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Medicare: Prescription Drug Expenditures, 1997

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Summary

Medicare beneficiaries spent, on average, a *total* of \$744 per person for prescription drugs in 1997 (including beneficiaries' out-of-pocket expenses and payments made by any third party payers). Approximately 37% of beneficiaries had total prescription drug expenditures of between \$0 and \$250. Approximately 25% of beneficiaries had total prescription drug expenditures between \$1 and \$250, which represented 4% of overall drug expenditures for beneficiaries. In contrast, 8% of beneficiaries with total drug expenditures above \$2,000 accounted for 33% of overall drug expenditures. Beneficiaries' *out-of-pocket* expense for prescription drugs in 1997 was \$347, on average, though about 60% of beneficiaries spent less than \$250 out-of-pocket on prescription drugs. Beneficiaries with no drug coverage spent, on average, \$520 for drugs, while those with drug coverage had total drug expenditures averaging \$826 and out-of-pocket expenditures averaging \$284. Total and out-of-pocket costs of prescription drugs vary by supplemental insurance coverage.

Background

Prescription drugs are an increasingly important part of medical treatment and medical care costs. Prescription drug expenditures comprised approximately 9% of health care spending in 1999.¹ Drug costs are the fastest-growing component of overall health care costs. The Congressional Budget Office predicts the annual growth in prescription drug expenditures will be over 13% per year for each of the next 2 years.

Medicare does not cover most outpatient prescription drugs. However, about 73% of Medicare beneficiaries had some form of public or private drug coverage at some point during 1997. The analysis in this report provides information on Medicare beneficiaries with drug coverage at any point in 1997. Some beneficiaries may not have coverage for

¹ Health Care Financing Administration, Office of the Actuary.

the entire year. For example, some studies have found that only 53% of beneficiaries have prescription drug coverage for the entire year.² **Table 1** shows the proportion of Medicare beneficiaries with outpatient prescription drug coverage by Medicare eligibility category³ and income to poverty guideline⁴ ratio in 1997. Almost 71% of beneficiaries with incomes at or below the poverty guideline had prescription drug coverage. Medicaid covered prescription drugs for at least 18% of those people. The proportion of beneficiaries with drug coverage dropped to about 65% for individuals between 100% and 135% of poverty, but was higher for beneficiaries with larger incomes.

Table 1. Drug Coverage by Eligibility Category and Income to Poverty Ratio, 1997

	With Drug Coverage		Without Drug Coverage	
	Number	Percent	Number	Percent
(number in thousands)				
All Medicare Beneficiaries				
Income <=100% of Poverty	4,168	70.8%	1,720	29.2%
> 100% to <=135% of Poverty	3,224	65.1%	1,730	34.9%
> 135% to <=150% of Poverty	1,207	66.4%	611	33.6%
> 150% to <=200% of Poverty	3,880	69.2%	1,726	33.8%
> 200% to <=400% of Poverty	9,697	77.4%	2,834	22.6%
> 400% of Poverty	4,532	80.5%	1,100	19.5%
Total	26,708	73.3%	9,721	26.7%
Aged Beneficiaries				
Income <=100% of Poverty	3,071	70.0%	1,315	30.0%
> 100% to <=135% of Poverty	2,600	64.8%	1,410	35.2%
> 135% to <=150% of Poverty	1,070	66.0%	551	34.0%
> 150% to <=200% of Poverty	3,459	69.4%	1,522	30.6%
> 200% to <=400% of Poverty	8,955	76.7%	2,718	23.3%
> 400% of Poverty	4,214	79.7%	1,075	20.3%
Total	23,369	73.1%	8,590	26.9%
Disabled/ESRD* Beneficiaries				
Income <=100% of Poverty	1,097	73.1%	404	26.9%
> 100% to <=135% of Poverty	624	66.1%	320	33.9%
> 135% to <=150% of Poverty	—	—	—	—
> 150% to <=200% of Poverty	421	67.3%	205	32.7%
> 200% to <=400% of Poverty	742	86.5%	116	13.5%
> 400% of Poverty	—	—	—	—
Total	3,339	74.7%	1,130	25.3%

Source: Table prepared by the Congressional Research Service based on analysis of data from the 1997 Medicare Current Beneficiary Survey (MCBS) Cost and Use File. These estimates differ slightly from other published

² Stuart, Bruce, et al. Prescription Drug Costs for Medicare Beneficiaries: Coverage and Health Status Matter. *The Commonwealth Fund*, Issue Brief, January 2000.

³ Individuals become eligible for Medicare either because of age (65 years of age or older), or because of a disability (including end stage renal disease).

