Trends in Medicare enrollee use of physician and supplier services, 1983-86

by Charles R. Fisher

Beginning in 1984, the long-term trend of increasing utilization of inpatient hospital care by Medicare enrollees was reversed. As Medicare patients increasingly received care in outpatient hospital facilities, ambulatory surgical centers, and physicians' offices, the structure of charges for physicians' services changed significantly. Medical services by physicians in inpatient hospitals declined rapidly. Surgical care for less life-threatening illnesses, such as eye conditions, moved from inpatient hospitals to outpatient facilities and physicians' offices. The decline in the proportion of physicians' charges derived from inpatient care was offset primarily by the increased proportion derived from physician care in outpatient facilities, mostly for surgery.

Introduction

Although 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 expenditures under Medicare. In 1983, the initial year of most data analyzed in this article, the fee-for-service sector accounted for more than 97 percent of all SMI benefits paid. By 1986, the last year covered in this article, this sector accounted for slightly less than 96 percent of SMI benefits. In this article, major trends in SMI benefit reimbursements, charges, and utilization in the fee-for-service sector from calendar years 1983 through 1986 are described. Accompanying trends in Medicare inpatient hospital utilization are also included. This article is focused mainly on physicians and other noninstitutional suppliers of medical services and less on outpatient facility and inpatient hospital services. Benefits for the services of physicians and nonphysician suppliers of medical services and for outpatient facility care are paid from the SMI trust fund. Benefits for inpatient hospital care are paid from the hospital insurance (HI) trust fund.

Overview

Major regulatory and legislative changes in Medicare reimbursements for fee-for-service hospital and physician care were implemented in the period 1983-86.

- The prospective payment system (PPS), which began on October 1, 1983, was gradually phased in during fiscal year 1984. Subsequent conversions to PPS in two "waiver States," New York and Massachusetts, occurred in fiscal year 1986. 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 (DRG's). Only two States, Maryland and New Jersey, and certain excluded hospitals are yet outside PPS.
- The peer review organization (PRO) program to review inpatient hospital care for medical necessity and quality began in 1984. A major PRO initiative in late 1984 encouraged thorough review of inpatient hospital surgical care to determine whether noninpatient hospital surgery would have been more appropriate.
- New payment policies were implemented for physicians/suppliers of Part B (SMI) services. These included a fee freeze on physician customary and prevailing charges, which extended from July 1984 through April 1986; fee schedules for laboratory services, which were implemented in July 1984; direct billing by independent laboratories, which was implemented in July 1984; and a physician participation program, begun in 1984, which sharply reduced balance billing rates. (Balance billing is the amount of beneficiary liability in excess of Medicare-approved charges for cases in which a physician does not accept Medicare-approved charges as final.)
- Increasing competition was generated by the growing supply of physicians and the expansion of prepaid health care plans into fee-for-service markets.
- A fee-freeze policy, implemented in July 1984, was extended to 1986.

The Health Care Financing Administration (HCFA) is currently attempting to assess the relative contributions of these and other health care market changes on spending for HI and SMI, a task that is complicated by their generally simultaneous occurrence. However, the cumulative effects of these changes are clear. Use rates for inpatient hospital care, which had expanded almost continuously since the beginning of the Medicare program, abruptly declined after 1983, as use rates for joint physicians/suppliers and outpatient facility care increased.

- In 1983, nearly 23 percent of all SMI enrollees used at least one hospital day in the year. By 1986, the proportion had declined to about 19 percent (Table 1).
- In 1983, 44 percent of all users of SMI-reimbursed

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Table 1

Percent distribution of Medicare supplementary medical insurance (SMI) enrollees, by type of SMI benefit and hospitalization status: 1983-86

