and disabled against the cost of illness and is a valuable addition to income in the financing of health care services (Del Bene and Vaughan, 1992). It is not generally recognized that, on average, the Medicare program covers less than one-half of a beneficiary's total health care expenses (Waldo et al., 1989). Many elderly and disabled persons acquire private insurance to supplement their Medicare benefits because the program has significant cost-sharing requirements and does not cover commonly used services such as outpatient prescription drugs.² Supplementary insurance has been shown to improve access to health care services (Blustein, 1995).

At the same time, previous research has shown that supplementary health insurance increases the level of Medicare spending for health care (Chulis et al., 1993a; Hahn and Lefkowitz, 1992). In addition, the existence of public and private supplements complicates the search for policy options to reduce Medicare spending. For example, an increase in cost sharing for services used under Medicare might not reduce demand for services because, under existing insurance arrangements, many beneficiaries have the option of buying additional supplementary insurance to cover the increased cost sharing (Chulis et al., 1993b). This is important to policymakers because large annual increases in Medicare expenditures have been a signifi-

² The annual publication *Your Medicare Handbook* provides a complete description of Medicare benefits and cost sharing.

cant influence on the size of the deficit (U.S. Congressional Budget Office, 1992), and ways to curb that spending are at the center of much legislative activity.

Whatever policy options are considered to slow the growth in Medicare spending, an important consideration is how any proposed changes will affect various subgroups of the Medicare population. The last major Medicare reform, the Medicare Catastrophic Coverage Act of 1988, was repealed in 1989 because of beneficiary dissatisfaction with the new program. The most dissatisfied group of beneficiaries were those persons who felt that their private supplementary insurance benefits were preferable to the new Medicare benefits and who objected to the new premiums they would be required to pay (Rice, Desmond, and Gabel, 1990). That experience is a useful reminder that it is important to understand the distribution and costs of private supplementary insurance in crafting reforms designed to slow the growth in Medicare spending.

TYPES OF PRIVATE SUPPLEMENTARY INSURANCE

There are two main types of private supplementary insurance for elderly and disabled persons: individually purchased insurance and employer-sponsored plans acquired as part of a retirement benefits package.³ As suggested later, there were fairly clear differences between the benefits offered by each type of plan in the past. In recent years, however, the differences in benefits offered by a typical individually purchased plan and an employer-sponsored plan have blurred.

³ Interviewers are instructed not to include either so-called "dread disease" policies targeted at specific diseases such as cancer or policies paying a specific dollar amount per day during illness as private insurance policies on the survey.

Medigap Insurance

Individually purchased insurance plans are primarily medigap plans, but the category also includes individually purchased policies to cover specific benefits such as prescription drugs or long-term care. (For simplicity of presentation only, we refer to all individually purchased plans in this article as medigap plans.) Medigap plans can vary considerably, but they primarily insure against Medicare cost sharing such as the inpatient hospital deductible (\$652 in 1992) and the 20-percent beneficiary copayment required for most physician services. These plans typically do not cover prescription drugs and long-term care, although it is possible to buy medigap plans with these types of coverage or to buy plans that cover only these benefits. Medigap plans are primarily designed to insure against "front-end" cost sharing such as deductibles and coinsurance, but they do not provide stop-loss insurance against large out-of-pocket expenses in cases of catastrophic illness.

In the Omnibus Budget Reconciliation Act (OBRA) of 1990 (Public Law 96-499), Congress moved to standardize the benefit packages that could be offered for sale as medigap policies. Beginning in 1992, new policies had to be 1 of 10 different allowable combinations of insurance benefits (Rice and Thomas, 1992). Core benefits include inpatient coinsurance for stays of more than 60 days, the 20-percent coinsurance for Part B services, and Parts A and B blood deductibles. Optional benefits include skilled nursing facility coinsurance for stays of more than 20 days, the inpatient hospital deductible, the Part B deductible, Part B excess charges (balance billing), foreign travel coverage, at-home recovery services, prescription drugs, and preventive medical care. Existing medigap plans that did not conform to the new cov-

erage combinations could continue in their original form if renewed by owners. Since only new policies must conform to the new requirements and beneficiaries can continue their old medigap policies indefinitely, it will take several years before a majority of policyholders own plans sold under the new insurance regulations.

Employer-Sponsored Insurance

Many employers offer continuing health insurance coverage for their former workers and their families after retirement. Generally in the past, the same package of employer-sponsored health insurance benefits offered to employees was also offered to retirees (Chollet, 1989). In addition to hospital and physician benefits, these plans generally include insurance coverage for prescription drugs and often include out-of-pocket stop-loss limits. When a person 65 years of age or over who is no longer working becomes entitled to Medicare benefits, Medicare becomes the primary payer for the services it covers. The employer then decides how to coordinate its insurance benefits with Medicare benefits. Most employers coordinate their insurance benefits with Medicare using the "carve out" method, which limits their payment liability and requires policyholders to pay either Medicare or private plan deductibles (Jensen and Morrissey, 1992).

More recently, some employers have begun to convert retiree policies to "wrap-around" coverage, in which the person's Medicare benefits are not duplicated in the employers' insurance package. The coverage in these plans focuses on Medicare cost sharing and non-Medicare services such as prescription drugs. In some cases, employers are offering their retirees insurance plans with coverage that is very similar to individually purchased medigap plans.

Employer-sponsored plans offer an advantage to policyholders in that employers often subsidize the premium on behalf of the former employee (Morrissey, Jensen, and Henderlite, 1990). However, there are indications that employers have been reducing their support for their retirees' health insurance in recent years (Employee Benefit Research Institute, 1993).⁴ One of the primary reasons for decreasing employer support was new financial reporting requirements. Under revised financial reporting rules (Financial Accounting Standards Board Rule 106) announced in 1989, which took full effect in 1993, employers must account for the projected cost of future expenditures for retiree health benefits in their current financial statements (Stern, 1991). Employers have reacted to this increase in booked liabilities by re-examining their commitment to health insurance for retirees. To date, this process has not greatly reduced the number of persons entitled to employer-sponsored insurance, but it has increased the share of premiums that insured persons must pay (Battagliola, 1994; U.S. General Accounting Office, 1993).

OWNERSHIP OF MULTIPLE SUPPLEMENTAL POLICIES

There has been a longstanding concern that the elderly might be purchasing unnecessary insurance, either because of confusion about exactly what Medicare and their supplementary medical insurance cover or because of high-pressure sales tactics. This would include private policies that duplicate existing coverage or add little additional insurance value in relation to their cost. In 1980, Congress passed an amendment to the Social Security Act (Public Law 96-

⁴ One survey of employers suggests that, in 1993, two-thirds of retirees paid the entire premium for their employer-sponsored insurance (Employee Benefit Research Institute, 1995).