⁴ The poverty *guidelines* are published by the Department of Health and Human Services and are used primarily for program eligibility purposes. The poverty *thresholds* are different measures of poverty updated by the Census Bureau and used primarily for statistical purposes. In addition, the Medicare Current Beneficiary Survey contains income information on the beneficiary and spouse. The Current Population Survey (CPS), in contrast, defines family more broadly and contains detailed income data on all members in the family. As a result, the estimated number of Medicare beneficiaries with incomes below poverty differ between the two surveys.

estimates using the MCBS due to the inclusion or exclusion of beneficiaries who spent any part of 1997 in an institution, and the use of poverty thresholds versus poverty guidelines.

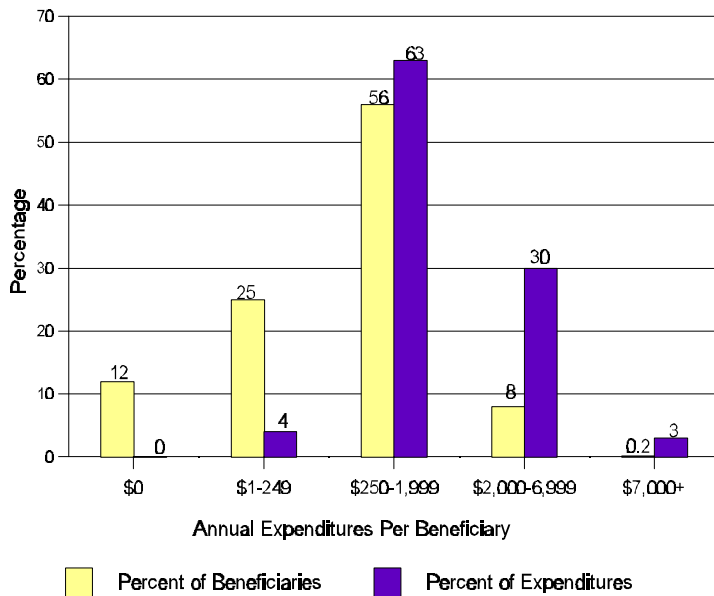
Note: Income categories are based on beneficiary income as a percent of the Federal Poverty Guidelines. See footnote 4 for a discussion of poverty estimates using the MCBS. Drug coverage is defined as individuals with prescription drug coverage at any time during 1997. This includes individuals who enter Medicare or change supplemental insurance coverage during the year. A hyphen indicates that the sample size is too small to provide a reliable estimate.

* End stage renal disease.

Overall Total and Out-of-pocket Drug Expenditures.

Approximately \$28 billion was spent on prescription drugs by Medicare beneficiaries in 1997. The total drug expenditure for an individual includes both the beneficiary out-of-pocket expense and payments made by any third-party payers. The average per capita total prescription drug expenditure for Medicare beneficiaries was \$744 in 1997. **Figure 1**

Figure 1. Medicare Beneficiaries and Total Drug Expenditures by Annual Expenditures per Beneficiary, 1997



1 shows two distributions: the distribution of Medicare beneficiaries by categories of per capita spending on drugs and the distribution of overall drug expenditures for these categories of beneficiaries. About 12% of beneficiaries did not purchase any prescription drugs in 1997. Twenty-five percent of beneficiaries had drug expenditures of between \$1 and \$249; their drug expenditures represent 4% of overall drug spending for the Medicare population. In contrast, the 8% of beneficiaries whose drug expenditures exceeded \$2,000 for the year accounted for 33% of the total drug spending for Medicare beneficiaries.

Source: Figure created by the Congressional Research Service based on data from the 1997 Medicare Current Beneficiary Survey, Cost and Use File

In contrast to the \$744 average *total* drug spending by Medicare beneficiaries, average *out-of-pocket* prescription drug spending was \$347 in 1997. Half of beneficiaries spent \$165 or less out-of-pocket. About 60% of beneficiaries spent less than \$250 out-of-pocket in 1996.

Total and out-of-pocket drug expenditures for Medicare beneficiaries vary by several factors including income and supplemental insurance coverage (with or without drug coverage).⁵ Beneficiaries who do not have drug coverage generally pay the entire cost of their prescription drugs. In 1997, beneficiaries without drug coverage spent, on average,

⁵ Poisal, et al., found expenditures also varied by age and gender; Steinburg, et al., found expenditure varied by presence of a chronic disease. *Health Affairs*, March/April 2000.

\$520 for drugs, while those with drug coverage had total drug expenditures averaging \$826 and out-of-pocket expenditures averaging \$284.