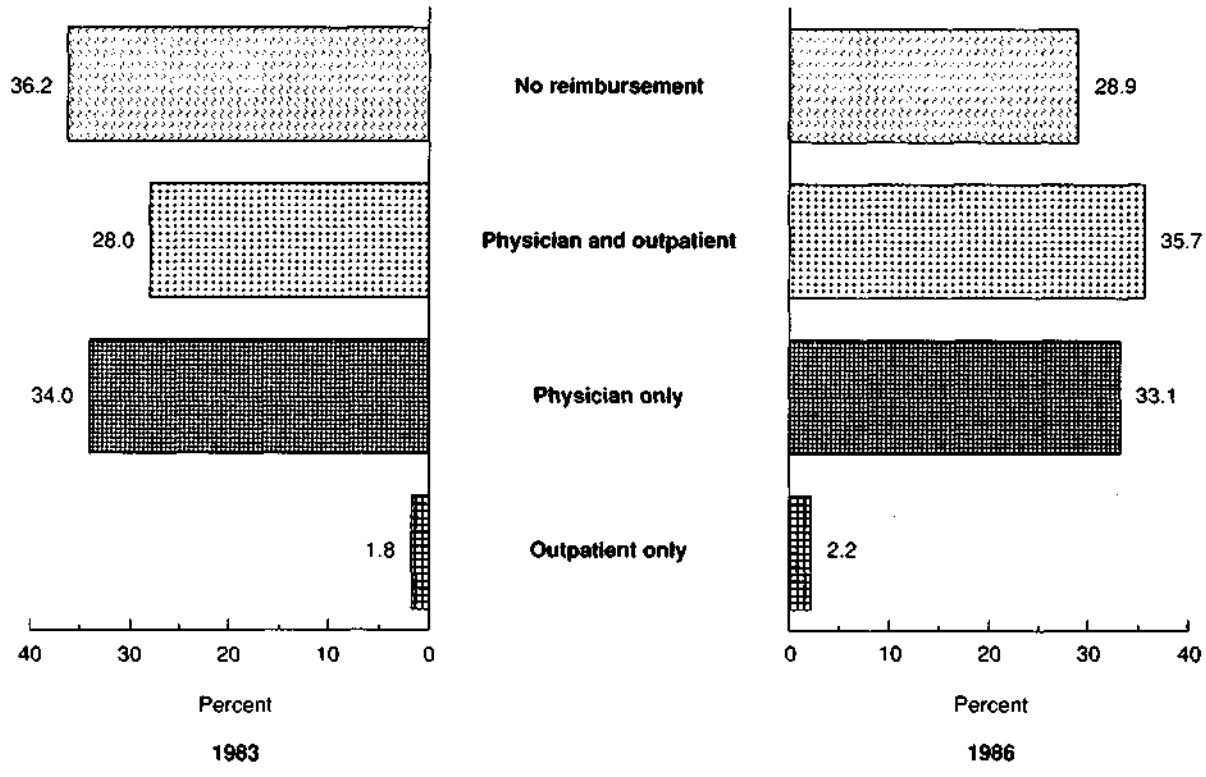
Year and hospitalization status	Total	Without reimbursement	With reimbursement			
			Total	Physician only	Physician and outpatient	Outpatient only
			Percent distribution			
1986	100.0	28.9	71.1	33.1	35.7	2.2
Hospitalized	—	—	19.2	6.3	12.8	0.2
Not hospitalized	—	—	51.8	26.8	22.9	2.0
1985	100.0	30.1	69.9	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
1984	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
1983	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

NOTES: "Physician" includes both physician and nonphysician suppliers of medical goods and services. The numbers of persons (in thousands) enrolled in SMI at any time during the year are: 1986, 32,240; 1985, 31,605; 1984, 30,981; 1983, 30,506.

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

Figure 1

Percent distribution of Medicare supplementary medical insurance enrollees, by type of benefit: 1983 and 1986



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

services had reimbursements for both physicians/suppliers and outpatient facility care. By 1986, the proportion had increased to more than 50 percent (Table 2). SMI enrollees using both physician and outpatient facility care increased from 28 percent of all enrollees in 1983 to 36 percent in 1986 (Table 1 and Figure 1).

- The joint use of outpatient facilities and physicians/suppliers increased both for patients who used inpatient facilities and for those who did not (Table 2).

