Prescription Drug Coverage and Spending for Medicare Beneficiaries

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Outpatient prescription drug coverage is not a Medicare covered benefit. Debate continues in Congress and elsewhere on modernizing the Medicare benefit package, including proposals that would help the Nation's seniors pay for prescription drugs. Very little is known about which persons within the Medicare population have drug coverage from other sources. Using 1995 data from the Medicare Current Beneficiary Survey (MCBS), the authors present information on who has coverage by various sociodemographic categories. The data indicate higher-than-average levels of coverage for minority persons, beneficiaries eligible for Medicare because of disability, and those with higher incomes.

INTRODUCTION

Use of all medical services, including prescription drugs, increases with age. The Medicare program, which provides government-sponsored health insurance benefits to elderly and disabled persons, does not pay for most prescription drugs for persons living in the community. By contrast, about 80 percent of persons employed in medium and large firms have health insurance benefits that include some form of outpatient prescription drug coverage (U.S. Department of Labor, 1994).

There have been a variety of legislative proposals over time to add a drug benefit to Medicare. The Medicare Catastrophic Coverage Act, which would have added a limited drug benefit to Medicare, was passed in 1988 but repealed in 1989 before the drug benefit took effect. There are currently several proposals for Medicare drug coverage in Congress, including one that would raise cigarette taxes to pay for adding a drug benefit to Medicare (Convey, 1998). Another proposal would legislate steep discounts for prescription drug purchases by Medicare beneficiaries (Lagnado, 1998). The National Bipartisan Commission on the Future of Medicare, created by Congress in 1997 to examine possible options for restructuring Medicare benefits, recommended adding an outpatient prescription drug benefit to Medicare for persons with incomes at or below 135 percent of the Federal poverty level (National Bipartisan Commission on the Future of Medicare, 1999).

An earlier article (Davis et al., 1999) showed national data on drug insurance coverage, use, and spending for Medicare beneficiaries. In this article we provide more detail on the demographic characteristics and extent of coverage for Medicare beneficiaries with some form of prescription drug coverage. In future articles we will focus on characteristics of persons without such coverage and compare the two groups.

The data in this article were compiled from the MCBS 1995 Cost and Use File. The MCBS is a continuing panel survey of about 12,000 aged and disabled beneficiaries. The survey collects a wide variety of personal and health care-related information for persons living in the community

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and those living in long-term care facilities. In this article, however, we exclude persons who lived in a facility for all of their Medicare-eligible months and focus only on drug insurance coverage and spending for Medicare persons who lived in the community for all or part of the year. The "Data Sources and Methods" section provides more detail about the procedures used to assign persons to insurance categories and the methods used to collect drug coverage, use, and spending data. For a more complete description of the MCBS, refer to Adler (1994).

FINDINGS

Approximately 65 percent of Medicare beneficiaries have some insurance coverage for prescription drugs (Table 1). This percentage is higher than that reported in earlier studies, in part because of an improvement in methodology. For example, the count of covered persons now includes those who have more than one insurance source and receive drug coverage from a second or third source, not their primary. This change added about 1.2 million persons, or 3.4 percentage points, to the count. To simplify presentation and avoid very small numbers, however, persons with multiple sources of coverage were assigned to whichever insurance category was considered to be their primary Medicare supplement (a fuller discussion of the methodological changes is contained in the "Data Sources and Methods" section).

The largest source of drug coverage, by far, is employer-sponsored insurance. People in this category represent about 44 percent of all covered persons. Eighty-six percent of beneficiaries with employer-sponsored supplemental insurance have some form of drug coverage. Although recent data have suggested that the number of employers providing supplemental retiree coverage has been declining, MCBS data show an increasing percentage of beneficiaries with employer-sponsored coverage have a drug benefit.