265, commonly known as the Baucus Amendment) that established Federal minimum standards for marketing medigap policies. OBRA 1990 extended this consumer protection by including a provision that discourages the sale of any medigap policies that duplicate existing coverage (U.S. General Accounting Office, 1991). However, these provisions had the unintended effect of denying new insurance to willing and knowledgeable purchasers where there were incidental overlaps in coverage. The Social Security Amendments of 1994 included provisions to remedy this situation. Beginning in late 1995, all new supplemental policies must include a disclosure statement that identifies any overlap between plan coverage and Medicare benefits (*Federal Register*, 1995).

Two studies have partially confirmed and partially refuted the concern about duplicate insurance coverage. The National Medical Care Expenditure Survey of 1987 found that about 20 percent of the elderly held more than one supplemental policy. However, an analysis of multiple policyholders did not confirm the stereotype of poor, very elderly persons persuaded to buy essentially useless additional policies. Multiple policyholders were found to be relatively young and better educated, with above-average incomes (Short and Vistnes, 1992).

A more recent congressional study concluded that many of the multiple policies held by Medicare beneficiaries may be unnecessary (U.S. General Accounting Office, 1994). However, this same study also pointed out some potential long-run reasons to hold multiple policies, particularly for persons with employer-sponsored insurance. One of the provisions of OBRA 1990 requires that insurance companies provide a 6-month "open season" beginning after a person enrolls in Part B of Medicare. During this period, a person cannot be excluded from purchasing a

medigap policy because of his or her health status. This can create a dilemma for persons who are currently covered by employer-sponsored insurance, but are uncertain that their former employer will continue offering them coverage until the end of their life. These persons, even if currently in good health, could decide to buy an essentially redundant medigap plan during this "open season," not because it greatly improves their current insurance but to be certain they will have some private insurance in the future if their health declines.

Table 1 shows insurance holdings and average premium payments by type of policy and number of policies held. In order to address the question of the extent to which multiple policies fill in gaps for services not covered by Medicare, Table 1 also shows the shares of supplemental policies that cover outpatient prescription drugs and nursing home benefits.

Insurance Holdings by Type of Policy

Nearly 27 million elderly and disabled persons living in the community (78 percent of all such people) hold some form of private insurance to supplement Medicare. About 12.5 million persons hold only medigap insurance, 11.8 million hold only employer-sponsored insurance, and 2.4 million hold both types of insurance. The average annual premium paid was \$1,014 for persons with medigap insurance only; \$728 for those with employer-sponsored insurance only; and \$1,369 for those with both types.

Number of Policies Held

Just under 20 percent of the Medicare population held more than one supplementary policy in 1992, which was about the same level as the share measured in

Table 1

Number and Percent of Medicare Enrollees Living in the Community With Private Supplemental Insurance, Average Premiums Paid, Percent With Drug Coverage, and Percent With Nursing Home Coverage, by Type of Supplemental Insurance and Number of Plans: 1992

Item	Total	1 Policy	2 Policies	3 Policies or More
All Private Health Insurance				
Number of Persons in Thousands	26,788	20,248	5,312	1,228
Percent of Persons	100.0	75.6	19.8	4.6
Average Premium per Person	\$914	\$791	\$1,231	\$1,575
Percent With Drug Coverage	50	45	63	69
Percent With Nursing Home Coverage	21	17	32	49
Medigap Only				
Number of Persons	12,528	10,427	1,821	280
Percent of Persons	100.0	83.2	14.5	2.2
Average Premium per Person	\$1,014	\$856	\$1,628	\$2,439
Percent With Drug Coverage	25	23	34	23
Percent With Nursing Home Coverage	25	20	44	66
Employer-Sponsored Only				
Number of Persons	11,832	9,820	1,630	382
Percent of Persons	100.0	83.0	13.8	3.2
Average Premium per Person	\$728	\$722	\$692	\$999
Percent With Drug Coverage	72	68	85	98
Percent With Nursing Home Coverage	15	14	16	32
Both Medigap and Employer-Sponsored				
Number of Persons	2,428	—	1,861	566
Percent of Persons	100.0	—	76.6	23.3
Average Premium per Person	\$1,369	—	\$1,316	\$1,538
Percent With Drug Coverage	73	—	73	72
Percent With Nursing Home Coverage	38	—	34	52

NOTES: All person counts are in thousands. Includes persons ever enrolled for Medicare who did not enter a long-term care facility during 1992. Numbers may not add to totals due to rounding.

SOURCE: Health Care Financing Administration, Office of the Actuary: Medicare Current Beneficiary Survey.

the 1987 National Medical Expenditure Survey (Short and Vistnes, 1992). Nearly 16 percent of persons had two policies, and just under 4 percent had three policies or more. For persons with medigap policies only, the average premium for just one policy was \$856. Each additional medigap policy added about \$800 to premiums. However, the data do not show proportionate increases in premiums as the number of employer-sponsored policies held increases.

There are some possible reasons for this somewhat counterintuitive finding. Unlike medigap insurance, for which coverage is for an individual and a person can choose to purchase a second policy or not, persons are entitled to employer-sponsored health insurance based on their previous work experience or by being included on a

spouse's or other relative's family policy. It is possible that many second and third employer-sponsored policies are family policies extended to the sample person at low incremental cost. Even if the coverage duplicates their primary plan, if there is little additional out-of-pocket cost involved, the person would be inclined to continue the coverage. Another possibility is that some employers offer insurance coverage in parts (e.g., hospital, physician, drugs, etc.) analogous to Medicare Parts A and B. In this type of situation, a person would report two employer-sponsored plans or more, but the average premium should be close to what others pay for a single comprehensive plan. It should also be noted (as we describe in the Data Sources and Methods section) that it is more difficult to collect employer-sponsored insurance pre-

Table 2
Number and Percent Distribution of Medicare Enrollees Living in the Community,
by Selected Characteristics: 1992

Characteristic	Number	Percent	Characteristic	Number	Percent
All Enrollees	34,258	100.0	Income		
Age			Under \$5,001	2,499	7.3
0-44 Years	1,130	3.3	\$5,001-10,000	8,965	26.2
45-64 Years	2,221	6.5	\$10,001-15,000	6,676	19.5
65-69 Years	9,610	28.1	\$15,001-20,000	4,433	12.9
70-74 Years	8,147	23.8	\$20,001-25,000	3,416	10.0
75-79 Years	6,316	18.4	\$25,001-30,000	2,301	6.7
80-84 Years	4,041	11.8	\$30,001-35,000	1,517	4.4
85 Years or Over	2,793	8.2	\$35,001-50,000	2,424	7.1
Gender			\$50,000 or More	1,603	4.7
Male	14,971	43.7	Partial: Less Than \$25,000	171	0.5
Female	19,287	56.3	Reports: More Than \$25,000	116	0.3
Ethnicity			Unknown	135	0.4
White	28,704	83.8	Health Status		
Black	3,089	9.0	Excellent	5,779	16.9
Hispanic	1,849	5.4	Very Good	8,795	25.7
Other	616	1.8	Good	9,863	28.8
Location			Fair	6,408	18.7
Metropolitan	25,013	73.0	Poor	3,307	9.7
Non-Metropolitan	9,245	27.0	Unknown	86	0.3
Living Arrangements			Functional Status		
Lives Alone	9,683	28.3	No Limitations	25,842	75.4
With Spouse	14,903	43.5	IADL Only	1,594	4.7
With Others	9,673	28.2	1 or 2 ADLs	4,477	13.1
			3 ADLs or More	2,347	6.9

NOTES: All person counts are in thousands. Includes persons ever enrolled for Medicare who did not enter a long term-care facility during 1992. Numbers may not add to totals due to rounding. IADL is instrumental activity of daily living. ADL is activity of daily living.