Table 2 shows Medicare beneficiaries' average and median⁶ total prescription drug expenditures by income to poverty guideline ratio and supplemental insurance. Total prescription drug expenditures take into account the beneficiaries' out-of-pocket expenses as well as payments made by any third-party payers. The average total drug expenditure of individuals with incomes at or below the federal poverty guidelines is just \$50 less than expenditures of individuals with incomes above 400% of poverty. For beneficiaries with no supplemental insurance coverage (those with only Medicare), average total prescription drug expenditures vary by income. Beneficiaries with incomes at or below 100% of the federal poverty guideline who do not have supplemental insurance spend an average of \$329 for prescription drugs. Beneficiaries with incomes at or below 100% of the federal poverty guideline who have full Medicaid benefits spend an average of \$891 for prescription drugs while beneficiaries with incomes between 100% and 135% of the federal poverty guideline spend, on average, a total of \$961 for prescription medication.

Average drug expenditures vary by supplemental insurance categories⁷. Beneficiaries with either employer-based insurance or Medicaid have the largest average total drug expenditures of all beneficiaries (employer-based: \$849; Medicaid: \$929). Generally, Medicare beneficiaries entitled to full Medicaid protection have a drug benefit; beneficiaries with employer-based coverage are more likely than beneficiaries with other types of supplemental insurance to include a drug benefit, which may account for the higher average total expenditure. Beneficiaries who do not have any type of supplemental insurance coverage (Medicare only) have the lowest average total drug expenditures.

Table 3 shows average and median *out-of-pocket* prescription drug expenditures for Medicare beneficiaries, by income to poverty guideline ratio and supplemental insurance. The average out-of-pocket expenditures of all beneficiaries with incomes at or below poverty was \$247 in 1997. For beneficiaries with slightly higher incomes (between 100% and 135% of the federal poverty guideline), the average out-of-pocket prescription drug expenditure was 50% higher (\$371). Patterns in average out-of-pocket prescription drug expenditures by income differ depending on the supplemental insurance category.

Average out-of-pocket drug expenditures of Medicare beneficiaries vary by supplemental insurance. Beneficiaries enrolled in Medicare managed care or in Medicaid in 1997 had the lowest average out-of-pocket prescription drug costs. Individuals with Medigap supplemental insurance paid more out-of-pocket, on average, than all other beneficiaries. Medicare beneficiaries who did not have supplemental insurance paid the entire cost of their drugs out-of-pocket.

⁶ Half of all beneficiaries spend more than the median value; half spend less. The median is a measurement which is less reactive to extreme values in the data than is the average.

⁷ Supplemental insurance may or may not cover prescription drugs. For example, not all Medicare managed care organizations or Medigap plans offer a prescription drug benefit. Individuals who only have Medicare (and no supplemental insurance) do not have a drug benefit. Individuals with Medicaid have a drug benefit; Qualified Medicare Beneficiaries and Specified Low-Income Medicare Beneficiaries are not included in the Medicaid supplemental insurance category in this analysis.

Table 2. Average and Median Total Spending on Prescription Drugs by Income to Poverty Ratio and Supplemental Insurance Coverage, 1997

	Total	Medicare			Medicaid	
		Only	Managed Care	Employer Medigap		
Income <=100% of Poverty						
Average spending	\$707	\$329	\$512	\$563	\$653	\$891
Median spending	\$405	\$86	\$290	\$437	\$422	\$567
Percent with Supplemental Insurance		11%	7%	7%	15%	18%
> 100% to <=135% of Poverty						
Average spending	\$741	\$419	\$693	\$921	\$687	\$961
Median spending	\$440	\$137	\$399	\$495	\$448	\$671
Percent with Supplemental Insurance		11%	13%	14%	23%	6%
> 135% to <=150% of Poverty						
Average spending	\$799	–	–	\$940	\$917	–
Median spending	\$430	–	–	\$474	\$530	–
Percent with Supplemental Insurance		9%	13%	22%	32%	2%
> 150% to <=200% of Poverty						
Average spending	\$724	\$394	\$601	\$797	\$702	–
Median spending	\$468	\$143	\$448	\$491	\$462	–
Percent with Supplemental Insurance		8%	14%	24%	29%	1%
> 200% to <=400% of Poverty						
Average spending	\$759	–	\$590	\$866	\$687	–
Median spending	\$499	–	\$316	\$589	\$469	–
Percent with Supplemental Insurance		2%	14%	34%	24%	0%
> 400% of Poverty						
Average spending	\$757	–	\$527	\$863	\$697	–
Median spending	\$428	–	\$283	\$523	\$445	–
Percent with Supplemental Insurance		2%	11%	35%	26%	0%
Total						
Average spending	\$744	\$433	\$593	\$849	\$704	\$929
Median spending	\$455	\$142	\$339	\$524	\$462	\$607
Percent with Supplemental Insurance		6%	12%	25%	24%	4%

Source: Table prepared by the Congressional Research Service based on analysis of data from the 1997 Medicare Current Beneficiary Survey Cost and Use File. These estimates differ slightly from other published estimates using the MCBS due to the inclusion or exclusion of beneficiaries who spent any part of 1997 in an institution, and the use of poverty thresholds versus poverty guidelines.