About 17 percent of covered persons have Medicaid, the second-largest source of coverage. Not all persons classified with Medicaid have drug coverage, because this category includes Qualified Medicare Beneficiaries (QMBs) and Special Low-Income Beneficiaries (SLMBs), for whom the State pays the Medicare Part B premiums (buy-ins). This results in 90 percent of Medicaid-eligible beneficiaries receiving prescription drug coverage. The next largest source—individually purchased plans that are the primary source of health coverage—represents 16 percent of covered persons. Three of the 10 standardized medigap plans currently offered (which are included in the individually purchased category) contain a prescription drug benefit. Perhaps because of its expense, only 29 percent of persons with individually purchased plans have prescription drug coverage through that plan. Another 7 percent of beneficiaries with individually purchased supplemental plans obtain drug coverage from another source, leaving about two-thirds of beneficiaries with individually purchased plans without drug coverage.

Nearly all beneficiaries enrolled in Medicare risk health maintenance organizations (HMOs) receive prescription drug coverage. These beneficiaries accounted for about 10 percent of persons with drug coverage in 1995. The number of Medicare beneficiaries joining risk HMOs appears to have risen in the past several years perhaps in part because of people wishing to obtain prescription drug coverage.

The extent of coverage varies somewhat by demographic characteristic, although, in many cases, this variation is directly attributable to the type of supplemental coverage, if any, the beneficiary has.

Table 1

Number and Percent of Medicare Beneficiaries, by Selected Demographic Variables: 1995

Demographic Variable	All Beneficiaries	Persons With Drug Coverage		Persons Without Drug Coverage	
	Number in Thousands	Number in Thousands	Percent of Total	Number in Thousands	Percent of Total
All Beneficiaries	36,716	23,929	65.2	12,787	34.8
Supplementary Insurance Status					
No Supplement (Fee for Service Only)	2,954	0	0.0	2,954	100.0
Medicare Risk HMO	2,508	2,404	95.9	104	4.1
Medicaid	4,498	4,039	89.8	460	10.2
Employer-Sponsored[1]	12,106	10,452	86.3	1,654	13.7
Individually Purchased	10,641	3,818	35.9	6,822	64.1
All Other[2]	986	787	79.9	198	20.1
Switched Coverage During Year	3,023	2,428	80.3	595	19.7
Age					
0-44 Years	1,407	1,029	73.1	378	26.9
45-64 Years	2,797	1,923	68.8	874	31.2
65-69 Years	9,490	6,285	66.2	3,205	33.8
70-74 Years	8,577	5,720	66.7	2,858	33.3
75-79 Years	6,687	4,273	63.9	2,414	36.1
80-84 Years	4,389	2,707	61.7	1,682	38.3
85 Years or Over	3,369	1,991	59.1	1,377	40.9
Sex					
Male	16,199	10,790	66.6	5,409	33.4
Female	20,517	13,138	64.0	7,378	36.0
Race					
White	31,621	20,307	64.2	11,313	35.8
Black	3,369	2,327	69.1	1,043	30.9
Other	1,726	1,295	75.0	431	25.0
Health Status					
Excellent	6,043	3,827	63.3	2,216	36.7
Very Good	9,670	6,167	63.8	3,503	36.2
Good	10,776	7,053	65.5	3,723	34.5
Fair	6,864	4,561	66.4	2,303	33.6
Poor	3,314	2,278	68.7	1,036	31.3
Functional Status					
No Limitations	27,665	17,931	64.8	9,734	35.2
IADL Only	1,583	1,082	68.3	501	31.7
1 or 2 ADLs	4,599	3,032	65.9	1,568	34.1
3 ADLs or More	2,868	1,884	65.7	984	34.3
Income					
Less Than $10,000	10,677	6,765	63.4	3,912	36.6
$10,000-$19,999	11,007	6,613	60.1	4,395	39.9
$20,000-$29,999	6,701	4,567	68.2	2,134	31.8
$30,000 or More	8,331	5,984	71.8	2,346	28.2
Living Arrangement					
Living Alone	11,182	6,977	62.4	4,205	37.6
Living With Spouse Only	15,832	10,471	66.1	5,361	33.9
Living With Others[3]	9,702	6,481	66.8	3,221	33.2
Marital Status					
Married	19,716	13,134	66.6	6,582	33.4
Single	2,931	2,027	69.1	904	30.9
Widowed or Divorced	14,058	8,759	62.3	5,299	37.7
Location					
Metropolitan	27,060	18,726	69.2	8,334	30.8
Non-metropolitan	9,620	5,187	53.9	4,434	46.1

[1] Includes those with individually purchased and employer-sponsored plans.

