WHAT DO MEDICARE HMO ENROLLEES SPEND OUT-OF-POCKET?

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EXECUTIVE SUMMARY

A significant proportion of Medicare beneficiaries are now enrolled in managed care plans under the Medicare+Choice program in order to reduce their out-of-pocket spending and obtain benefits, particularly prescription drugs, that traditional fee-for-service Medicare does not cover. Some 17 percent of Medicare beneficiaries are expected to be enrolled in such plans in 2000 and 31 percent by 2009.

Even though beneficiaries have reported high satisfaction with Medicare managed care plans in recent years and disenrollment rates have been low, the Medicare+Choice program faces new challenges given that plans increasingly are scaling back benefits and shifting costs to enrollees. The declining availability of Medicare+Choice plans offering zero premiums, increases in service copayments, and decreases in the value of prescription drug benefits are indicative of this trend.

As more beneficiaries opt for Medicare managed care and as Medicare+Choice plans attempt to restructure benefits and impose more cost-sharing, understanding the characteristics of HMO enrollees' out-of-pocket spending is especially important. To date, few studies have examined this issue, largely because of limitations in key data sources such as the Medicare Current Beneficiary Survey (MCBS). Even so, there is something to be learned from analyzing these data.

HMO enrollees' average annual out-of-pocket spending in 1995 varied by subgroup (Table ES-1). The measure of such spending in this analysis includes the Medicare Part B premium, health plan premiums, and individuals' payments for health services. Across the enrollee group, average out-of-pocket spending was $1,652, or 13 percent of annual income (this figure excludes full-year facility residents). Noninstitutionalized enrollees, who account for 97 percent of the enrollee population, spent $1,406, or 11 percent of their income, out-of-pocket. Beneficiaries in fair or poor health, however, spent substantially more—$1,771, or 18 percent of their income. HMO enrollment, then, does not level the financial burden for those with varying health status.

Table ES-1. Average Annual Out-of-Pocket Spending and Out-of-Pocket Spending as a Share of Income

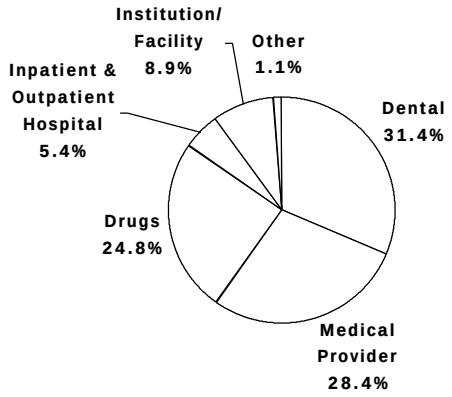
HMO Enrollee Group	Average Annual Out-of-Pocket Spending	Out-of-Pocket Spending as a Share of Income
All Enrollees	$1,652	13.3%
Community Residents	$1,406	11%
Full-Year Facility Residents	$14,199	*
Community Residents in Fair or Poor Health	$1,771	18%

* Due to very high facility costs, this group's average out-of-pocket spending as a share of income exceeds 100%.

Source: Authors' analysis of 1995 MCBS.

Dental services accounted for the largest share of direct spending on health services (31%) although relatively few HMO enrollees used this service (Figure ES-1). Medical provider services (ranging from physicians to durable medical equipment) and prescription drugs (28% and 25%, respectively) were the next two largest categories. Though Medicare+Choice HMOs presumably furnish comprehensive coverage for medical providers, 15 percent of users spent 50 percent or more out-of-pocket for these services. Similarly, despite high rates of coverage for drugs in Medicare+Choice HMOs, 31 percent of users spent 50 percent or more out-of-pocket on their medications.

Figure ES-1. Distribution of Noninstitutionalized HMO Enrollee Out-of-Pocket Spending for Health Services, 1995



Note: "Other" includes home health and hospice spending.

Source: Authors' analysis of 1995 MCBS.

A significant share of Medicare beneficiaries select Medicare+Choice HMOs to reduce out-of-pocket spending and get more benefits. Yet even though HMO enrollees enjoy better health and theoretically spend less out-of-pocket compared with the Medicare population in general, roughly the same share of both groups had trouble paying medical bills in 1997. Furthermore, insurance does not fully protect beneficiaries in poor health in either group. Thus, for beneficiaries in Medicare HMOs, out-of-pocket spending is a major concern that is likely to grow if plans continue cost-shifting.

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INTRODUCTION

Managed care is a major component of the Medicare program, attracting enrollment primarily by reducing beneficiaries' out-of-pocket spending and providing benefits beyond Medicare-covered services.[1] From 1992 to 1999, the number of Medicare beneficiaries enrolled in health maintenance organizations (HMOs) under the Medicare+Choice program climbed nearly 300 percent, from 1.6 million to 6.3 million, while the number of Medicare+Choice contracts grew by 200 percent.[2] Although enrollment growth rates have fallen markedly since 1997, the share of Medicare beneficiaries in HMOs is projected to reach 17 percent in 2000 and 31 percent by 2009.[3]

Medicare HMOs appear to be meeting enrollees' expectations, according to surveys conducted from 1995 through 1997. Beneficiaries reported high levels of satisfaction with their overall health care, the value of care they received, and the cost of care in general.[4] Moreover, disenrollment has been low: In 1996, for instance, just 3 percent of HMO enrollees switched to Medicare fee-for-service, while only 5 percent changed HMOs.[5]