SOURCE: Health Care Financing Administration, Office of the Actuary: Medicare Current Beneficiary Survey.

miums as accurately as medigap premiums in a consumer survey.⁵

Prescription Drug and Skilled Nursing Home Coverage

We included the shares of persons with prescription drug and nursing home coverage as a limited test of whether multiple policies duplicate existing coverage or are obtained to fill a gap in existing insurance coverage. In the aggregate, 45 percent of persons with one policy had prescription drug insurance. This share increased to 63 percent for persons with two policies and

increased further to 69 percent for persons with three policies or more. A similar pattern is shown for insurance coverage of nursing home services. Considering all persons with private insurance, only 17 percent of persons with one policy had nursing home coverage. This share increased to 32 percent for persons with two policies and to 49 percent for persons with three policies or more.

About 25 percent of persons with medigap insurance only have either prescription drug or nursing home coverage. By contrast, 72 percent of persons with employer-sponsored policies only have prescription drug coverage, and only 15 percent have nursing home coverage. In general, additional medigap policies increase the percent of persons with nursing home coverage, and additional employ-

⁵ This is due to differences in the way each type of premium is generally paid. Medigap premiums are usually paid directly by the insured person and can usually be recalled to memory in a survey. The employee's share of employer-sponsored premiums may be deducted from a pension benefit check. Amounts recorded on a pension check deductions slip are generally not as easily remembered as payments made by writing out a check.

er-sponsored policies increase the percent with prescription drug coverage. Persons with both types of insurance have relatively high levels of both prescription drug and nursing home coverage.

These patterns suggest that, in general, multiple policyholders are obtaining additional policies in order to fill gaps in their insurance coverage.⁶

MEDICARE ENROLLEES BY SELECTED CHARACTERISTICS

Table 2 shows the distribution of Medicare enrollees living in the community by a number of demographic, economic, and health status characteristics. Table 3 shows the distribution of privately insured people living in the community by type of insurance for the characteristics presented in Table 2. About 78 percent of Medicare enrollees have some form of private health insurance to supplement Medicare. This is almost evenly split between persons with medigap plans (37 percent) and persons with only employer-sponsored plans (35 percent). About 7 percent of Medicare enrollees have both types of insurance. The total number of persons with medigap insurance (44 percent) is the sum of the number with medigap alone (37 percent) and the number of persons with both types of insurance (7 percent). The number of enrollees with employer-sponsored insurance (42 percent) is the sum of those having employer-sponsored alone (35 percent) and those with both types of insurance (7 percent). Figure 1 presents a graphic representation of the private health insurance holdings of

⁶ It is important to note that the data we report do not tell the complete story about enrollee's health insurance coverage. The size of the survey budget prevents an in-depth examination of the detailed benefits of a given policy and of the value of these benefits compared with the premium paid. Thus, although we can say that people with more than one policy are more likely to be covered for, say, prescription drugs, we cannot say whether in the course of acquiring such coverage that policyholders are paying for redundant hospital or physician coverage. Values for the premium dollar are outside the scope of this article.

the Medicare population. In the following discussion of the prevalence of medigap and employer-sponsored insurance by demographic and health status characteristics, persons with both types of insurance are included in both the medigap and employer-sponsored insurance coverage totals.

Age

There is a considerable difference in the private insurance coverage rates of Medicare enrollees under 65 years of age who obtain their Medicare coverage as a result of qualifying for work disability cash payments and Medicare enrollees 65 years of age or over. Less than 46 percent of persons 45-64 years of age and 27 percent of persons under 44 years of age have private supplemental insurance. For persons 65 years of age or over, by contrast, age-specific insurance coverage rates are generally over 80 percent. This pattern of below-average-coverage rates for persons under 65 years of age applies to both medigap alone and employer-sponsored insurance alone.

For persons 65 years of age or over, there are very different age patterns for medigap and employer-sponsored coverage. The share of persons with medigap insurance increases steadily with age, from 41 percent for persons 65-69 years of age to 53 percent for persons 85 years of age or over. There is an opposite pattern for persons with employer-sponsored insurance: 48 percent of persons 65-69 years of age are covered, but this proportion drops steadily to 30 percent for persons 85 years of age or over. Employer-sponsored health insurance for retirees did not become widespread until the 1960s and expanded rapidly in the 1970s and 1980s (Clark and Kreps, 1989). It follows that more recent retirees (the younger elderly) are more likely to qualify for this type of coverage than are older persons whose prime earn-

Table 3

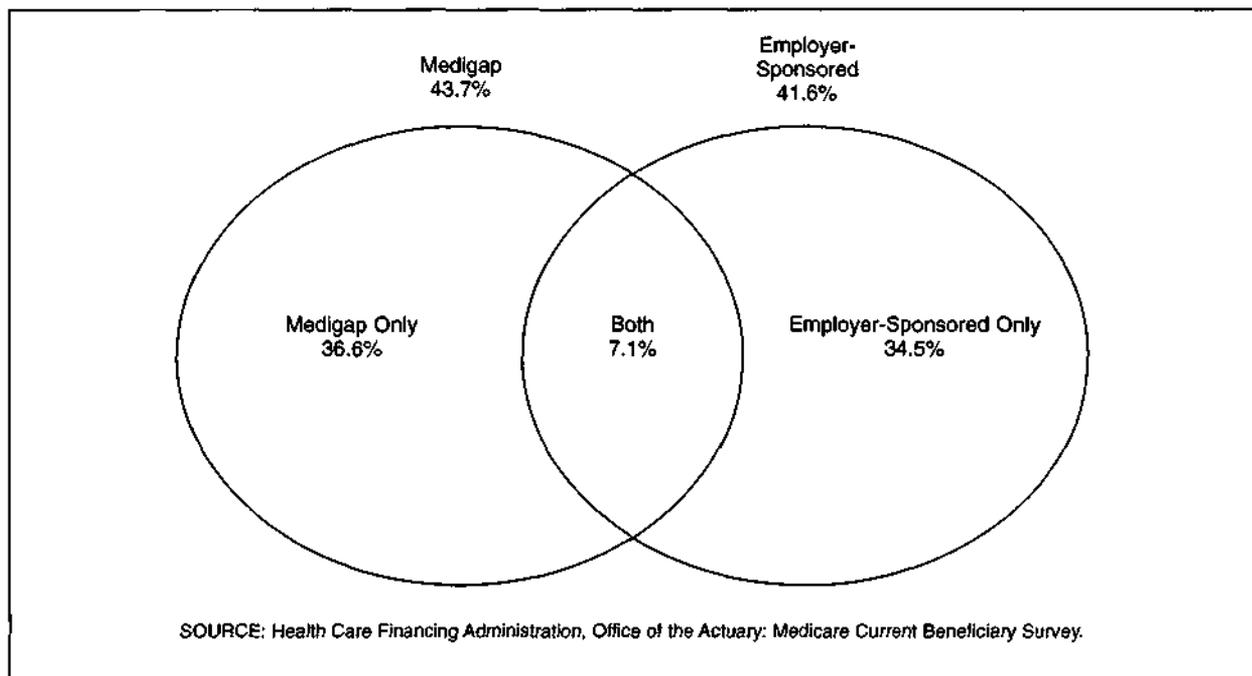
Number and Percent of Medicare Enrollees Living in the Community With Private Supplementary Insurance, by Type of Plan and Selected Characteristics, 1992