[2] Includes non-risk HMOs, State-based plans, VA, and DOD.

[3] Includes other arrangements.

NOTES: HMO is health maintenance organization. IADL is instrumental activity of daily living. ADL is activity of daily living. VA is Department of Veterans Affairs. DOD is Department of Defense. Some variable categories may not add to 100 percent because small unknown or other cells were eliminated from the table. Small differences may not be statistically significant; results should therefore be interpreted with caution.

SOURCE: Medicare Current Beneficiary Survey Cost and Use File, 1995.

Highlights of Table 1 include the following:

- Coverage was greatest for the disabled, ages 0 to 44 years, with nearly three-quarters of these beneficiaries receiving drug coverage. This high figure is attributable to the large proportion of these beneficiaries who receive Medicaid assistance. Drug coverage was lowest—59 percent—for the oldest age group (85 years or over), in which a large proportion of beneficiaries have individually purchased supplemental plans or no supplemental insurance at all.
- Coverage rates were similar for males and females.
- Black persons and other minorities had higher coverage rates than white people, again because of the larger proportion of these beneficiaries receiving Medicaid.
- Coverage rose slightly as self-reported health status declined but was about the same for persons of every functional status.
- Single, never-married beneficiaries had higher rates of coverage because of higher rates of Medicaid eligibility.
- Beneficiaries living in non-metropolitan areas were much less likely to have drug coverage than beneficiaries living in metropolitan areas.
- Roughly 70 percent of persons with incomes greater than $20,000 had coverage. Coverage was lowest—60 percent—for persons with incomes in the $10,000-$19,999 range—the category likely to be just above Medicaid levels.

PRESCRIPTION DRUG SPENDING

In general, household surveys have been found to contain underreporting of costs and use of services because of lack of recall on the part of those being interviewed. Although several steps were taken to mitigate under—reporting (see "Data Sources and Methods" section), HCFA's Office of the Actuary and others believe that the spending and use numbers should be considerably higher. Readers are cautioned that the results reported in this article are those from the survey and do not reflect any estimates of potential underreporting.

Table 2

Prescription Drug Spending for Medicare Beneficiaries: 1995

Source of Payment	Total Payments in Thousands	Percent Distribution
Total	$22,020,930	100.0
Out-of-Pocket	11,106,552	50.4
Covered Persons	5,573,660	25.3
Non-Covered persons	5,532,892	25.1
Third-Party Payments	10,914,379	49.6
Medicare Risk HMO	775,166	3.5
Medicaid	2,365,024	10.7
Employer-Sponsored[1]	5,494,552	25.0
Individually Purchased	681,014	3.1
All Other[2]	1,598,622	7.3

[1] Includes those with individually purchased and employer-sponsored plans.

[2] Includes non-risk HMOs, State-based plans, VA, and DOD.

NOTES: HMO is health maintenance organization. VA is Department of Veterans Affairs. DOD is Department of Defense. Some variable categories may not add to 100 percent because small unknown or other cells were eliminated from the table. Small differences may not be statistically significant; results should be interpreted with caution.

SOURCE: Medicare Current Beneficiary Survey Cost and Use File, 1995.

Approximately $22 billion, or $600 per person, was spent for prescription drugs by or on behalf of Medicare beneficiaries in 1995 (Table 2). Three-quarters of those dollars were spent by or on behalf of the 65 percent of beneficiaries with drug coverage. Since the survey in 1995, drug use and spending in the United States has grown rapidly. Ninety-two new drugs gained Food and Drug Administration approval in 1996 and 1997, and direct-to-consumer drug advertising has encouraged many consumers to ask for newer, more expensive drugs by name. Total U.S. drug spending between 1995 and 1997 grew by 26 percent, and the number of prescriptions filled grew by 9 percent (Levit et al., 1998). Although these figures are not for the Medicare population alone, it is reasonable to assume (because the elderly

generally use more prescription drugs than younger persons) that spending growth for this group at least matched if not exceeded these national levels.