Even so, Medicare+Choice plans are scaling back benefits and shifting cost to enrollees in response to rising prescription drug costs and slower growth in Medicare+Choice payment rates following passage of the Balanced Budget Act of 1997 (BBA). The Health Care Financing Administration (HCFA) reports that costs to enrollees are increasing. The agency estimates that the share of Medicare beneficiaries with access to a zero premium Medicare HMO will be 77 percent in 2000, down from 85 percent in

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[1] According to a 1999 Office of the Inspector General survey of Medicare managed care enrollees, when enrollees were asked to identify the single most important reason for joining their HMO, almost half (49%) cited lower costs and a third cited prescription drug coverage. Prior surveys of Medicare managed care enrollees also found that enrollees most often identified lower costs and additional benefits as their primary reason for enrolling. See Cathy Schoen, Patricia Neuman, Michelle Kitchman, Karen Davis, and Diane Rowland, *Medicare Beneficiaries: A Population at Risk—Findings from the Kaiser/Commonwealth 1997 Survey of Medicare Beneficiaries,* The Kaiser Family Foundation and The Commonwealth Fund, 1998; and see Mathematica Policy Research/Physician Payment Review Commission (MPR/PPRC), *Access to Care in Medicare Managed Care: Results from a 1996 Survey of Enrollees and Disenrollees*, November 7, 1996.

[2] Health Care Financing Administration (HCFA). "Medicare+Choice: Changes for the Year 2000" (informal report). December 21, 1999.

[3] Kaiser Family Foundation. "Medicare Managed Care Fact Sheet." September 1999.

[4] In the MPR/PPRC survey, 97 percent of HMO enrollees rated their overall health care as excellent, very good, or good, and 95 percent rated the value of their care for the out-of-pocket costs in this same range. In the 1995 MCBS, 28 percent of HMO enrollees reported being "very satisfied" with the cost of care, a higher rate than any other Medicare insurance group, 16 percent being the average.

[5] MPR/PPRC, 1996.

1999. Enrollee out-of-pocket spending, meanwhile, will go up, owing to higher copayments and lower benefit caps on prescription drugs.[6] HMOs are expected to continue experimenting with benefit design as they respond to the changes introduced by the BBA.[7]

Given the growth of Medicare managed care as an option for beneficiaries, and Medicare+Choice plans' efforts to restructure benefits and cost-sharing, understanding the characteristics of HMO enrollees' out-of-pocket spending is especially important. This information should help researchers and policymakers estimate how projected changes in Medicare managed care will affect enrollees.

Few prior studies have looked closely at Medicare HMO enrollees' out-of-pocket spending. Indeed, until recently, limited HMO enrollment has kept survey sample size quite small. Perhaps even more important is that enrollees underreport health care expenses in the Medicare Current Beneficiary Survey (MCBS). Unlike fee-for-service spending, which can be adjusted to reflect administrative data, no such controls are available for HMOs. Despite these drawbacks, there is something to be learned from analyzing these data, even though the findings here should be used to broaden understanding of out-of-pocket spending rather than to represent absolute spending levels.

The report begins with a brief overview of the Medicare+Choice HMO enrollee population's basic demographic, economic, and health characteristics. Next, an analysis of out-of-pocket spending is presented, including a broad description of total expenditures and a breakdown by selected services. Also discussed is the effect of other insurance on out-of-pocket spending overall, as well as how such spending differs for enrollees in fair or poor health status.

DATA DEFINITIONS AND LIMITATIONS

The Medicare HMO sample for this study consisted of Medicare+Choice enrollees who were enrolled for all of 1995, including those residing in long-term care facilities.[8] Accordingly, all analyses here are based on this "full-year" HMO group, except for the "HMO enrollment" statistic in Table 1. The group consisted of 663 enrollees—71 percent of all HMO risk enrollees and 6 percent of the total Medicare population (Table 1). The small sample size could be problematic in light of significant variation in covered benefits and premium levels among Medicare+Choice HMOs.[9] This variation very likely affects reported out-of-pocket spending.

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[6] HCFA, 1999.

[7] Peter D. Fox, Rani Snyder, Geraldine Dallek, and Thomas Rice. *Should Medicare HMO Benefits Be Standardized?* The Commonwealth Fund, February 1999.

[8] "Full-year" enrollment is defined as consecutive enrollment in any Medicare HMO; thus, the study group could include enrollees who switched from one Medicare HMO to another during 1995.

[9] Timothy McBride. "Disparities in Access to Medicare Managed Care Plans and Their Benefits." *Health Affairs.* Vol. 17, No. 6 (November/December 1998) pp. 170–180.

Table 1. Characteristics of Medicare HMO Population Based on 1995 MCBS

HMO Enrollment		Income (as % of federal poverty level)	
Full-Year	71.4%	<125%	27.9%
Part-Year	28.6%	125%–199%	15.9%
		200%–399%	26.3%
Age		400%+	29.9%
<65	3.5%		
65–74	58.0%	Other Insurance*	
75–84	30.7%	Yes	41.0%
85+	7.8%	No	59.0%
Sex		Medicare HMO Drug Coverage	
Female	56.3%	Yes	91.4%
Male	43.7%	No	8.6%
Health Status		Medicare HMO Premium Payment	
Excellent or Very Good	51.0%	$0	61.8%
Good	32.1%	>$0	38.2%
Fair or Poor	16.9%	Average Premium (>$0)	$518
Nursing Facility Status		Out-of-Pocket Spending—Health Services	
Community Only	96.0%	<$500	67.4%
Facility Full-Year	3.0%	$500–$999	18.0%
Some Facility	1.0%	$1,000+	14.5%

* Other insurance was not necessarily in effect during the full year.