Note: Percentages do not sum across rows because some supplemental insurance categories are not included in the table. Percentages in the table represent the proportion of all beneficiaries within the income to poverty guideline ratio category who have a particular type of supplemental insurance. Income categories are based on beneficiary income as a percent of the Federal Poverty Guidelines. See footnote 4 for a discussion of poverty estimates using the MCBS. – Sample size too small to provide reliable estimate.

* Beneficiaries with full Medicaid benefits. Qualified Medicare Beneficiaries and Specified Low-Income Medicare Beneficiaries (QMB and SLMB) are not included in the Medicaid supplemental insurance category in this analysis. Beneficiaries enrolled in the QMB and SLMB programs spent, on average, \$884 on prescription drugs in 1997.

Source and Limitations of the Data

These estimates are based on data from the 1997 Medicare Current Beneficiary Survey (MCBS), a longitudinal panel survey of Medicare beneficiaries. Individuals in Puerto Rico, and those living in facilities⁸ were not included in this analysis.

⁸ According to the MCBS, a facility may be any one of the following: hospital; nursing home; retirement home; domiciliary or personal care facility; mental health facility; institution for the
(continued...)

Table 3. Average and Median Out-of-Pocket Spending on Prescription Drugs by Income to Poverty Ratio and Supplemental Insurance Coverage, 1997

	Total	Medicare Only	Medicare Managed Care	Employer	Medigap	Medicaid*
Income <=100% of Poverty						
Average spending	\$247	\$329	\$177	\$247	\$486	\$60
Median spending	\$75	\$86	\$91	\$142	\$284	\$14
Percent with Supplemental Insurance		11%	7%	7%	15%	18%
> 100% to <=135% of Poverty						
Average spending	\$371	\$419	\$249	\$393	\$534	\$106
Median spending	\$173	\$137	\$130	\$176	\$312	\$19
Percent with Supplemental Insurance		10%	13%	14%	23%	6%
> 135% to <=150% of Poverty						
Average spending	\$429	–	–	\$296	\$702	–
Median spending	\$198	–	–	\$149	\$422	–
Percent with Supplemental Insurance		9%	13%	22%	32%	2%
> 150% to <=200% of Poverty						
Average spending	\$387	\$394	\$225	\$282	\$575	–
Median spending	\$205	\$143	\$127	\$166	\$360	–
Percent with Supplemental Insurance		8%	14%	24%	29%	1%
> 200% to <=400% of Poverty						
Average spending	\$357	–	\$190	\$263	\$579	–
Median spending	\$181	–	\$112	\$154	\$377	–
Percent with Supplemental Insurance		2%	14%	34%	24%	0%
> 400% of Poverty						
Average spending	\$345	–	\$167	\$288	\$552	–
Median spending	\$167	–	\$93	\$144	\$312	–
Percent with Supplemental Insurance		2%	11%	35%	25%	0%
Total						
Average spending	\$347	\$433	\$202	\$282	\$567	\$80
Median spending	\$165	\$142	\$114	\$154	\$355	\$15
Percent with Supplemental Insurance		6%	12%	25%	24%	4%

Source: Table prepared by the Congressional Research Service based on analysis of data from the 1997 Medicare Current Beneficiary Survey Cost and Use File by Social and Scientific Systems. These estimates differ slightly from other published estimates produced using the MCBS due to the inclusion or exclusion of beneficiaries who had spent any part of 1997 in an institution, and the use of poverty thresholds versus poverty guidelines.

Note: Percentages do not sum across rows because some supplemental insurance categories are not included in the table. Percentages in the table represent the proportion of all beneficiaries within the income to poverty guideline ratio category who have a particular type of supplemental insurance. Income categories are based on beneficiary income as a percent of the Federal Poverty Guidelines. See footnote 4 for a discussion of poverty estimates using the MCBS. – Sample size too small to provide reliable estimate.

* Beneficiaries with full Medicaid benefits. Qualified Medicare Beneficiaries and Specified Low-Income Medicare Beneficiaries (QMB and SLMB) are not included in the Medicaid supplemental insurance category in this analysis. Beneficiaries enrolled in the QMB and SLMB programs spent, on average, \$190 out-of-pocket on prescription drugs in 1997.

⁸ (...continued)

mentally retarded/developmentally disabled; mental health center; life care/continuing care facility; assisted living facility; or rehabilitation facility.