Roughly one-half of total drug spending for the Medicare population was provided by third parties, and 71 percent of national drug expenditures were paid for by third-party sources (Levit et al., 1998). Approximately one-fourth of drug spending for Medicare beneficiaries was paid for by employer-sponsored plans, almost one-fifth by public programs, and the remainder by private sources, as shown in the next section.

PER CAPITA DRUG SPENDING

Per capita drug spending for beneficiaries with coverage was $689 in 1995; beneficiaries without coverage had per capita spending of $432. Approximately 5 million persons (14 percent) had no expenditures for prescription drugs, and another 5 million averaged expenditures of $1,250 or more (Table 3). Insured persons were more likely to incur drug costs and more likely to incur high drug costs. Nearly one-fifth of persons without coverage had no drug expenditures at all, compared with one-tenth of insured persons. The percentage of covered beneficiaries with 1995 expenditures of $1,250 or more was double that of non-covered persons. The amount of total drug spending for persons with coverage, however, varied widely by health status and the presence of any functional limitations, whether the person was disabled, and whether the person was in a risk HMO (Table 4). Highlights of Table 4 include the following:

- The average total drug spending for persons in excellent health was $363 but for those in poor health was more than 200 percent higher, at $1,107.
- Spending for persons with no functional limitations was $582 versus roughly $1,000 for persons with any limitations in instrumental activities of daily living (IADLs) or activities of daily living (ADLs). The degree of limitation (one IADL or three or more ADLS) had very little impact on the level of drug spending.
- Beneficiaries between the ages of 45 and 64 who were eligible for Medicare as a result of a disability had average drug expenditures of more than $1,100.
- Average total drug spending of persons enrolled in Medicare risk plans ($472) was far lower than spending for beneficiaries with coverage from any other source. This may be attributable to several factors. First, there are fewer prescriptions filled for Medicare HMO members, perhaps because they are healthier than other beneficiaries (Riley et al., 1996). Second, HMOs often can negotiate lower drug prices for their members.
- Because Medicaid beneficiaries are generally in poorer health and more likely to have functional limitations, total drug spending was $777 for that group, higher than any other insurance category and 60 percent higher than risk HMO per capita spending.
- Drug spending for females was higher than for males; white persons and black persons had higher drug spending than beneficiaries of other races; and beneficiaries with incomes greater than $30,000 had lower rates of drug spending.

DEPTH OF DRUG INSURANCE COVERAGE

Although nearly two-thirds of Medicare beneficiaries have some form of drug coverage, the extent of that coverage varies primarily according to the beneficiary's source of coverage. On average, Medicare beneficiaries with drug insurance coverage pay for one-third of their drug expenditures out of pocket. Highlights of Table 4 include the following:

Table 3

Distribution of Prescription Drug Spending for Medicare Beneficiaries, by Coverage Status and Amount of Spending: 1995

Spending	All Beneficiaries			Persons With Drug Coverage			Persons Without Drug Coverage		
	Number in Thousands	Percent of Population	Cumulative Percent Distribution	Number in Thousands	Percent of Population	Cumulative Percent Distribution	Number in Thousands	Percent of Population	Cumulative Percent Distribution
Total	36,716	100.0	—	23,929	100.0	—	12,787	100.0	—
$0	5,004	13.6	13.6	2,583	10.8	10.8	2,421	18.9	18.9
$1-$249	11,041	30.1	43.7	6,971	29.1	39.9	4,070	31.8	50.8
$250-$499	6,428	17.5	61.2	3,977	16.6	56.5	2,451	19.2	69.9
$500-$749	4,421	12.0	73.2	3,079	12.9	69.4	1,342	10.5	80.4
$750-$999	2,952	8.0	81.3	2,029	8.5	77.9	923	7.2	87.6
$1,000-$1,249	1,869	5.1	86.4	1,318	5.5	83.4	551	4.3	92.0
$1,250-$1,499	1,214	3.3	89.7	903	3.8	87.2	311	2.4	94.4
$1,500-$1,749	967	2.6	92.3	717	3.0	90.2	249	2.0	96.3
$1,750-$1,999	739	2.0	94.3	546	2.3	92.5	193	1.5	97.8
$2,000-$2,499	901	2.5	96.8	756	3.2	95.6	145	1.1	99.0
$2,500 or More	1,182	3.2	100.0	1,051	4.4	100.0	131	1.0	100.0
Average per Person		$600			$689			$432	
Median per Person		343			408			255	

NOTES: All dollar figures shown are based on total spending. Small differences may not be statistically significant; results should be interpreted with caution.