Source: Authors' analysis of 1995 MCBS.

Researchers know much more about underreporting of Medicare-covered services among fee-for-service beneficiaries than among HMO enrollees, because they can use administrative bill records to estimate this phenomenon for the former group. Underreporting of Medicare-covered services in fee-for-service was about 30 percent in 1995.[10] Westat, which conducts the Medicare Current Beneficiary Survey (MCBS), found in a preliminary analysis that HMO enrollees may underreport the use of routine and trivial medical services, but not major events like inpatient hospital stays.[11] Because corrections were made for fee-for-service expenditures but not for HMOs, it is inappropriate to compare spending for the two groups.

[10] MCBS Website "Linking Survey Data and Medicare Claims." http://www.hcfa.gov/mcbs/Linkage.asp.

[11] Yi-Feng Chia, Hongji Liu, and Gary Olin. "Underreporting of Utilization Data in the Medicare Current Beneficiary Survey." Rockville, MD: Westat, abstract from Association of Health Services Research conference (unpublished), June 1998. Final report forthcoming.

THE MEDICARE+CHOICE HMO ENROLLEE POPULATION

The typical full-year Medicare HMO enrollee is a 74-year-old female, who does not have other insurance and who reports $1,652 in total annual out-of-pocket costs, or 13.3 percent of annual income (Table 1).

Compared with all Medicare beneficiaries, the HMO enrollee group, on average, not only had fewer people in the under-65 disabled and oldest-old age groups, but also reported better health and higher income (Table 2). As with the Medicare beneficiary population in general, age and health status of HMO enrollees are correlated with income level. One analysis of 1995 MCBS data shows that, among all elderly beneficiaries, the share reporting mid to high income (200% of the federal poverty level or higher) decreases with age.[12] The findings here are consistent with that observation: A majority of Medicare HMO enrollees (56%) had incomes in the mid to high range and also tended to be younger and to report better health status than those whose income was less than 200 percent of poverty. Indeed, 67 percent of those ages 65 to 74 reported mid to high income, compared with 22 percent of those 85 and older (Figure 1). (Among enrollees under 65, the majority had incomes below 200% of poverty.)

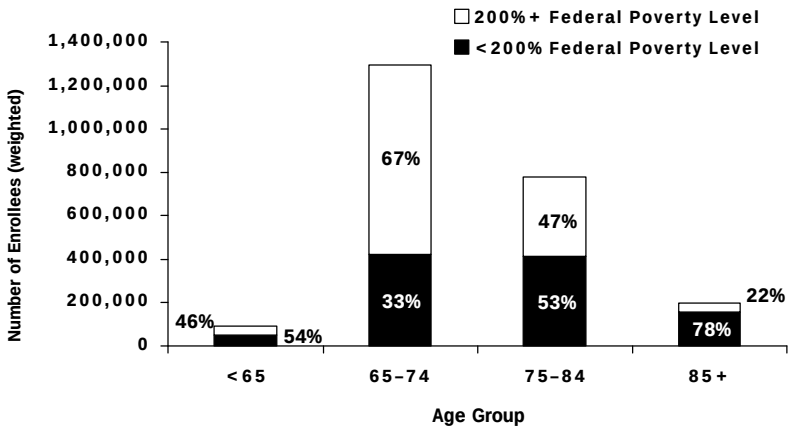
Table 2. Comparison of HMO and All Beneficiary Groups on Age, Health Status, and Income

	Medicare HMO Enrollee	All Medicare Beneficiaries
Age		
<65	3.5%	11.6%
65–74	58.0%	48.8%
75–84	30.7%	29.0%
85+	7.8%	10.6%
Health Status		
Above Average	51.0%	41.3%
Average	32.1%	29.6%
Below Average	16.9%	29.1%
Income: As a Percent of Poverty		
<125%	27.9%	35.0%
125%–199%	15.9%	15.9%
200%–399%	26.3%	25.7%
400%+	29.9%	23.3%

Source: HMO figures and income of "All Medicare Beneficiaries," authors' analysis of 1995 MCBS; age and health status of "All Medicare Beneficiaries," Westat analysis of 1995 MCBS.

[12] Gary L. Olin, Hongji Liu, and Barry Merriman. *Health and Health Care of the Medicare Population: Data from the 1995 Medicare Current Beneficiary Survey.* (Rockville, MD: Westat, November 1999). Table 1.2 "Demographic and Socioeconomic Characteristics of Medicare Beneficiaries, by Age and by Gender and Age, 1995."

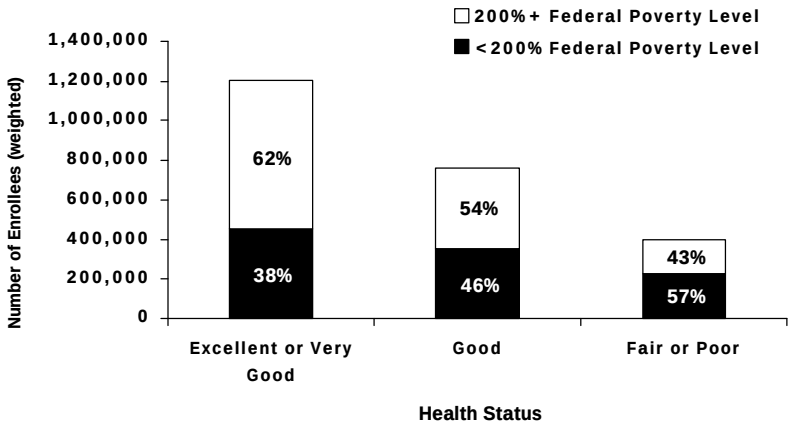
Figure 1. HMO Enrollees by Age Group and Income Level, 1995



Source: Authors' analysis of 1995 MCBS.