Characteristic	All Persons		Private Health Insurance		Medigap Only		Employer-Sponsored Only		Both	
	Number	Percent of Total	Number	Percent of Row Total	Number	Percent of Row Total	Number	Percent of Row Total	Number	Percent of Row Total
Total	34,258	100.0	26,788	78.2	12,528	36.6	11,832	34.5	2,428	7.1
Age										
0-44 Years	1,130	100.0	300	26.5	87	7.7	201	17.8	*11	*1.0
45-64 Years	2,221	100.0	1,027	46.2	355	16.0	608	27.4	64	2.9
65-69 Years	9,610	100.0	7,855	81.7	3,210	33.4	3,936	41.0	710	7.4
70-74 Years	8,147	100.0	6,961	85.4	3,120	38.3	3,113	38.2	727	8.9
75-79 Years	6,316	100.0	5,209	82.5	2,631	41.7	2,104	33.3	474	7.5
80-84 Years	4,041	100.0	3,300	81.7	1,835	45.4	1,204	29.8	261	6.5
85 Years or Over	2,793	100.0	2,136	76.5	1,289	46.2	666	23.8	180	6.4
Gender										
Male	14,971	100.0	11,381	76.0	4,768	31.8	5,543	37.0	1,071	7.2
Female	19,287	100.0	15,407	79.9	7,760	40.2	6,290	32.6	1,357	7.0
Ethnicity										
White	28,704	100.0	24,329	84.8	11,357	39.6	10,728	37.4	2,245	7.8
Black	3,089	100.0	1,341	43.4	601	19.5	642	20.8	98	3.2
Hispanic	1,849	100.0	812	43.9	423	22.9	337	18.2	52	2.8
Other	616	100.0	305	49.5	147	23.9	126	20.5	*32	*5.2
Income										
Under \$5001	2,499	100.0	1,285	51.4	815	32.6	375	15.0	95	3.8
\$5,001-\$10,000	8,965	100.0	5,057	56.4	3,347	37.3	1,461	16.3	249	2.8
\$10,001-\$15,000	6,676	100.0	5,429	81.3	2,757	41.3	2,256	33.8	416	6.2
\$15,001-\$20,000	4,433	100.0	4,014	90.5	1,681	37.9	1,970	44.4	363	8.2
\$20,001-\$25,000	3,416	100.0	3,214	94.1	1,214	35.5	1,634	47.8	366	10.7
\$25,001-\$30,000	2,301	100.0	2,171	94.4	762	33.1	1,201	52.2	208	9.0
\$30,001-\$35,000	1,517	100.0	1,435	94.6	488	32.2	759	50.0	188	12.4
\$35,001-\$50,000	2,424	100.0	2,326	96.0	740	30.5	1,255	51.8	331	13.7
\$50,000 or More	1,603	100.0	1,513	94.4	578	36.1	762	47.5	173	10.8
Partial: Less Than \$25,000	171	100.0	139	81.3	*45	*26.3	71	41.5	*14	*8.2
Reports: More Than \$25,000	116	100.0	110	94.8	56	48.3	52	44.8	*2	*1.7
Unknown	135	100.0	104	77.0	45	33.3	*36	*26.7	*23	*17.0
Health Status										
Excellent	5,779	100.0	4,931	85.3	2,285	39.5	2,186	37.8	460	8.0
Very Good	8,795	100.0	7,629	86.7	3,461	39.4	3,506	39.9	662	7.5
Good	9,863	100.0	7,744	78.5	3,635	36.9	3,389	34.4	720	7.3
Fair	6,408	100.0	4,451	69.5	2,104	32.8	1,944	30.3	403	6.3
Poor	3,307	100.0	1,970	59.6	1,023	30.9	772	23.3	175	5.3
Unknown	86	100.0	63	73.3	*19	*22.1	*36	*41.9	*8	*9.3
Functional Status										
No Limitations	25,842	100.0	21,002	81.3	9,568	37.0	9,439	36.5	1,994	7.7
IADL Only	1,594	100.0	1,115	69.9	599	37.6	424	26.6	92	5.8
1 or 2 ADLs	4,477	100.0	3,099	69.2	1,560	34.8	1,322	29.5	216	4.8
3+ ADLs	2,347	100.0	1,572	67.0	800	34.1	646	27.5	126	5.4
Location										
Metropolitan	25,013	100.0	19,983	79.9	8,816	35.2	9,314	37.2	1,853	7.4
Non-Metropolitan	9,245	100.0	6,804	73.6	3,711	40.1	2,518	27.2	575	6.2
Living Arrangements										
Lives Alone	9,683	100.0	7,314	75.5	4,035	41.7	2,622	27.1	656	6.8
With Spouse	14,903	100.0	13,259	89.0	5,487	36.8	6,527	43.8	1,244	8.3
With Others	9,673	100.0	6,215	64.3	3,005	31.1	2,683	27.7	527	5.4

NOTES: All person counts are in thousands. Includes persons ever enrolled for Medicare who did not enter a long term care facility during 1992. Numbers may not add exactly because of rounding. IADL is instrumental activity of daily living. ADL is activity of daily living. Numbers marked with an asterisk (*) have relative standard errors of 30 percent or greater.

SOURCE: Health Care Financing Administration, Office of the Actuary: Medicare Current Beneficiary Survey.

Figure 1
Private Health Insurance Coverage of Medicare Enrollees Living in the Community,
by Type of Insurance: 1992



ing years occurred prior to the time that this benefit became widely available.

The larger proportion of older persons with medigap insurance reflects the importance placed on health insurance by the elderly Medicare population. As previously noted, the proportion of persons with employer-sponsored insurance drops steadily as age increases. However, the total proportion with private health insurance is fairly constant. This suggests that as persons lose employer-sponsored insurance because of business closings, bankruptcies, mergers, and so forth, or because of the loss of a spouse, they replace the employer-sponsored insurance with individually purchased plans.