SOURCE: Medicare Current Beneficiary Survey Cost and Use File, 1995.

Table 4

Average Total and Out-of-Pocket Drug Expenditures for Medicare Beneficiaries with Drug Coverage, by Demographic Variable: 1995

Demographic Variable	Number of Beneficiaries With Drug Coverage in Thousands	Per Capita Drug Spending			Out-of-Pocket Spending Percentile Distribution		
		Total Amount	Out-of-Pocket Amount	Out-of-Pocket As a Percent of Total	25th	50th	75th
All Beneficiaries	23,929	$689	$233	33.8	$16	$99	$284
Supplementary Insurance							
Medicare Risk HMO	2,404	472	162	34.3	20	81	195
Medicaid (Buy-ins)	4,039	777	135	17.4	0	21	131
Employer-Sponsored (Includes Boths)	10,452	732	224	30.6	38	123	288
Individually Purchased	3,818	674	361	53.6	45	196	515
All Other[1]	787	677	249	36.8	53	147	333
Switched Coverage During Year	2,428	600	297	49.4	28	135	335
Age							
0-44 Years	1,029	747	153	20.5	0	30	178
45-64 Years	1,923	1,162	349	30.0	15	127	406
65-69 Years	6,285	595	207	34.8	17	89	242
70-74 Years	5,720	656	213	32.5	24	107	270
75-79 Years	4,273	651	233	35.8	23	104	276
80-84 Years	2,707	729	283	38.8	31	143	361
85 Years or Over	1,991	620	234	37.7	17	98	267
Sex							
Male	10,790	628	217	34.5	14	86	266
Female	13,138	739	246	33.3	20	109	297
Race							
White	20,307	702	241	34.3	22	110	298
Black	2,327	655	186	28.4	3	57	194
Other	1,295	541	191	35.3	0	49	215
Health Status							
Excellent	3,827	363	131	36.2	2	50	156
Very Good	6,167	535	190	35.5	14	81	224
Good	7,053	688	228	33.1	20	103	278
Fair	4,561	962	312	32.5	33	153	365
Poor	2,278	1,107	376	34.0	33	165	447
Functional Status							
No Limitations	17,931	582	197	33.8	14	87	241
IADL Only	1,082	1,001	361	36.1	44	173	446
1 or 2 ADLs	3,032	1,004	332	33.1	30	144	382
3 ADLs or More	1,884	1,022	343	33.5	21	129	408
Income							
Less Than $10,000	6,765	707	206	29.1	1	56	224
$10,000-$19,999	6,613	703	260	36.9	31	125	328
$20,000-$29,999	4,567	704	244	34.6	42	131	318
$30,000 and Over	5,984	642	226	35.2	30	107	277
Living Arrangement							
Living Alone	6,977	689	235	34.1	14	97	278
Living With Spouse Only	10,471	666	233	35.0	29	113	297
Living With Others[2]	6,481	726	230	31.8	8	84	268
Marital Status							
Married	13,134	663	235	35.4	26	110	297
Single	2,027	697	172	24.7	0	34	162
Widowed or Divorced	8,759	726	244	33.7	17	110	296
Location							
Metropolitan	18,726	685	224	32.7	16	97	269
Non-metropolitan	5,187	707	265	37.5	17	107	333

[1] Includes non-risk HMOs, State-based plans, VA, and DOD.

[2] Includes other arrangements.

NOTES: HMO is health maintenance organization. VA is Department of Veterans Affairs. DOD is Department of Defense. IADL is instrumental activity of daily living. ADL is activity of daily living. Some variable categories may not add to 100 percent because small unknown or other categories were eliminated from the table. Small differences may not be statistically significant; results should be interpreted with caution.

SOURCE: Medicare Current Beneficiary Survey Cost and Use File, 1995.