Medicare spending for physicians/suppliers and outpatient facility services paralleled changes in utilization. In 1983, persons using services of both outpatient facilities and physicians/suppliers accounted for 68 percent of all SMI reimbursements, a proportion that increased to 78 percent in 1986. SMI spending for hospitalized and nonhospitalized persons followed similar trends. Persons using both physician and outpatient facilities accounted for 69 percent of SMI spending for hospitalized enrollees in 1983 and 80 percent in 1986; persons in the same category accounted for 68 percent of SMI spending for nonhospitalized enrollees in 1983 and 75 percent in 1986 (Table 3). (Spending for hospitalized persons shown in Table 3 includes both inhospital and out-of-hospital expenditures.)

HI reimbursements for inpatient hospital care are increasingly accompanied by SMI reimbursements for the joint use of physician/supplier and outpatient facility services (Table 4). In 1983, 62 percent of inpatient hospital spending was for persons using inpatient, physician/supplier, and outpatient hospital services; this proportion increased to 73 percent in 1986. (A relatively small amount of HI spending, $281 million in 1986, was not accompanied by any physician expenditures. This may occur 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/supplier or outpatient facility care reached $9,109 in 1986, 36 percent above 1983 levels (Table 5). From 1983 to 1986, average SMI reimbursements for hospitalized persons increased more slowly (up 30 percent to $2,421) than did average HI reimbursements (up 38 percent to $6,688).

SMI reimbursements to physicians for inpatient hospital services as a proportion of total SMI spending for hospitalized persons decreased steadily during the period. In 1983, 78 percent of all reimbursements for physician services for hospitalized persons were for inpatient hospital care, compared with 70 percent in 1986. The declining incidence of hospitalization further reduced the share of total SMI spending represented by reimbursements for physician services in inpatient hospitals. In 1983, Medicare benefits for physician care in an inpatient hospital setting accounted for 48 percent of all SMI reimbursements for physician/supplier and outpatient facility care. This proportion declined to 35 percent in 1986 (Table 6).

The marked decrease in the proportion of persons using inpatient care was accompanied by significant changes in characteristics of inpatient hospitalizations that further altered patterns in the use of physician/supplier services. These changing characteristics are described in the next section.

Short-stay hospital use

The relative decline in the number of persons hospitalized was accompanied by other significant changes in inpatient hospital care for Medicare

Table 2

Number and percent distribution of persons receiving Medicare supplementary medical insurance benefits, by type of benefit and hospitalization status: 1983-86

Year and hospitalization status	Type of benefit							
	Total	Physician only	Physician and outpatient	Outpatient only	Total	Physician only	Physician and outpatient	Outpatient only
	Number in thousands				Percent distribution			
1986	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
1985	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
1984	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
1983	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

NOTE: "Physician" includes both physician and nonphysician suppliers of medical goods and services.

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

enrollees. Short-stay hospital admissions and lengths of stay both decreased; thus, total days of care decreased even more swiftly. Intensity of care as measured by special care days increased, as only sicker patients continued to be hospitalized. All of these events were manifested in changes in physician charge and utilization patterns, as demonstrated in later sections.

Fee-for-service short-stay inpatient hospital admissions, which had been rising steadily prior to 1984, fell each year from 1984 through 1986 (Table 7). Admission rates dropped even faster because Medicare populations continued to grow. Admission rates per 1,000 HI enrollees dropped from 399 in 1983 to 349 in 1986.

Hospital discharges can be categorized as medical or surgical as defined by the DRG assigned to a discharge. Discharges can be further categorized by disease system (diagnostic category). Medical discharges for all major diagnostic categories began to decrease in late 1983 and continued to decline through 1986. However, total surgical discharges increased in 1984. After 1984, surgical discharges for circulatory and respiratory ailments increased while discharges for eye conditions, primarily cataract surgery, decreased precipitously. If eye conditions are excluded, surgical

Table 3

Amount and percent distributions of Medicare supplementary medical insurance benefit payments, by type of benefit and hospitalization status: 1983-86