Enrollees with mid to high income were much less likely to report fair or poor health than those with low income (13% vs. 22%). Low-income enrollees represent 38 percent of all enrollees reporting above-average health, but 57 percent of those reporting below-average health (Figure 2).

Figure 2. HMO Enrollees by Health Status and Income Level, 1995



Source: Authors' analysis of 1995 MCBS.

Out-of-pocket spending by HMO enrollees who are full-year facility residents has not been well-documented. Though this group made up only 3 percent of the HMO

enrollee population in 1995 (Table 3), their expenditures for health services alone (excluding Part B and plan premiums) accounted for 30 percent of all HMO enrollee direct spending on health services, on average, $14,199 annually. That was nine times more than the $1,406 spent by HMO enrollees living in the community. Not surprisingly, facility services accounted for nearly all of this group's direct expenditures. Because the group skews the distribution of HMO enrollee out-of-pocket spending and is characterized by different service use, it was excluded from most other analyses in this study. However, it is noteworthy that HMO enrollment does not protect these beneficiaries from high out-of-pocket spending since they are heavy users of long-term care services, which HMOs generally do not cover.

Table 3. Average Annual Out-of-Pocket Spending and Out-of-Pocket Spending as a Share of Income

HMO Enrollee Group	Average Annual Out-of-Pocket Spending	Out-of-Pocket Spending as a Share of Income
All Enrollees	$1,652	13%
Community Residents	$1,406	11%
Full-Year Facility Residents	$14,199	*
Community Residents in Fair or Poor Health	$1,771	18%

* Due to very high facility costs, this group's average out-of-pocket spending as a share of income exceeds 100%.

Source: Authors' analysis of 1995 MCBS.

WHAT DO MEDICARE HMO ENROLLEES SPEND OUT-OF-POCKET?

HMO enrollee out-of-pocket spending is defined here as the sum of direct expenditures on the Medicare Part B premium, health plan premiums, and health services (copayments for covered services as well as payments for services the HMO has not authorized or does not cover). Out-of-pocket spending made up just under half (49%) of the HMO enrollee group's total health services expenditure in 1995; the average was $1,652. Average annual out-of-pocket spending varied considerably by health status, but not by income level (Table 4).

HMO community residents devoted, on average, 11 percent of their income to out-of-pocket spending.[13] Those with income below 200 percent of poverty spent 19 percent, while those with income at 200 percent of poverty or higher spent 5 percent. As for health status, those reporting fair or poor health spent 18 percent, on average, out-of-pocket. That is substantially higher than the 8 percent reported by enrollees in very good or excellent health. In short, then, HMO enrollment does not level the financial burdens across individuals with varying health status.

[13] When full-year nursing facility residents are included, the share was roughly 13 percent.

Table 4. Annual Out-of-Pocket Spending by Noninstitutionalized HMO Enrollee Subgroup

Group	Share of Community Residents	Out-of-Pocket Spending—Total	Out-of-Pocket Spending—As Share of Income
Community Residents	100%	$1,406	11%
Income: <200% of Poverty	43%	$1,362	19%
Income: 200%+ of Poverty	57%	$1,437	5%
Fair or Poor Health	17%	$1,771	18%
Excellent or Very Good Health	52%	$1,203	8%

Note: Enrollees in good health (31% of community residents) were excluded from this analysis to identify more clearly how health status influences out-of-pocket spending.

Source: Authors' analysis of 1995 MCBS.

Also for HMO community residents, health services account for 44 percent of total out-of-pocket spending, followed by payments for Part B premiums (38%), and plan premiums (18%). Since both the Part B and plan premiums are projected to rise sharply after 1999, according to the Congressional Budget Office and HCFA, they will most likely drive up HMO enrollees' total out-of-pocket spending.[14]

Fully 59 percent of the HMO enrollee population had no insurance besides coverage through their Medicare HMO (Table 1). Among fee-for-service beneficiaries, the corresponding share was 11 percent.[15]

Employer-sponsored insurance was the likeliest source of other insurance for this group, followed by Medigap coverage (Figure 3). In both cases, this supplemental insurance may be filling gaps in HMO coverage. Only 8 percent of HMO enrollees had Medicaid or other public coverage (such as through the Department of Veterans Affairs) even though 28 percent had income below 125 percent of poverty. The presence of other insurance complicates any examination of out-of-pocket spending and deserves a more careful look than is possible here. Preliminary analysis indicates, however, that community residents with such insurance spent somewhat more, on average, than those who relied on an HMO only, largely because of additional spending on plan premiums.

