Health Care Financing Trends

Medicare physician and hospital utilization and expenditure trends

by Winston O. Edwards and Charles R. Fisher

During the period 1983-86, the period directly following implementation of the Medicare prospective payment system, inpatient hospital care declined. Concurrently, fee-for-service utilization rates for physicians and other noninstitutional suppliers of medical goods and services and for outpatient facility care rose. Medicare expenditures for physicians and other suppliers and for outpatient facility care paralleled changes in utilization. In 1987, the proportion of Medicare patients receiving inpatient hospital care stabilized, but the proportion receiving outpatient hospital care continued to increase.

Introduction

Beginning in 1984, Medicare utilization and expenditure patterns for the services of physicians and other noninstitutional suppliers changed significantly. Medical services provided by physicians in inpatient hospitals declined sharply, and Medicare patients started receiving more care in outpatient hospital facilities and ambulatory surgical centers. Surgical care for less life-threatening illnesses, such as eye conditions, migrated from inpatient hospital settings to outpatient facilities and physicians' offices.

Although Part B, or supplementary medical insurance (SMI), benefit reimbursements for prepaid health care have risen rapidly in recent years, the fee-for-service sector still accounts for most Medicare expenditures. In this article, major trends in fee-for-service SMI allowed charges, benefit reimbursements, and utilization patterns through 1987 are examined.

Overview

Major regulatory and legislative changes in Medicare reimbursements for fee-for-service hospital and physician care were implemented in the period 1983-87. Utilization rates for inpatient hospital care, which had expanded almost continuously since the beginning of the Medicare program, abruptly declined after 1983, as utilization and expenditure rates for physicians and other suppliers of medical goods and services and outpatient facility care increased.

Reprint requests: Winston O. Edwards, Room 3A5, Security Office Park Building, 6325 Security Boulevard, Baltimore, Maryland 21207. The prospective payment system (PPS), which began on October 1, 1983, was gradually phased in during fiscal year 1984. PPS radically changed the method of Medicare payment for inpatient hospital services from cost-based reimbursement, which had been in effect since the beginning of Medicare in 1966, to predetermined rates for diagnosis-related groups. A major PPS objective is to encourage non-inpatient surgical care. In 1983, 23 percent of all SMI enrollees used at least one hospital day in the year. By 1986, the proportion had declined to 19 percent, a rate that remained stable through 1987 (Table 1).

In 1983, 44 percent of all users of SMI-reimbursed services had reimbursements both for physicians and other suppliers and for outpatient facility care. By 1987, the proportion had increased to more than 50 percent (Table 2). SMI enrollees using both physician and outpatient facility care increased from 28 percent in 1983 to 38 percent in 1987 (Table 1 and Figure 1). The joint use of outpatient facilities and of physicians and other suppliers increased both for patients who used inpatient facilities and for those who did not (Table 2).

Medicare spending for physicians and other suppliers and for outpatient facility services paralleled changes in utilization. In 1983, persons using the services both of outpatient facilities and of physicians and other suppliers accounted for 68 percent of all SMI reimbursements, a proportion that increased to 80 percent in 1987. SMI spending for hospitalized and nonhospitalized persons followed similar trends. Persons using both physician services and outpatient facilities accounted for 69 percent of SMI spending for hospitalized enrollees in 1983 and 82 percent in 1987; persons in the same category accounted for 68 percent of SMI spending for nonhospitalized enrollees in 1983 and 76 percent in 1987 (Table 3). (Spending for hospitalized persons shown in Table 3 includes both inhospital and out-of-hospital expenditures.)

Part A, or hospital insurance (HI), payments for inpatient hospital care are increasingly accompanied by SMI reimbursements for the joint use of physician or other supplier and outpatient facility services (Table 4). In 1983, 62 percent of inpatient hospital spending was for persons using inpatient, physician or other supplier, and outpatient hospital services; this proportion increased to 75 percent in 1987. A relatively small amount of HI spending for SMI enrollees, \$260 million in 1987, was not accompanied by any physician expenditure. This may have occurred because all physician spending for a hospital stay that straddled 2 calendar years occurred in the earlier year or because the physician did not perform a reimbursable service during the year.

Average combined HI and SMI reimbursements for hospital users with inpatient hospital and physician or other supplier or outpatient facility care reached \$9,685 in 1987 (Table 5), 44 percent above 1983 levels. From 1983 to 1987, average SMI reimbursements for hospitalized persons increased 45 percent. The average SMI reimbursement is now about the same as the average HI reimbursement.

SMI reimbursements to physicians for inpatient hospital services, as a proportion of total SMI spending for hospitalized persons, decreased steadily during the period. The declining incidence of hospitalization further reduced the share of total SMI spending represented by reimbursements for physician services in inpatient hospitals. The marked decrease in the proportion of persons using inpatient care was accompanied by significant changes in the characteristics of inpatient hospitalizations that further altered utilization patterns of physician and other supplier services.