Gender

There are considerably more females (56 percent) than males (44 percent) in the Medicare population living in the community, but there is very little difference in pri-

ivate insurance coverage rates for women (80 percent) and men (76 percent). There are, however, gender differences by type of insurance. Among persons with medigap coverage, 47 percent are female and 39 percent are male. This pattern reversed for those with employer-sponsored insurance—44 percent are males and 40 percent are females. The larger current proportions of males with employer-sponsored insurance probably reflects the larger proportion of males who worked in paid employment outside the home in earlier generations. Conversely, the larger proportion of females with medigap insurance is undoubtedly influenced by the large numbers of women who outlive their spouses and subsequently purchase individual medigap policies.

Ethnicity

The Medicare population living in the community is primarily white (84 percent), with fairly small proportions of black per-

sons (9 percent), hispanic persons (5 percent), and persons of other ethnic groups (2 percent). There are large differences in private insurance coverage rates between white persons (of whom 85 percent have insurance) and persons of other ethnic groups (for whom coverage rates are between 40 percent and 50 percent). This pattern is the same for persons with both medigap and employer-sponsored coverage. For each type of insurance, the amount of coverage for black persons, hispanic persons, and persons of other ethnic groups is about one-half that for white persons. The relatively low levels of employer-sponsored insurance for ethnic minorities are probably a result of their lower levels of participation in employment that offered retirement health benefits during their working lives. The lower levels of individually purchased medigap coverage for ethnic minorities probably is related to lower average income levels for those groups.

Income

Distribution of the Medicare population by income is as follows: 34 percent with incomes of \$10,000 or less; 42 percent with incomes of \$10,001-\$25,000; and 23 percent with incomes of \$25,000 or more. The proportion of persons with private insurance increased from less than 60 percent for persons with incomes of \$10,000 or less to more than 90 percent for persons with incomes of \$25,000 or more. This expected aggregate result conceals somewhat different patterns by type of insurance, however. The proportion of medigap policyholders falls into a fairly narrow range, from 36 percent to 47 percent for all income categories of less than \$5,000 to \$50,000 or more. The proportion with employer-sponsored coverage only, on the other hand, increases with higher income. The proportion with employer-sponsored insurance increases

from 19 percent of persons with incomes of less than \$5,000 to more than 60 percent of persons with incomes of \$35,000 or more.

The absence of a strong positive correlation between income and the proportion of persons covered by medigap insurance is consistent with our findings in an earlier study (Chulis et al., 1993b). In that analysis, we examined the insurance purchase decisions of persons without either employer or government support for their supplemental insurance. Although there was some effect of income on coverage shares, we found that even at very low incomes, fairly large proportions of persons purchase medigap policies. This suggests that low-income Medicare enrollees regard medigap insurance much more as a necessity than as an optional purchase.

The positive association between income and share with employer-sponsored coverage is not really surprising. Researchers have found that firms that offer retiree health insurance generally also offer pension benefits (Clark, Ghent, and Headen, 1994). These pension benefits, added to Social Security and any investment income, tend to move persons with employer-sponsored insurance into higher income classes.

Health Status

Excellent or very good health is reported by 43 percent of Medicare enrollees living in the community; good health is reported by 29 percent; fair or poor health is reported by 28 percent. In general, the proportion of persons with private supplementary insurance decreases as reported health status worsens: 85 percent of persons in excellent health have private insurance, but this share declines to 60 percent for persons in poor health. This pattern of lower shares of private insurance as reported health status declines also applies to

persons with medigap only and employer-sponsored only coverage.

Our previous research has shown that health spending increases sharply as health status worsens (Chulis et al., 1993a). The existing distribution of private supplementary insurance, however, is skewed toward the healthier segments of the Medicare population who have less need to use health care services. On the other hand, Medicaid benefits may serve as an alternate form of income protection for people in poor health.

Functional Status

Seventy-five percent of the Medicare population living in the community reported no limitations in performing usual activities of daily living (ADLs) required to live independently and manage a household. Of the remaining 25 percent reporting some impairment, 13 percent reported difficulties performing one or two ADLs, 7 percent reported difficulties with three ADLs or more, and 5 percent reported difficulties performing one instrumental activity of daily living (IADL) or more. The ADLs surveyed include eating, dressing, bathing, walking, transferring in and out of a chair, and using the toilet. The IADLs surveyed include making meals, using the phone, going shopping, managing money, doing light housework, and doing heavy housework.

Persons reporting no functional limitations have a higher level of private insurance coverage (81 percent) than do persons reporting some level of impairment. All three functionally limited categories show coverage levels around 70 percent. For medigap policyholders, there is very little variation between the coverage levels of impaired and non-impaired persons. For employer-sponsored policyholders there is more variation. The level of coverage for the functionally impaired was 10-12 per-

cent below that for the non-impaired. If you assume that persons reporting functional limitations are more likely to use health care services than are people without limitations, the existing distribution of persons with private insurance again seems to favor those with less need for health care treatment. However, the private insurance tilt toward the healthy appears to be less pronounced for functional limitations than it is for health status.

Location

Nearly 73 percent of the Medicare population live in metropolitan areas, and 27 percent live in non-metropolitan areas. The proportion of private insurance coverage is slightly higher for persons in metropolitan areas (80 percent) than for persons in non-metropolitan areas (74 percent). The patterns for medigap and employer-sponsored insurance are different. For medigap insurance, a slightly higher proportion of persons (46 percent) live in non-metropolitan areas than in metropolitan areas (43 percent). For employer-sponsored insurance, the pattern reverses with a wider gap: 43 percent living in metropolitan areas and 33 percent living outside these areas. The lower proportion of persons in non-metropolitan areas with employer-sponsored insurance probably reflects more self-employed persons and work experience in agriculture and smaller businesses that typically offer less generous retirement benefit packages (Clark, Ghent, and Headen, 1994).

Living Arrangements

Persons living with their spouse comprise 44 percent of Medicare enrollees living in the community. Persons living alone and persons living with others each comprise 28 percent of the Medicare population. Persons living with their spouse have

the highest share of private insurance coverage (89 percent); next is persons living alone (76 percent); and the lowest share is for persons living with others (64 percent). Persons living alone have the highest share with medigap coverage (49 percent) while persons living with their spouse have the highest share with employer-sponsored coverage (52 percent). These patterns are probably related to the fact that women live several years longer than men on average. Younger retired women are often covered on their husband's employer-sponsored policy, but as women age, and particularly if they are widowed, they may lose employer-sponsored insurance. At this point, women often decide to purchase individual medigap policies to continue their private insurance coverage.

AVERAGE PREMIUMS PAID BY SELECTED CHARACTERISTICS

Earlier Findings

Recent reports on the cost of medigap plans have shown considerable variation. One source estimated the average annual premium for a medigap policy in 1991 at \$661 (U.S. Congressional Budget Office, 1991). Another source estimated the 1989 annual premium at \$718 (Rice and Thomas, 1992). *Consumer Reports* conducted a survey to identify the lowest price for a basic medigap plan (Plan C) in 64 cities in 1994. Their best price annual premiums, which would understate the average price actually paid, ranged from just over \$500 to just under \$1,000 (*Consumer Reports*, 1994).⁷ However, a recent survey of Medicare enrollee preferences showed that the most popular medigap benefit

⁷ Best price premiums would understate the average price paid because many consumers pay a higher price for the same coverage, and because many consumers prefer more expensive combinations of benefits than offered in Plan C.

combination was not Plan C but the more expensive Plan F. Plan F includes the same benefits as Plan C plus coverage of balance billing amounts by physicians and providers (Fox, Rice, and Alecxih, 1995).