Out-of-Pocket Costs for HMO Enrollees Reporting Fair or Poor Health Status

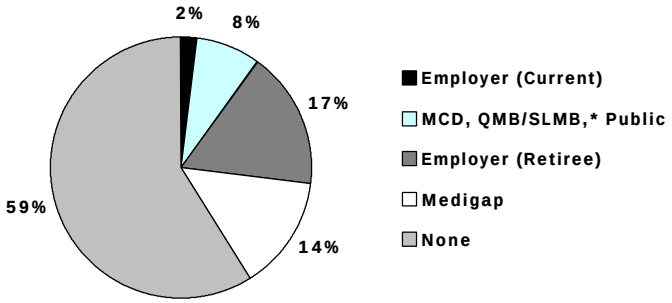
HMO community residents in fair or poor health reported out-of-pocket spending that was 126 percent that of the average community resident, a ratio similar to the 117 percent reported by fee-for-service beneficiaries in fair or poor health.[16]

[14] The Lewin Group. *Baseline Assumptions for the Medicare Benefit Model, 1998.* Prepared for the American Association of Retired Persons. October 13, 1998. HCFA. *Medicare+Choice,* 1999.

[15] Olin et al. 1999.

[16] Authors' analysis of 1995 MCBS data.

Figure 3. Distribution of Other Insurance Coverage—Medicare HMO Enrollees, 1995



* Medicaid, including Qualified Medicare Beneficiaries and Specified Low-Income Medicare Beneficiaries.

Note: Assignment to these mutually exclusive insurance groups is based on a hierarchy of insurance types: some enrollees with additional coverage belong to multiple groups.

Source: Authors' analysis of 1995 MCBS.

Compare spending for those in fair or poor health with that of enrollees whose health status is excellent or very good (Table 5).[17] Expenditures for health services are the main contributor to higher out-of-pocket spending for beneficiaries in fair or poor health, due primarily to differences in service utilization. Those in fair or poor health reported much heavier use of both medical provider and prescription drug services. (Medical provider services range from physicians to durable medical equipment.) Together, these two categories represent more than 60 percent of this group's direct spending on health services. Further, people in this group also reported significant out-of-pocket spending annually for facility services ($188), whereas those in the excellent or very good health group reported none. Though beneficiaries in fair or poor health represented only 17 percent of HMO community residents in 1995, their much higher out-of-pocket spending is noteworthy.

[17] Enrollees who reported good health were excluded to draw a more distinct comparison by health status. Also excluded were full-year facility residents, because this group already has been identified as vulnerable to very high out-of-pocket spending due to their expenditures on facility care. The same analysis was conducted by income level, but only small differences in service use and out-of-pocket spending were found. These differences might be even smaller, or nonexistent, by controlling for health status.

Table 5. Comparison of Out-of-Pocket Spending and Service Use by Health Status—Noninstitutionalized HMO Enrollees

Measure	Fair or Poor Health Status	Excellent or Very Good Health Status
Average Income	$18,804	$29,805
Average Out-of-Pocket Spending	$1,771	$1,203
Average Out-of-Pocket Spending as a Share of Income	18%	8%
Share with Other Insurance	43%	38%
Average Direct Spending on Health Services	$980	$411
Premiums (Part B & Plan)	$791	$793
Number of Medical Provider Events[a]	13.2	8
Average Medical Provider Out-of-Pocket Spending	$401	$123
Number of Drug Events[b]	23.8	11.6
Average Drug Out-of-Pocket Spending	$199	$122

[a] Medical provider services include physician visits, other practitioner visits (such as physical therapists), diagnostic and X-ray services, medical and surgical services, durable medical equipment, and nondurable medical supplies. An event is defined as a separate visit, procedure, service, or purchase of a supply or equipment.

[b] A prescription drug event is defined as a single purchase of a single drug in a single container.

Source: Authors' analysis of 1995 MCBS data.

OUT-OF-POCKET SPENDING ON HEALTH SERVICES

Dental services represent the largest share of direct spending on health care for HMO community residents, followed by spending for medical providers and prescription drugs.[18] Medical provider services and prescription drugs were the next two largest categories. The two services used by the highest percentage of community residents—medical providers and prescription drugs—are characterized by high out-of-pocket spending on both a per-enrollee and a per-user basis (Figure 4).

Medicare+Choice HMO enrollees and Medicare beneficiaries with traditional fee-for-service coverage pay similar shares of total expenditures out-of-pocket.[19] The HMO group, however, pays a substantially lower share of total drug expenses out-of-pocket—33 percent, compared with 49 percent for fee-for-service participants. This difference in spending probably reflects the better coverage of prescription drugs enjoyed by HMO enrollees.

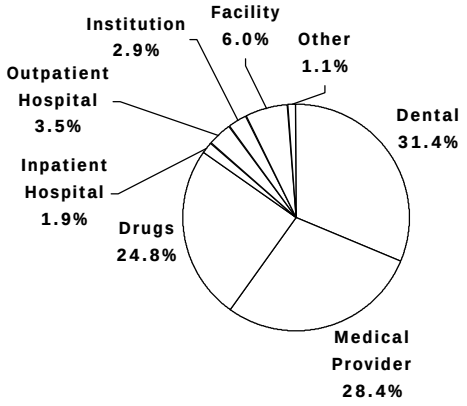
Though only 45 percent of HMO community residents reported using dental services, the per-enrollee and per-user out-of-pocket spending amounts are quite high relative to other services. That is because enrollees, on average, pay for a large share (65%) of their dental bills, presumably due to lack of coverage. In 1995, only 26 percent of

[18] Dental care is, for the most part, not a Medicare-covered service. But some HMOs offer it as an additional benefit either in the basic plan or in a supplemental plan.

[19] Olin et al. 1999.