Conclusion

The period 1983-87 was characterized by decreased inpatient hospital utilization and by rapid growth in supplementary medical insurance reimbursements, particularly reimbursements for physicians and other suppliers of services in a non-inpatient hospital setting and for outpatient facility care.

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Technical note

Administrative data from the Health Care Financing Administration's Medicare Statistical System and Hospital Cost Report Information System were used in preparing this article. Data for all files and for all years are incomplete for a variety of reasons. Two salient reasons follow:

- Administrative data files are edited for erroneous records. Such editing may require reprocessing and reentry into the statistical files used for this article. Occasionally, reprocessed administrative records are not included in statistical files.
- In this article, an attempt was made to portray trends based on the year in which a service was rendered and an expense incurred. Frequently, long lags exist between the time of the service, the time a bill is submitted for the service, and the time the bill is finally recorded in the administrative billing system. Thus, statistical information derived from the administrative billing system is likely to be incomplete at any given time.

To adjust for these limitations, we estimated total utilization, charges, benefit expenditures, and personuse information to ensure internal consistency based on the best data sources available.

Table 1

Percent distribution of Medicare supplementary medical insurance (SMI) enrollees, by type of SMI benefit received and hospitalization status: United States, calendar years 1983-87

			With reimbursement					
Calendar year and hospitalization status	All SM1 enrollees	Without reimbursement	Total	Physician only	Physician and outpatient	Outpatient only		
1983			Perce	nt distribution				
Total	100.0	36.2	63.8	34.0	28.0	1.8		
Hospitalized	_	_	22.8	10.4	12.3	0.2		
Not hospitalized	-		41.0	23.7	15.7	1.6		
1984								
Total	100.0	33.4	66.6	34.9	29.5	2.2		
Hospitalized	_	~	21.8	9.2	12,4	0.2		
Not hospitalized	_	_	44.7	25.7	17.1	2.0		
1985								
Total	100.0	30.1	69.9	34.6	33.2	2,2		
Hospitalized	-		19.6	6.8	12.6	0.2		
Not hospitalized	_	_	50.3	27.8	20.5	2.0		
1986								
Total	100.0	28.9	71.1	33.1	35.7	2.2		
Hospitalized		_	19.2	6.3	12.8	0.2		
Not hospitalized	_		51.8	26.8	22.9	2.0		
1987								
Total	100.0	26.6	73.4	33.1	38.4	1.9		
Hospitalized	_		19.1	5.6	13.3	0.1		
Not hospitalized	_	_	54.3	37.5	25.1	1.8		

NOTES: "Physicians" includes both physicians and other noninstitutional suppliers of medical goods and services. Only fee-for-service use is included. Totals do not necessarily equal the sum of rounded components. The numbers of persons ever enrolled for SMI (in thousands) are: 1983, 30,508; 1984, 30,981; 1985, 31,605; 1986, 32,240; and 1987, 32,843.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System.

Table 2

Number and percent distribution of Medicare supplementary medical insurance enrollees receiving benefits for physician services and outpatient facility care, by hospitalization status: United States, calendar years 1983-87

	·-	Type of ber	nefit received		Type of benefit received			
			Physician				Physician	
Calendar year and hospitalization status	Total	Physician only	and outpatient	Outpatient only	Total	Physician only	and outpatient	Outpatient only
1983		Number in	thousands		•	Percent	distribution	
Total	19,471	10,383	8,540	548	100.0	53.3	43.9	2.8
Hospitalized	6,967	3,165	3,749	52	100.0	45.4	53.8	0.7
Not hospitalized	12,504	7,218	4,791	496	100.0	57.7	38.3	3.9
1984								
Total	20.632	10,822	9,138	672	100.0	52.5	44.3	3.2
Hospitalized	6.769	2,864	3,841	64	100.0	42.3	56.7	0.9
Not hospitalized	13,863	7,958	5,296	608	100.0	57.4	38.2	4.4
1985								
Total '	22,102	10.929	10,481	692	100.0	49.4	47.4	3.1
Hospitalized	6,200	2,157	3,995	48	100.0	34.8	64.4	0.8
Not hospitalized	15,901	8,772	6,486	644	100.0	55.2	40.8	4.1
1986								
Total	22,907	10,685	11,520	703	100.0	46.6	50.3	3.1
Hospitalized	6,205	2,033	4,121	52	100.0	32.8	66.4	0.8
Not hospitalized	16,702	8,652	7,399	651	100.0	51.8	44.3	3.9
1987								
Total	24,105	10,878	12,603	624	100.0	45.1	52.3	2.6
Hospitalized	6,264	1,853	4,362	49	100.0	29.6	69.6	0.8
Not hospitalized	17,841	9,025	8,241	575	100.0	50.6	46.2	3.2

NOTES: "Physicians" includes both physicians and other noninstitutional suppliers of medical goods and services. Only fee-for-service use is included. Totals do not necessarily equal the sum of rounded components.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System.