There is very little recent population-based premium data available for employer-sponsored insurance covering retirees. One estimate for average premiums paid by the policyholder in 1988 was about \$300 per year (Morrissey, Jensen, and Henderlite, 1990). (Note that total premiums including the employers' share are very likely much higher, and here we are only reporting on the out-of-pocket cost to policyholders.) Another estimate, made using late 1980s data brought forward to 1991 using a price index, was \$475 per year (U.S. Congressional Budget Office, 1991). Direct survey data collected in 1987 estimated that persons 65 years of age or over with employer-sponsored insurance paid less than 20 percent of policy premiums, on average, or about \$400 per year (Cooper and Johnson, 1993). Our data, shown in Table 4, show considerably higher premiums than those reported. In part, the higher levels we report can be explained by price inflation occurring between the time they reported and our 1992 data. We assume, however, that the largest part of the increase over previously published premium levels is due to decreasing employer support for retiree health benefits.

Age

For medigap-only policyholders, there is a steady increase in average premiums paid with increasing age. On average, persons under 44 years of age paid \$728 and persons 85 years of age and over paid \$1,109. This trend is consistent with insurance underwriting practices, which require increased premiums with increased risk. For policyholders with

Table 4

Out-of-Pocket Premium Payments per Medicare Enrollee Living in the Community for Private Supplementary Insurance, by Type of Plan and Selected Characteristics: 1992

Characteristic	Medigap Only		Employer-Sponsored Only		Both	
	Average Premium	Ratio to Total Average	Average Premium	Ratio to Total Average	Average Premium	Ratio to Total Average
Total	\$1,014	1.00	\$728	0.72	\$1,369	1.35
Age						
0-44 Years	728	0.72	550	0.54	*2,559	*2.52
45-64 Years	953	0.94	842	0.83	1,350	1.33
65-69 Years	971	0.96	716	0.71	1,288	1.27
70-74 Years	1,007	0.99	690	0.68	1,343	1.32
75-79 Years	1,024	1.01	661	0.65	1,354	1.34
80-84 Years	1,042	1.03	837	0.83	1,523	1.50
85 Years or Over	1,109	1.09	978	0.96	1,546	1.52
Gender						
Male	961	0.95	711	0.70	1,289	1.27
Female	1,046	1.03	743	0.73	1,430	1.41
Ethnicity						
White	1,022	1.01	736	0.73	1,377	1.36
Black	729	0.72	554	0.55	1,220	1.20
Hispanic	1,154	1.14	655	0.65	1,233	1.22
Other	832	0.82	964	0.95	*1,383	*1.36
Income						
Under \$5,001	1,015	1.00	869	0.86	1,331	1.31
\$5,001-\$10,000	955	0.94	774	0.76	1,376	1.36
\$10,001-\$15,000	996	0.98	781	0.77	1,299	1.28
\$15,001-\$20,000	1,051	1.04	720	0.71	1,303	1.29
\$20,001-\$25,000	1,074	1.06	691	0.68	1,367	1.35
\$25,000-\$30,000	1,057	1.04	611	0.60	1,396	1.38
\$30,001-\$35,000	1,039	1.02	726	0.72	1,546	1.52
\$35,001-\$50,000	1,056	1.04	638	0.63	1,408	1.39
\$50,000 or More	972	0.96	877	0.86	1,408	1.39
Partial: Less Than 25,000	*831	*0.82	624	0.62	*1,373	*1.35
Reports: More Than 25,000	1,010	1.00	419	0.41	*770	*0.76
Unknown	864	0.85	*694	*0.68	*787	*0.78
Health Status						
Excellent	994	0.98	646	0.64	1,452	1.43
Very Good	1,032	1.02	729	0.72	1,291	1.27
Good	998	0.98	710	0.70	1,311	1.29
Fair	1,059	1.04	810	0.80	1,349	1.33
Poor	960	0.95	881	0.87	1,770	1.75
Unknown	*944	*0.93	*728	*0.72	*1,401	*1.38
Functional Status						
No Limitations	1,007	0.99	694	0.68	1,355	1.34
IADL Only	1,069	1.05	810	0.80	1,386	1.37
1 or 2 ADLs	1,019	1.00	770	0.76	1,491	1.47
3 ADLs or More	1,052	1.04	1,090	1.07	1,391	1.37
Location						
Metropolitan	1,017	1.00	712	0.70	1,358	1.34
Non-Metropolitan	1,008	0.99	780	0.77	1,402	1.38
Living Arrangements						
Lives Alone	1,093	1.08	803	0.79	1,480	1.46
With Spouse	954	0.94	698	0.69	1,350	1.33
With Others	1,017	1.00	725	0.71	1,265	1.25

NOTES: Includes persons living in the community only. Premiums per person include payments for 1 or more policies. Multiperson policies have been separated into per person costs by dividing plan premiums equally across each person covered. Numbers marked with an asterisk (*) have relative standard errors of 30 percent or greater. IADL is instrumental activity of daily living. ADL is activity of daily living.

SOURCE: Health Care Financing Administration, Office of the Actuary: Medicare Current Beneficiary Survey.

employer-sponsored only coverage, average premiums paid varied from \$550 a year to \$978 a year, depending on age. However, there is no consistent age-related pattern for persons with employer-sponsored insurance. Persons 85 years of age or over paid the highest rate, \$978 per person per year. At the same time, persons 75-79 years of age paid only \$661 on average.

This unexpected result is probably due to the way that employer-sponsored insurance is organized and financed. First, employers often include their retirees in the same insurance pool as their younger working employees. In general, the healthier the insurance pool, the lower the average premiums for the persons in the pool, including older retirees. This type of selection would reduce average premiums for those older persons who find themselves in a relatively young and healthy insurance pool. Second, during the survey, data were collected only on that part of the insurance premium paid by the policyholder; the part paid by the employer was excluded. Some employers are considerably more generous than others in the amount that they pay on behalf of retirees. The total policy premium for an older person can be higher than that for a younger person, but if their premium is more heavily subsidized by the former employer, their out-of-pocket cost reported during the survey would be less. We assume that variations in the pooled risk subsidy and the employer's share subsidy have combined to produce the pattern by age shown for employer-sponsored insurance.

Average premiums paid by persons with both medigap and employer-sponsored insurance show a pattern by age consistent with blending the results shown for each type alone. As with medigap insurance, there is a slight general trend toward increasing premiums with increasing age. However, mirroring the employer-spon-

sored findings, there are anomalous high premiums at lower ages and fluctuations between the age categories.