- Medicaid provides the most extensive coverage, paying 83 percent of all the drug spending of Medicaid beneficiaries. The remaining 17 percent may be largely attributable to the QMB/SLMB population, who do not have full Medicaid benefits.
- Only 46 percent of the drug spending of beneficiaries with individually purchased plans was paid by the plans. The remaining 54 percent was paid out of pocket by beneficiaries. None of the three types of current medigap plans that offer drug coverage offers significant coverage. All have a fairly high deductible ($250), high coinsurance (50 percent), an annual limit on covered expenses ($1,250 for two of the three plans), and significantly higher premiums, compared with the other non-drug medigap plans (McCormack et al., 1996).
- The demographic variation in depth of drug coverage is a function of type of coverage. Because they are more likely to be receiving Medicaid assistance, the deepest coverage is for the disabled under age 45 (who pay 20 percent out of pocket) and persons who were never married (25 percent out of pocket).
- Beneficiaries in most other demographic groups paid out-of-pocket expenses of approximately 30-38 percent.

OUT-OF-POCKET COSTS

The average out-of-pocket expense (not including premium payments) for covered beneficiaries is $233. However, persons with very high total and out-of-pocket prescription drug spending tend to raise the average spending disproportionately. The distribution of out-of-pocket spending for Medicare beneficiaries with drug coverage in Table 4 illustrates the wide variation in out-of-pocket expenses. Highlights of Table 4 include the following:

- One-quarter of all covered beneficiaries spent $16 or less out of pocket in 1995 for their prescription drugs. The median out-of-pocket expense was $99.
- Median out-of-pocket expenses were less than one-half of average out-of-pocket expenses ($233) (Table 4). Sixty-four percent of the Medicare population paid less than the average out-of-pocket expense.
- One-quarter of beneficiaries with coverage paid more than $284.
- For total drug spending, out-of-pocket costs were most affected by health status, functional limitations, and type of insurance coverage.
- Despite their likelihood to have Medicaid coverage, disabled Medicare beneficiaries age 45-64 years had such large drug expenditures that they still paid an average $350 out of their own pockets. One-quarter paid more than $400.
- Beneficiaries of all ages reporting poor health status also experienced large drug expenditures and large out-of-pocket costs—$376.
- Out-of-pocket spending was highest among covered persons with incomes of $10,000-$19,999. Averaging $260, their out-of-pocket expenditures were higher than those of persons in other income categories. Because many of these beneficiaries' incomes were above the Medicaid cutoff, they were less likely to have an employer-sponsored supplemental policy and were more likely to receive their drug benefits through an individually purchased policy.

DATA SOURCES AND METHODS

Measuring Drug Insurance Coverage

Medicare pays for about one-half of the personal health care expenditures of the average beneficiary (Olin and Liu, 1998). Most Medicare enrollees carry additional insurance to supplement their Medicare coverage (Eppig and Chulis, 1997). Most have one supplementary source of coverage, but some persons have multiple supplementary coverages. To simplify presentation and avoid very small numbers in table cells, persons with multiple sources of coverage were assigned to whichever insurance category was considered their primary Medicare supplement.

Most previous studies of drug insurance coverage concentrated on coverage arising from the person's primary supplement. These studies used direct questions about whether the person's private supplementary insurance covered drugs and made reasonable assumptions about drug coverage for persons in HMOs and with Medicaid coverage. These studies produced estimates of drug insurance coverage in the Medicare population ranging from 50 to 55 percent, depending on the assumptions used and the year coverage was measured (Chulis, Eppig, and Poisal, 1995; American Association of Retired Persons, 1997). However, there were some changes in supplementary insurance arrangements in the mid-1990s, which called into question the reasonableness of previous assumptions about drug insurance coverage. For example, as Medicaid coverage was expanded to QMBs and SLMBs, who did not necessarily receive full Medicaid benefits, it did not seem reasonable to continue to assume that all Medicaid enrollees had drug coverage. Similarly it became clear that Medicare beneficiaries in some risk HMOs were being asked to pay extra for drug benefits, and it was not clear whether it was reasonable to continue to assume that all Medicare HMO members had drug insurance benefits. Finally, Medicare beneficiaries are often very poorly informed about what Medicare and their supplementary insurance actually covers (McCall, Rice, and Sangl, 1986), raising the question of how accurate the self-reports of private drug insurance coverage really are.