HMO enrollees were in plans that offered dental benefits as part of the basic option.[20] Another study found that community-only Medicare beneficiaries reported similar user rates, but a significantly higher out-of-pocket share of total dental expenditures (82%).[21] Thus, HMO enrollment appears to reduce direct spending on dental services somewhat. Despite recent attention on beneficiaries' prescription drug use and associated out-of-pocket expenditures, per-user out-of-pocket spending ($381) for dental services was more than twice that for drugs ($174).[22]

Figure 4. Distribution of Noninstitutionalized HMO Enrollee Out-of-Pocket Spending for Health Services, 1995



Note: "Other" includes home health and hospice spending.

Source: Authors' analysis of 1995 MCBS.

MEDICAL PROVIDER SERVICES

Fully 95 percent of HMO community residents reported using at least one medical provider service, higher than any other service (Table 6). Medical provider services, which are Medicare-covered, range from physician visits to durable medical equipment.

[20] Kaiser Family Foundation. "Managed Medicare Fact Sheet." September 1999.

[21] Olin et al. 1999.

[22] Though the majority of HMO enrollees reported no out-of-pocket spending on dental services, 10 percent spent $500 or more. Further, among those enrollees who used dental services, the majority reported that their out-of-pocket share of total dental payment was 90 percent or higher.

Table 6. Total and Out-of-Pocket Spending Among Noninstitutionalized HMO Enrollees—Selected Services

Type of Service	Service Users as a Share of HMO Enrollee Population*	Number of Events per Enrollee	Number of Events per Service User	Average Annual Out-of-Pocket Spending per Enrollee (rank)	Average Annual Out-of-Pocket Spending per User (rank)	Average Annual Total Expenditure per Enrollee (rank)	Average Enrollee Out-of-Pocket Spending as a Share of Total Payment
Medical Provider	95%	9.2	9.7	$175 (1)	$185 (4)	$888 (1)	20%
Dental**	45%	1.3	2.9	$173 (2)	$381 (3)	$268 (5)	65%
Prescription Medicine	88%	15.7	17.9	$153 (3)	$174 (5)	$460 (3)	33%
Facility	0.6%	.01	1.2	$39 (4)	$6,833 (1)	$67 (7)	58%
Outpatient Hospital	54%	1.5	2.7	$22 (5)	$41 (8)	$301 (4)	7%
Skilled Nursing Facility	1%	.01	1	$18 (6)	$1,321 (2)	$68 (6)	26%
Inpatient Hospital	14%	.18	1.3	$12 (7)	$85 (6)	$864 (2)	1%
Home Health	9%	8.2	92.2	$6 (8)	$69 (7)	$8 (9)	79%
Hospice	0.2%	.00	1	$0 (9)	$0 (9)	$20 (8)	0%

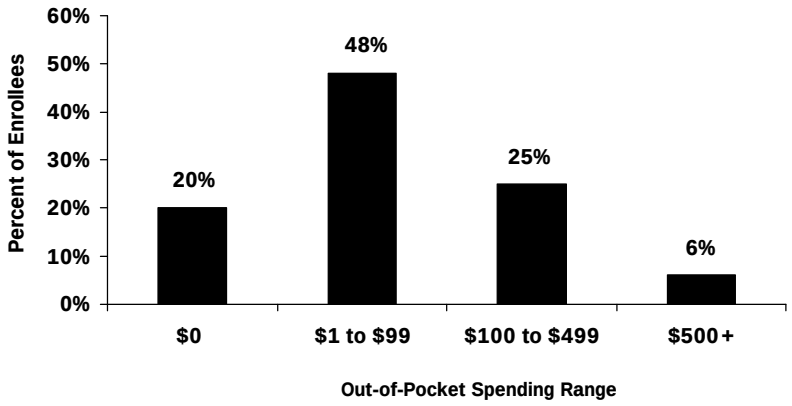
* Users defined as Medicare HMO enrollees with one or more service event in the particular service category.

** Dropped one observation reporting extreme outlier annual costs (>$35,000).

Source: Authors' analysis of 1995 MCBS.

More than two-thirds of community residents reported annual out-of-pocket spending on medical provider services of less than $100. Of this group, over 80 percent spent less than $50, while only 6 percent spent more than $500 (Figure 5).

Figure 5. Distribution of Annual Medical Provider Out-of-Pocket Spending—Noninstitutionalized HMO Enrollees, 1995



Source: Authors' analysis of 1995 MCBS.

To get a better idea of community residents' burden from medical provider services, out-of-pocket spending was examined as a share of total spending. The mean share was 21 percent (Table 7). More than three-quarters of users had an out-of-pocket share of less than 30 percent, which suggests that most of their spending consisted of copayments. However, a significant minority contributed at least 50 percent toward the total expenditure on these services. That finding suggests some users may have had noncovered services, including out-of-network provider visits.

Table 7. Distribution of Noninstitutionalized Service Users' Medical Provider Out-of-Pocket Spending as a Share of Total Payment

Out-of-Pocket Spending as a Share of Total Payment	Percent Distribution (Service Users)	Average Out-of-Pocket Spending	Average Number of Events*
<30%	76%	$70	10
30% to <50%	9%	$286	9.9
50%+	15%	$708	8.1
Mean Share = 21%			

* Medical provider services include physician visits, other practitioner visits (such as physical therapists), diagnostic and X-ray services, medical and surgical services, durable medical equipment, and non-durable medical supplies. An event is defined as a separate visit, procedure, service, or purchase of a supply or equipment.

Source: Authors' analysis of 1995 MCBS.