Gender

In general, females pay more for private supplementary insurance than do males, although the difference varies by type of insurance. Males with medigap policies exclusively paid \$961 on average, whereas females with that type of insurance paid \$1,046. There is a smaller difference for employer-sponsored insurance only: Males paid an average of \$711 and females paid \$743. The payment difference widens again for persons with both types of insurance, with males paying \$1,289 on average and females paying \$1,430. The higher average premiums for females probably reflect, at least in part, that females in the Medicare population are older than males, on average.

Ethnicity

In Table 3, we saw that the amount of insurance coverage that black persons, hispanic persons, and persons of other ethnic groups had was only about one-half that of white persons. Among those with medigap coverage only, hispanic persons paid more on average (\$1,154) than did white persons (\$1,022). By contrast, average medigap premiums paid by black persons (\$729) and persons of other ethnic groups (\$832) were well below average. It is not clear why average medigap premiums are relatively low for these groups, but it could reflect the purchase of medigap policies offering only minimum benefits.

The pattern of ethnic differences in average premium payments changes somewhat for persons with employer-sponsored insurance only. Here the highest average payments are for persons of other ethnic

groups (\$964), and the lowest are for black persons (\$554). Average premiums for hispanic persons (\$655) and white persons (\$736) fall between these extremes. There is no obvious explanation for these differences. There is less variation in average premium payments by ethnic categories for persons holding both medigap and employer-sponsored insurance.

Income

There is no direct relationship between income and average premiums paid by policyholders with medigap insurance only. The lowest average premiums (\$955) are for persons with relatively low incomes: \$5,001 to \$10,000. However, persons with incomes of less than \$50,000 pay almost the same amount for their medigap coverage (\$972). There is very little variation in average premiums paid for medigap insurance in income categories from \$15,001 to \$50,000. This lack of variation in premiums paid by income may reflect the increasing standardization of medigap policies after OBRA 1990 reforms. Standard insurance products encourage increased price competition between insurers by making comparison shopping simpler.⁸ There appears to be a weak inverse relationship between income and average premiums paid for persons with employer-sponsored insurance only. Average premiums declined from \$869 for persons with incomes of less than \$5,000 to \$638 for persons with incomes of \$35,000-\$50,000. This apparent pattern, however, is not consistent because increases occur in some higher income categories. Lower premiums for wealthier persons are more likely to be a result of generous employer subsidies, rather than

less comprehensive insurance benefits. As noted earlier, employers often link employer-sponsored health benefits and pension benefits in their retirement packages (Clark, Ghent, and Headen, 1994). It seems likely that employers offering relatively generous pensions, which increase their retirees' income, would also be most likely to offer relatively generous subsidies for retiree health insurance, which decreases their retirees' premium payments. For persons holding both medigap and employer-sponsored insurance, there is also no consistent relationship between income and average premiums paid for private insurance.

Health Status

We noted earlier that the proportion of persons with private insurance decreased as self-reported health status declined. Among persons with medigap insurance only, however, there is no clear relationship between self-reported health status and the average premiums paid. Persons in excellent health pay slightly more (\$994) than persons in poor health (\$960), but there is no clear pattern for the categories in between. In fact, no health status category varies more than 5 percent from the overall average premium for medigap insurance (\$1,014). The existing configuration of lower insurance shares for persons in fair or poor health, but without an increase in average premiums, is interesting. This outcome is consistent with an insurance industry strategy of excluding persons with pre-existing conditions from purchasing medigap insurance, as opposed to offering insurance to these persons at higher rates.

There is a clear relationship between premiums paid and health status for persons with employer-sponsored insurance only. In all but one health status category,

⁸ In addition to standardizing medigap policy benefits, OBRA 1990 also tightened insurance company payout requirements (U.S. General Accounting Office, 1991). This would also tend to bring premium prices for competing policies closer together.

the average premium paid increases as health status worsens. Persons in excellent health paid an average of \$646 for employer-sponsored insurance compared with \$881 paid by persons in poor health. The pattern is more mixed for persons with both medigap and employer-sponsored insurance. The highest average premium (\$1,770) in this class, however, is paid by persons in poor health.

Functional Status

Average premiums for medigap insurance only are higher for persons with some functional limitations than for non-impaired persons, but the differences are fairly small. The same pattern of higher premiums for impaired persons appears for employer-sponsored insurance only, but for this insurance type the differences are larger. Persons with no functional limitations paid \$694 for employer-sponsored insurance, whereas persons who had difficulty with three basic ADLs or more paid an average of \$1,090. For persons with both medigap and employer-sponsored insurance, average premiums are also higher for persons with functional limitations. Except for one category (\$1,491 for difficulty with one or two ADLs), however, the differences in premiums are not large.

Location

There is virtually no difference in average premiums paid for medigap insurance only by persons living in metropolitan and non-metropolitan areas. For employer-sponsored insurance only, persons in non-metropolitan areas (\$760) paid slightly more than persons living in metropolitan areas (\$712). This same pattern applies to persons with both types of insurance, but the difference is again very small.

Living Arrangements

Persons who live alone and have only medigap insurance pay the highest average premiums (\$1,093). Persons who live with their spouse and have only medigap insurance pay the lowest average premiums (\$954). The same pattern applies to persons with only employer-sponsored insurance. Persons with employer-sponsored insurance living alone paid an average of \$803, whereas persons living with spouses paid an average of \$698. The same pattern also applies to persons with both types of insurance, although the lowest total premium in this class is for persons living with others (\$1,265). The higher insurance premiums for persons living alone may reflect the older age distribution within this group.

SUMMARY AND POLICY IMPLICATIONS

Multiple Policies

This article shows that a large proportion of Medicare beneficiaries—about 20 percent—hold more than one private supplementary insurance policy. There are undoubtedly instances in which beneficiaries pay for private policies that are duplicative and unnecessary. The data in this article suggest, however, that multiple policies are purchased, at least in part, to fill specific insurance coverage gaps such as prescription drugs. The OBRA 1990 reform that created a 6-month open season in which a new enrollee for Medicare Part B could purchase a medigap policy was designed to prevent insurance companies from excluding persons with pre-existing conditions. Given the uncertainty surrounding the continuing support of employers for retiree health insurance, some bene-

ficiaries may be purchasing medigap policies they do not currently need in order to be assured of some private insurance coverage in the future.

Private Insurance Distribution

There are considerable variations in the level of private insurance coverage among different subgroups of the Medicare population. The following groups have relatively high shares with private insurance coverage: persons 65 years of age or over, white persons, persons with incomes of \$15,000 or more, persons in excellent or very good health, persons without limitations in ADLs, and married persons living with their spouse. In general, the private insurance distribution is less favorable toward the disabled, ethnic minorities, persons with low incomes, persons in fair or poor health, and unmarried persons.

Type of Insurance

The shares of persons with medigap (37 percent) and employer-sponsored insurance (35 percent) are about equal, with 7 percent of the population owning both types. There are differences in the distribution of each type of insurance, however. The employer-sponsored distribution, in general, favors the younger elderly, men, higher income persons, persons without activity limitations, persons living in metropolitan areas, and persons living with their spouse. Medigap insurance, on the other hand, is more heavily concentrated among the older elderly, women, lower income persons, persons in non-metropolitan areas, and persons living alone.