To improve the drug coverage measurement process, we used additional information from the individual prescription drug survey records to augment and verify the previously used self-reports and assumptions. In addition to collecting detailed information about every prescription drug reported on the survey, we also collected information on all the sources of payment for each prescription. Although assumptions about drug coverage can be mistaken and self-reports can be questioned, it is very unlikely that a third party would make a payment on the beneficiary's behalf for a prescription unless the person had drug insurance coverage from that source. Our initial expectation was that incorporating source-of-payment data into the drug insurance coverage decision would not change the previous levels of coverage figures very much. Contrary to our expectations of minor changes at the margin, we found that drug insurance coverage for the Medicare population was much higher than the 50-55 percent levels previously measured. As previously noted, we found that in 1995, 65 percent of Medicare beneficiaries had some form of drug insurance coverage.

We did an internal analysis to determine what factors explained this unexpectedly large increase. We previously published a drug coverage level of 50 percent in 1992, but that figure included only the Medicare population with private insurance. Using the same assumptions about drug coverage that were generally used in the early 1990s, we expanded our estimate to

Table 5

Number of Medicare Beneficiaries With Secondary Coverage: 1995

Supplementary Insurance	Total	Primary	Secondary
		Number in Thousands	
Total	23,929	22,671	1,257
Medicare Risk HMO	2,404	2,384	20
Medicaid	4,039	3,949	90
Employer-Sponsored[1]	10,452	10,162	290
Individually Purchased	3,818	3,075	743
All Other[2]	787	774	14
Switched Coverage During Year	2,428	2,328	101

[1] Includes those with individually purchased and employer-sponsored plans.

[2] Includes non-risk HMOs, State-based plans, VA, and DOD.

NOTES: HMO is health maintenance organization. VA is Department of Veterans Affairs. DOD is Department of Defense. Some variable categories may not add to 100 percent because small unknown or other cells were eliminated from the table. Small differences may not be statistically significant; results should be interpreted with caution.

SOURCE: Medicare Current Beneficiary Survey Cost and Use File, 1995.

include the entire Medicare population living in the community. This is the same population base used in this article. We found (using the old estimation methods) that just under 53 percent of the Medicare population living in the community had drug coverage in 1992. This meant that there was a 12-percentage-point difference between 1992 (53 percent, old method) and 1995 (65 percent, new method).

We then applied the new method to 1992. The result was a measurement of 57 percent with drug coverage. This meant that, holding the method of measurement constant, the level of drug coverage increased 8 percentage points from 57 percent in 1992 to 65 percent in 1995. We believe that most of this increase was attributable to the sharp increases in HMO enrollments that were occurring at that time, and some was due to the expansion of Medicaid enrollment that was also occurring during that period.

Looking at 1992 there is a 4-percentage-point increase between the old method (53 percent) and the new method (57 percent). This remaining difference is attributable to use of payment-source information from individual prescription drug records. More than 3 percentage points are the result of identifying persons who had drug coverage that was not from their primary supplement. These people were missed in previous analyses. The remainder of less than 1 percentage point was attributable to using the source-of-payment data to correct the drug coverage status for persons who either reported no coverage or were assumed not to have coverage. To summarize, the higher-than-expected drug coverage levels we report (12 percentage points) are attributable primarily (8 percentage points) to increased enrollments in HMOs and expansion of Medicaid rolls in the early to mid-1990s. The remaining difference (4 percentage points) came from using payment-source data in the new method. This identified a number of people who received drug benefits from a secondary source of supplementary insurance (more than 3 percentage points) that were missed by the previous method. Finally a small part (less than 1 percentage point) of the increase is explained by using payment-source data in place of yes-or-no answers about drug coverage and general assumptions about drug coverage within insurance categories.

The number of persons with secondary coverage is shown by type of primary coverage in Table 5.