Surveys of Medicare HMO enrollees have found that provider issues—especially relating to physician services—play a major role in plan disenrollment and switching.[23] Among beneficiaries who disenrolled, problems with physicians were cited as the most important factor. Thus, it is possible that out-of-network physician visits account for some portion of those paying a large share of costs out-of-pocket; however, event-level analysis would be required to determine the extent of out-of-network physician use.

PRESCRIPTION DRUGS

Medicare beneficiary spending on prescription drugs is of special concern given the rapid increase in that area in the 1990s: 11.6 percent annually from 1990 to 1998, compared with a 6.5 percent rise overall for health services and supplies.[24] HMOs are an important source of drug coverage for Medicare beneficiaries because many plans offer some protection. In 1995, 95 percent of Medicare HMO enrollees had drug coverage through their primary Medicare HMO coverage.[25]

While the share of Medicare+Choice plans covering drugs has risen in recent years, plans are also beginning to shift more drug costs to enrollees. For example, in 2000, for the first time, all plans are requiring some copayment on drug services. By contrast, in 1999, more than one million beneficiaries lived in areas with a Medicare+Choice plan offering drug coverage with zero copayments.[26] Thus, the current drug cost-shifting trends among Medicare HMOs may significantly compromise the comparative financial advantage associated with Medicare HMO enrollment in the future.

Despite having lower drug out-of-pocket spending compared with most other Medicare supplemental insurance groups, Medicare HMO enrollees still had a substantial out-of-pocket burden for drugs in 1995. Some 88 percent of Medicare HMO community residents had at least one prescription event, of whom almost 100 percent incurred some associated direct expense (Table 6). A majority of community residents reported annual out-of-pocket spending for drugs ranging from $1 to $499 (Figure 6), while 6 percent spent $500 or more.

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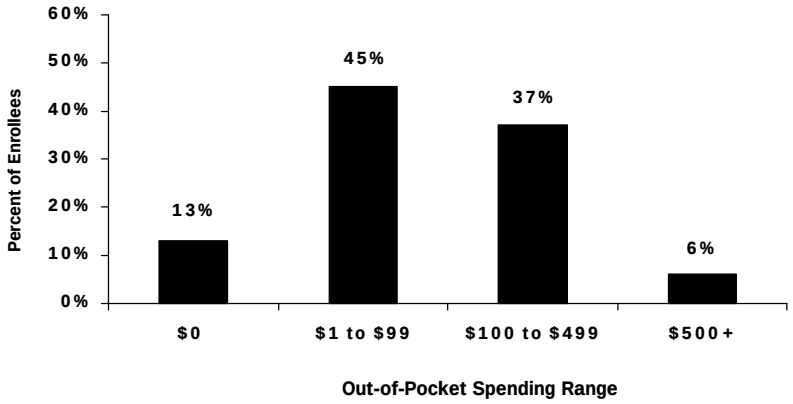
[23] MPR/PPRC. November 7, 1996.

[24] Katharine Levit et al. "Health Spending in 1998: Signals of Change." *Health Affairs.* Vol. 19, No. 1 (January/February 2000) pp. 124–132.

[25] Margaret Davis, John Poisal, George Chulis et al. "Prescription Drug Coverage, Utilization, and Spending Among Medicare Beneficiaries." *Health Affairs.* Vol. 18, No. 1 (January/February 1999) pp. 231–243.

[26] Davis et al. "Prescription Drug Coverage."

Figure 6. Distribution of Annual Drug Out-of-Pocket Spending— Noninstitutionalized HMO Enrollees, 1995



Source: Authors' analysis of 1995 MCBS.

As for service users, nearly three-quarters reported an out-of-pocket spending share of 20 percent or higher (Table 8). This figure could reflect high cost-sharing percentages or caps on insurance liability for drug expenditures. As the out-of-pocket share of total drug expenditure paid by the beneficiary increased, so did average out-of-pocket spending. Utilization also rose up to a point, declining when the out-of-pocket share reached 50 percent. The 12 percent of community residents who paid 90 percent or more out-of-pocket for medications also reported the lowest average use.

Table 8. Distribution of Noninstitutionalized Service Users' Drug Out-of-Pocket Spending as a Share of Total Drug Payment

Out-of-Pocket Spending as a Share of Total Payment	Percent Distribution (Service Users)	Average Out-of-Pocket Spending	Average Number of Events*
<20%	26%	$95	16.8
20% to <30%	19%	$156	20.3
30% to <50%	25%	$185	21.1
50% to <90%	19%	$219	17.0
90%+	12%	$278	11.1
Mean Share = 42%			

* A prescription drug event is defined as a single purchase of a single drug in a single container.
Source: Authors' analysis of 1995 MCBS.

Other studies have found that Medicare HMO enrollees spent less out-of-pocket on drugs then did fee-for-service beneficiaries, even those with supplemental insurance. For example, Davis and her colleagues (1999) found that Medicare fee-for-service

beneficiaries with no supplemental coverage spent $352, more than twice as much as HMO enrollees.[27] And beneficiaries with employer-sponsored supplemental coverage reported out-of-pocket spending on drugs that was 70 percent higher than that for HMO enrollees.

CONCLUSION

Despite the better health of enrollees in Medicare HMOs and the presumption of lower out-of-pocket spending compared with that of the Medicare population in general, roughly the same share of both groups reported difficulty paying medical bills in 1997.[28] Insurance does not fully protect people in poor health in either group. Thus, out-of-pocket spending is a significant concern even among Medicare HMO enrollees—and one that is likely to grow if Medicare HMOs continue to cost-shift. That significant shares of beneficiaries using medical provider and prescription drug services pay 50 percent or more out-of-pocket suggests HMO coverage is not as comprehensive in this area as some believe.