Average Premiums

The average annual premium for persons with medigap insurance was \$1,014.

Average premiums for employer-sponsored insurance, which is often subsidized by employers, was \$728. Persons with both types of insurance paid average premiums of \$1,369. Average medigap premiums did not vary in consistent patterns across population subgroups, although average premiums did rise steadily with age. This lack of variation may reflect the more standardized nature of this insurance product after regulatory reforms in recent years. There was a general, if inconsistent, trend toward lower average premiums for employer-sponsored insurance as income increased. This pattern probably reflects the linkage of pensions and health insurance by employers. That is, employers who offer more generous pensions probably also offer more generous insurance subsidies.

Increasing Medicare Cost Sharing

One of the proposed changes to Medicare most commonly discussed is an increase in deductibles and copayments for services used. Increased cost sharing has two objectives: to decrease the demand for services and thereby slow the growth of Medicare expenditures, and to increase the share of dollars paid by beneficiaries. There are objections to this approach on the grounds that use of both necessary and unnecessary services will be discouraged, that low-income persons will be disproportionately affected, and that providers will respond to any loss of income by inducing more demand for their services (Rasell, 1995). Nevertheless, increased Medicare cost sharing is very high on the Medicare reform policy agenda (*Medicine and Health*, 1995). Our point here, however, is that because of differences in private insurance coverage, an increase in Medicare cost sharing for services used will not affect all beneficiaries uniformly.

Much employer-sponsored supplementary insurance requires a person to pay either the Medicare or private-plan deductibles and cost sharing. An increase in direct cost sharing is most likely to reduce the service demand of the 35 percent of the Medicare population who only have this type of insurance. Under existing insurance arrangements, however, the possibility exists that persons with employer-sponsored insurance could decide to purchase additional medigap policies to counteract an increase in Medicare cost sharing. To the extent this occurred, average private insurance premiums paid by this group would increase, but the additional private coverage would work against the goals of reduced demand for services and slower growth in Medicare expenditures.

Medigap plans are designed specifically to cover Medicare deductibles and cost sharing, and they are owned by 44 percent of Medicare enrollees. If Medicare deductibles and cost sharing are increased, average medigap premiums would go up to cover the new cost sharing. Depending on the size of the premium increase, some persons will be priced out of the private insurance market and will have to pay the new Medicare cost sharing directly. Previous research has shown, however, that low-income elderly consider supplementary insurance more of a necessity than an optional purchase. The prospects of higher Medicare out-of-pocket payments may motivate low-income enrollees to make even greater sacrifices to hold medigap insurance. In short, an increase in Medicare cost sharing will clearly result in higher medigap policy premiums. However, if the share of persons with medigap insurance stays constant, there will probably not be any significant decrease in the demand for Medicare services in this group.

Thoughts on Reforming Medicare

The Medicare program is a uniform package of insurance benefits, equally distributed to all eligible persons with rules that are uniformly applied across the Nation. But from the point of view of remaking national policy, this represents only part of the picture. As this article shows, more than 75 percent of persons eligible for Medicare also held private supplementary insurance. This insurance is obtained to cover Medicare cost sharing amounts and to cover medical services, such as prescription drugs, that are not covered by Medicare. The clear objective of beneficiaries is to combine their private insurance with Medicare to obtain the broadest and deepest insurance benefits possible (Rice, Desmond, and Gabel, 1990).

Rather than a monolithic national insurance program, the Medicare program could more usefully be viewed as an interlocking network of public and private health insurance benefits. In this interlocked public-private insurance system, Medicare beneficiary access to health care is improved because supplementary insurance lowers out-of-pocket cost barriers to care. On the other hand, Medicare expenditures are higher than they would have been otherwise because more complete insurance coverage encourages more use of medical services. This interlocked insurance system makes reforms to Medicare more difficult, but it must be taken into account if changes to Medicare are to accomplish their intended effect. For Medicare reforms to work as intended, private insurance arrangements may also have to be modified or limited to be sure they conform to the purposes of reform.

DATA SOURCES AND METHODS

The data in this article were collected as part of the MCBS, a continuing panel survey

of about 14,500 aged and disabled Medicare beneficiaries. The survey includes both persons living in the community and those residing in facilities. However, this article is limited to persons who received only community interviews during the year. For a complete description of the survey design, sample frame, collection methods, and contents, see Adler (1994).

The private insurance data shown in this article were collected in Round 4 of the MCBS, which was conducted September-December 1992. In the interview, the sample person is asked for the name of all private plans that provide insurance coverage. For each plan mentioned, the sample person is asked the source of the coverage, the number of persons covered, whether the plan covers prescription drugs or nursing home stays, and the premium costs of the plan. For this article, premium costs for plans with multiple persons were divided equally among covered persons to calculate premium payments per person. For example, if three persons (the sample person and two others) were covered under one private plan with a total annual premium of \$3,000, the average annual premium for the sample person would be \$1,000.

In a number of cases, persons reported private insurance policies but were not able to report the premiums paid. Initial response levels for premiums paid were considerably better for medigap policies (75 percent) than for employer-sponsored insurance (43 percent). Respondents are more familiar with medigap premium costs because payments are generally made directly by the covered person to the insurance company. The less complete response for employer-sponsored insurance is due to the way these premiums are often paid. For this type of insurance, the employer usually pays the larger part, and the policyholder's share of premiums may be deducted from a pension check. Writing

out a personal check for a medigap policy creates better premium amount recall than passively examining a deduction slip that accompanies a pension check.

We decided not to impute missing premium data except for a small group of persons with partially complete reports. Partially complete reports include persons with multiple policies who reported complete premiums for one policy or more, with a non-response to the premium question for one or more other policies. The imputations on partial reports were done separately for medigap, employer-sponsored, and both categories. We assigned the average payment for that type of insurance based on the number of policies held. For example, consider a respondent with three policies, one medigap for which he knows the premium, a second medigap for which he does not know the premium because his daughter pays for the policy, and an employer-sponsored plan for which he also does not know his premium payment. The employer-sponsored premium would be imputed using the average premium for employer-sponsored policies for persons having both types of insurance. The second medigap plan premium would be imputed using the incremental average for second medigap policies (the difference in average premiums for persons with one policy compared with the average premiums for persons with two policies). After imputing the cases with partially reported premiums, our analysis of average premiums included 85 percent of reported medigap policies and 52 percent of reported employer-sponsored policies.

The income variable reported in Tables 2 and 3 was asked in two parts. Persons were first asked whether their income was more or less than \$25,000. Then they were asked to put themselves in the narrower income categories shown in the tables. The more-or-less-than-\$25,000 categories shown in

the tables represent persons who answered the first question but refused the second.

The relative standard errors used to identify numbers with high sampling variation in the tables were computed using the WESVAR statistical estimation system for complex samples. This system was developed by Westat Inc., which is responsible for the field collection of MCBS data under contract with HCFA.

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