Figure 1

Percent of Medicare supplementary medical insurance enrollees, by type of benefit received:

United States,1983 and 1987

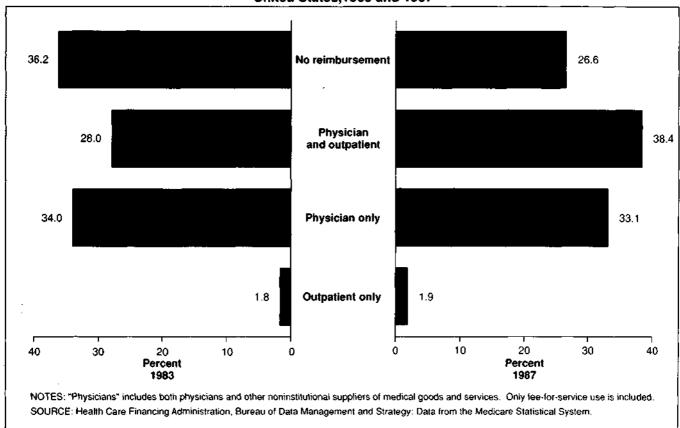


Table 3

Amount and percent distribution of Medicare supplementary medical insurance benefit payments for physician services and outpatient facility care, by type of benefit and hospitalization status:

United States, calendar years 1983-87

	E	Benefit paymer	nt .	Type of benefit received				
Calendar year and		All	Ali	Physician	Physiclan and outpatient			Outpatient
hospitalization status	All SMI	physician	outpatient	only	Total	Physician	Outpatient	only
				Amount in	millions			
1983								
Total	\$17,920	\$14,478	\$3,442	\$5,557	\$12,258	\$8,920	\$3,338	\$104
Hospitalized	12,885	11,028	1,857	4,020	8,847	7,008	1,839	18
Not hospitalized	5,034	3,449	1,585	1,537	3,411	1,912	1,499	86
1984								
Total	20,047	15.967	4,080	5,711	14,211	10,256	3,955	125
Hospitalized	13,682	11,546	2,136	3,844	9,815	7,702	2,113	23
Not hospitalized	6,365	4,421	1,944	1,867	4,396	2,554	1,842	102
1985								
Total	22,460	17,753	4,708	5,388	16,940	12,364	4.576	132
Hospitalized	13,827	11,483	2,344	3,013	10,790	8,470	2,320	24
Not hospitalized	8,633	6,269	2,364	2,375	6,150	3,894	2,256	108
1986								
Total	24,908	19,499	5,409	5,340	19,421	14,159	5,262	147
Hospitalized	14,921	12,353	2,568	2,927	11,970	9,426	2,544	24
Not hospitalized	9,987	7,146	2,841	2,413	7,451	4,733	2,718	123
1987								
Total	28,599	22,242	6,357	5,689	22,773	16,555	6,218	139
Hospitalized	16,890	13,875	3,015	2,950	13,916	10,926	2,990	25
Not hospitalized	11,709	8,367	3,342	2,739	8,857	5,629	3,228	114
See footnotes at end of table.					-			

Table 3—Continued

Amount and percent distribution of Medicare supplementary medical insurance benefit payments for physician services and outpatient facility care, by type of benefit and hospitalization status:

United States, calendar years 1983-87

		Benefit paymer	nt	Type of benefit received			eceived		
Calendar year and	All	All	Physician _	Physician and outpatient			_ Outpatient		
hospitalization status	All SMI	physician	outpatient	ónly	Total	Physician	Outpatient	only	
			Percen	t distribution t	by type of	benefit	<u> </u>		
1983					•				
Total	100.0	80.8	19.2	31.0	68.4	49.8	18.6	0.6	
Hospitalized	100.0	85.6	14.4	31.2	68.7	54.4	14.3	.1	
Not hospitalized	100.0	68.5	31.5	30.5	67.8	38.0	29.8	1.7	
1984									
Total	100.0	79.6	20.4	28.5	70.9	51.2	19.7	0.6	
Hospitalized	100.0	84.4	15.6	28.1	71.7	56.3	15.4	0.2	
Not hospitalized	100.0	69.5	30.5	29.3	69.1	40.1	28. 9	1.6	
1985									
Total	100.0	79.0	21.0	24.0	75.4	55.0	20.4	0.6	
Hospitalized	100.0	83.0	17.0	21.8	78.0	61.3	16.8	0.2	
Not hospitalized	100.0	72.6	27.4	27.5	71.2	45.1	26.1	1.3	
1986					•	1011			
Total	100.0	78.3	21.7	21.4	78.0	56.8	21.1	0.6	
Hospitalized	100.0	82.8	17.2	19.6	80.2	63.2	17.0	0.8	
Not hospitalized	100.0	71.6	28.4	24.2	74.6	47.4	27.2	1.2	
*	100.0	71.0	20.4	24.2	74.0	47.4	21.2	1.2	
1987									
Total	100.0	77.8	22.2	19.9	79.6	57.9	21.7	0.5	
Hospitalized	100.0	82.1	17.9	17.5	82.4	64.7	17.7	0.1	
Not hospitalized	100.0	71.5	28.5	23.4	75.6	48.1	27.6	1.0	
			Percent d	istribution by i	hospitalizal	tion status			
1983									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Hospitalized	71.9	76.2	54.0	72.3	72.2	78.6	55.1	17.3	
Not hospitalized	28.1	23.8	46.0	27.7	27.8	21.4	44.9	82.7	
1984									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Hospitalized	68.2	72.3	52.4	67.3	69.1	75.1	53.4	18.4	
Not hospitalized	31.8	27.7	47.6	32.7	30.9	24.9	46.6	81.6	
1985	00	_,			40.0	_ /	1010	21.0	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Hospitalized	61.6	64.7	49.8	55.9	63.7	68.5	50.7	18.2	
Not hospitalized	38.4	35.3	50.2	44.1	36.3	31.5	49.3	81.8	
•	30.4	55.5	30.2	77.1	30.3	31.5	45.0	01.0	
1986	400.0	100.0	400.0	400.0		400.4	400.0	400.0	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Hospitalized	59.9	63.4	47.5	54.8	61.6	66.6	48.3 51.7	16.3	
Not hospitalized	40.1	36.6	52.5	45.2	38.4	33.4	51.7	83.7	
1987									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Hospitalized	59.1	62.4	47.4	51.9	61.1	66.0	48.1	18.0	
Not hospitalized	40.9	37,6	52.6	48.2	38.9	34,0	51.9	82.0	

NOTES: "Physicians" includes both physicians and other noninstitutional suppliers of medical goods and services. Only fee-for-service use is included. Totals do not necessarily equal the sum of rounded components.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System.

Table 4

Amount and percent distribution of Medicare hospital insurance benefit payments for inpatient hospital care, by type of supplementary medical insurance benefits received: United States, calendar years 1983-87

		Type of benefit received					
Calendar year	Total	Physician only	Physician and outpatient	Outpatient only			
		Amount in millions					
1983	\$33,818	\$12,479	\$21,111	\$228			
1984	37,878	13,084	24,484	310			
1985	39,223	11,296	27,664	263			
1986	41,431	11,055	30,096	281			
1987	43,767	10,640	32,867	260			
		Percent o	distribution				
1983	100.0	36.9	62.4	0.7			
1984	100.0	34.5	64.6	0.8			
1985	100.0	31.3	68.0	0.7			
1986	100.0	26.7	72.6	0.7			
1987	100.0	24.3	75.1	0.6			

NOTES: "Physicians" includes both physicians and other noninstitutional suppliers of medical goods and services. Only fee-for-service use is included. Totals do not necessarily equal the sum of rounded components.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System.

Table 5

Total Medicare spending per person
hospitalized, by type of supplementary medical
insurance benefit and type of expense: United
States, calendar years 1983-87

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		Type of ben	efit received ¹
Calendar year and type of expense	Total	Physician only	Physician and outpatient
1983			
Total	\$6,718	\$5,213	\$7,991
Physician or outpatient	1,860	1,270	2,360
Inpatient hospital	4,858	3,943	5,631
1984			
Total	7,640	5,910	8,929
Physician or outpatient	2,037	1,342	2,555
Inpatient hospital	5,603	4,568	6,374
1985			
Total	8,575	6.634	9,626
Physician or outpatient	2,243	1,397	2,701
Inpatient hospital	6,332	5,237	6,925
1986	,	•	ŕ
Total	9,109	6.879	10,209
Physician or outpatient	2,421	1,440	2,905
Inpatient hospital	6.688	5,439	7,304
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1987	0.605	7 225	10,724
Total	9,685	7,335	
Physician or outpatient	2,697	1,592	3,190
Inpatient hospital	6,988	5,743	7,534

¹Excludes hospitalized patients with outpatient hospital payments only.

NOTES: "Physicians" includes both physicians and other noninstitutional suppliers of medical goods and services. Only fee-for-service use is included. Totals do not necessarily equal the sum of rounded components.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System.