In recent years, the federal government has expended much effort to develop and refine Medicare managed care, and a significant share of the beneficiary population has selected HMOs to reduce out-of-pocket spending and obtain additional benefits. It remains to be seen how changes in the Medicare+Choice program that have occurred since the data reported here were collected will affect out-of-pocket spending. Beneficiary satisfaction with the program may be compromised if these changes exacerbate out-of-pocket spending concerns in Medicare+Choice.

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[27] Davis et al. "Prescription Drug Coverage."

[28] Gary L. Olin, Hongji Liu, and Barry Merriman. *Health and Health Care of the Medicare Population: Data from the 1995 Medicare Current Beneficiary Survey.* (Rockville, MD: Westat, November 1999), Table 2.1; Carlos Zarabozo, Charles Taylor, and Jarret Hicks. "Medicare Managed Care: Numbers and Trends." *Health Care Financing Review.* Vol. 17 (Spring 1996) pp. 243–261; Schoen et al. *Medicare Beneficiaries: A Population at Risk—Findings from the Kaiser/Commonwealth 1997 Survey of Medicare Beneficiaries,* 1998. While comparisons of fee-for-service beneficiaries with HMO enrollees on average out-of-pocket spending are problematic due to the data limitations described above, analysis shows that most HMOs have lower cost-sharing for Medicare-covered services and offer additional benefits that, combined, may reduce overall out-of-pocket spending.

APPENDIX. DATA ISSUES AND METHODOLOGY

DATA ISSUES

The most critical limitation of the data from the Medicare Current Beneficiary Survey (MCBS) on health maintenance organization (HMO) enrollees' expenditures is that the information is entirely self-reported and there are no administrative bill records to validate self-reported information and correct for underreporting. MCBS staff uses Medicare claims information to supplement and correct Medicare fee-for-service beneficiaries' survey responses. However, no such records of health events and associated costs exist for the Medicare HMO population, given that health plans are paid on a capitated basis and were not required to submit encounter data in 1995. The rate of underreporting among HMO enrollees in the MCBS is not well understood. Therefore the data could not be adjusted for this phenomenon.

Small sample size is another limitation of the HMO enrollee data. Because only 8.2 percent of Medicare beneficiaries were enrolled in Medicare+Choice HMOs in 1995, the corresponding MCBS sample size was under 1,000 people.[29] The study's definition of full-year, HMO enrollees limited the sample to 663 respondents, or 71.4 percent of HMO enrollees covered by Medicare during the entire year.

Table A-1. Definition of Medicare+Choice HMO Study Group

Some HMO enrollment	960
Full-year Medicare, some HMO	928
Full-year Medicare, full-year HMO	663

Source: Authors' analysis of 1995 MCBS.

An issue related to the small sample size is missing values in key variables. In order to maintain the sample size, data for certain variables that had a significant number of missing values were imputed. For example, 6 percent of the study sample had missing values for the Medicare+Choice HMO premium variable.

METHODOLOGY

Based on the data limitations described above, analysis of HMO enrollee data was kept relatively simple by using summary-level, rather than event-level, files. The study group was limited to full-year HMO enrollees to avoid the problem of allocating service utilization and spending to "enrolled" versus fee-for-service periods, which would require working with event-level (date-specific) files. As for enrollees' other insurance, the study

[29] Jo Ann Lamphere, Patricia Neuman, Kathyrn Langwell, and Daniel Sherman. "The Surge in Medicare Managed Care: An Update." *Health Affairs.* Vol. 16, No. 6 (May/June 1997) pp. 127–133.

was restricted to describing the share of enrollees reporting such insurance and the distribution of that insurance by type. Respondents were coded as having other coverage if such coverage was reported in any month. This analysis did not look at the extent to which enrollees carried the other insurance full-year versus part of the year. Accordingly, how other insurance affected out-of-pocket spending was not closely examined.

As noted above, when data were missing, values for several key variables were imputed, using the following rules:

- Health status. For the two cases with missing values for the self-reported health status relative to others in the same age group, values based on the modal value for remaining cases within the same age group and with the same in activities of daily living were imputed.

- Premium value for Medicare+Choice HMO plan (plan 1). Some 101 cases had missing values for questions related to premium payment for their primary Medicare HMO plan. According to MCBS documentation, MCBS staff fill in missing HMO premium values using administrative records when premium information is available for a specific plan. But when such information is not, premium amounts are coded as missing. For those with missing premium amount values who said they did not pay a premium for their primary plan, zero was imputed for the amount. For the other 42 cases, a premium amount was imputed by randomly selecting values from donor cases stratified by the adjusted average per capita cost payment level.

- Prescription drug coverage for Medicare+Choice HMO plan (plan 1). The prescription drug coverage variable for the primary Medicare HMO plan was coded as "yes" in 84 percent of cases, "no" in 12 percent, and "missing" in 4 percent. Values for the missing cases were imputed based on a methodology used by Davis and her colleagues whereby the primary plan coverage value was coded as "yes" or "no" depending on whether there was reporting of Medicare HMO payment for drug services.[30] The result of this process was that the share of the sample with drug coverage through the primary plan increased to 91 percent, a share more consistent with Davis's finding that 95 percent of Medicare HMO enrollees had drug coverage through their primary plan in 1995.

[30] Davis et al. "Prescription Drug Coverage."

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