Possible Underreporting

There is a continuing debate about the extent to which household surveys underreport the actual number of prescriptions used and their costs. Surveyed persons generally tend to recall large or traumatic medical expenses better than small, routine medical expenses. The average beneficiary is more likely to recall a hospitalization during the 4-month recall period than a visit to a doctor's office. Because most prescription drugs are not as expensive as institutional care, for example, observers tend to believe that prescription drugs are among the medical events most likely to be forgotten during an interview. In the late 1980s, when the Medicare Catastrophic Coverage legislation was being debated, some critics argued that the National Medical Expenditure Survey (NMES) survey figures being used at the time seriously underestimated prescription drug use and cost (Berk, Schur, and Mohr, 1990). Others believed the critics were overstating the degree of the problem (Moeller and Mathiowitz, 1991). At the time both the Congressional Budget Office and HCFA's Office of the Actuary filed reports with Congress suggesting that survey reports of drug use and costs could be underreported by as much as 20 percent.

In developing the field procedures for the MCBS, we tried to avoid the problems identified by critics of NMES data. Each MCBS respondent is asked each round (every 4 months) about all health care events, charges, and payments since the previous interview. Beneficiaries are asked to make notes on a calendar we provide and to retain insurance statements, payment receipts, check stubs, etc., and to bring them to the interview. For prescribed drugs, respondents are asked to retain and bring to the interview the prescription bottle, the package it came in, and any receipts or statements they received with the prescription. In addition, interviewers are furnished a list of all prescription drugs reported in the previous interview so they can ask whether the respondent has taken any of those drugs during the reporting period. Earlier surveys have tried to have such a list of drugs already reported as a prompt to recall in the next interview, but it was not always possible. Because the MCBS uses computer-assisted data collection, interviewers always have the list of previously reported drugs at the next interview with the person. Although this does not ensure that prescription drugs will be recalled in the first place, it does add some assurance that those drugs that have been reported will not be lost at a later interview through poor recall. This is not to suggest that the survey underreporting problem has been solved by the MCBS. We believe that underreporting of prescription drugs still exists and is particularly a problem for one-time drugs and for poorer and sicker respondents who do not regularly use the survey recall aids. As mentioned earlier, HCFA's Office of the Actuary adjusts MCBS spending amounts upward. We do believe, however, that the MCBS drug information collection procedures are an improvement over survey methods used in earlier surveys.

Establishing Payment Amounts

Whenever possible, the actual transaction price for each prescribed drug is used, not the listed or posted price to which discounts (e.g., senior citizen discounts) are sometimes applied. A variety of methods were developed to determine a reasonable transaction price when respondents knew the amount they paid out of pocket but did not know the total transaction price. (For example, when other public or private sources made all or most of the payment on their behalf.)

The first step is to look within the MCBS data base to see if a total price is reported for that drug in that form and in that amount. If none is reported, a published drug industry source is consulted that gives the average national wholesale price. However, because of discounts, purchasers may pay different prices for the same drug. For example, an individual purchasing a prescription at a local pharmacy generally pays more than a Department of Veterans Affairs (VA) hospital pays for the same drug. Information on typical discounts is obtained from average prices that bulk buyers such as HMOs, the VA, and State Medicaid programs paid. In retail pharmacies, price markups vary according to wholesale price. For example, for prescriptions with average prices below $5, the final price was more than double that amount on average. For prescriptions with prices above $20, on the other hand, the average pharmacy markup was much smaller.

The result of this process was to establish an average transaction price for certain drugs and specific payers. In individual cases, the average payment may actually have been more or less than the average price we established. But we believe our final price is a reasonable estimate of the total price paid for a given drug. In allocating total payments among the various sources of payment, 2 percent of payments had to be classified as coming from an unknown payment source.

SUMMARY

Prescription drugs have become an increasingly important component of health care and are currently not part of the Medicare benefit. Two-thirds of Medicare beneficiaries have pieced together some form of drug coverage, but it is not always extensive.

The largest source of coverage comes from employer-sponsored insurance, a source that has begun to diminish. Persons in the youngest age group, those never married, and those in the highest income category ($30,000 or more) are the most likely to have coverage.

On average, covered persons still pay one-third of their drug expenditures out of pocket, not counting any premium payments they may make as well. Nevertheless, they are more likely to incur drug costs and high drug costs than those without any coverage, even though the health status of the two groups is similar.

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