Year and hospitalization status	Type of benefit							
					Physician and outpatient			
	Total	Total physician	Total outpatient	Physician only	Total	Physician	Outpatient	Outpatient only
	Amount in millions							
1986	$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
1985	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
1984	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
1983	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
	Percent distribution by type of benefit							
1986	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	0.2
Not hospitalized	100.0	71.6	28.4	24.2	74.6	47.4	27.2	1.2
1985	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
1984	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
1983	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	0.1
Not hospitalized	100.0	68.5	31.5	30.5	67.8	38.0	29.8	1.7
	Percent distribution by hospitalization status							
1986	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	16.3
Not hospitalized	40.1	36.6	52.5	45.2	38.4	33.4	51.7	83.7
1985	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
1984	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
1983	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

NOTE: "Physician" includes both physician and nonphysician suppliers of medical goods and services.

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

discharges as a percent of all discharges increased steadily from 1984 through 1986 (Table 7).

Average lengths of stay for short-stay hospital inpatients steadily declined for many years prior to PPS. After implementation of PPS in October 1983, they declined much more rapidly, and they continued to decrease in 1984 and 1985. However, in 1986, this long-term trend ceased when average lengths of stay increased. If admissions for inpatient cataract surgery are dropped from the computation, average length of stay is seen to stabilize in 1986 (Table 8).

Decreasing Medicare admissions under the fee-for-service system and declining or stable lengths of stay jointly resulted in rapidly decreasing days of inpatient hospital care (Table 9 and Figure 2). At the same time, nonroutine, or special care, inpatient days (i.e., those days provided in intensive care or coronary care units), increased absolutely and also as a percent of total days of care (Table 10 and Figure 3). Clearly, there was an increase in the average intensity of care provided patients who continued to be hospitalized.

Table 4

Amount and percent distribution of Medicare hospital insurance benefit payments for inpatient hospital care, by type of supplementary medical insurance (SMI) benefit: 1983-86

Year	Total	Type of SMI benefit received: Physician only	Physician and outpatient	Outpatient only
		Amount in millions		
1986	$41,431	$11,055	$30,096	$281
1985	39,223	11,296	27,664	263
1984	37,878	13,084	24,484	310
1983	33,818	12,479	21,111	228
		Percent distribution		
1986	100.0	26.7	72.6	0.7
1985	100.0	31.3	68.0	0.7
1984	100.0	34.5	64.6	0.8
1983	100.0	36.9	62.4	0.7

NOTE: "Physician" includes both physician and nonphysician suppliers of medical goods and services.

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

The impact of declining admissions and lengths of stay and of increasing intensity of inpatient care should be manifested in physician/supplier charge and utilization patterns, a subject discussed in the following sections.

Allowed charges

Medicare benefit reimbursements for physicians and other noninstitutional providers of medical services, discussed in the first section of this article, are determined by allowed charges for their services. In this section, the relationship between benefits and allowed charges and the sources of increase in allowed charges by place and type of service are shown.

Table 5

Total Medicare spending—hospital insurance (HI) and supplementary medical insurance (SMI) combined—per person hospitalized, by type of SMI benefit and type of expense: 1983-86

Year and type of expense	Type of SMI benefit received: Total[1]	Physician only	Physician and outpatient
1986	$9,109	$6,879	$10,209
Physician or outpatient (SMI)	2,421	1,440	2,905
Inpatient hospital (HI)	6,688	5,439	7,304
1985	8,575	6,634	9,626
Physician or outpatient (SMI)	2,243	1,397	2,701
Inpatient hospital (HI)	6,332	5,237	6,925
1984	7,640	5,910	8,929
Physician or outpatient (SMI)	2,037	1,342	2,555
Inpatient hospital (HI)	5,603	4,568	6,374
1983	6,718	5,213	7,991
Physician or outpatient (SMI)	1,860	1,270	2,360
Inpatient hospital (HI)	4,858	3,943	5,631

[1]Excludes hospitalized patients with outpatient hospital payments only.

NOTE: "Physician" includes both physician and nonphysician suppliers of medical goods and services.

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

Table 6

Estimated Medicare supplementary medical insurance (SMI) benefit payments and percent of SMI benefits for inpatient hospital physician care: 1983-86

Item	1986	1985	1984	1983
Amount in millions	$8,675	$8,458	$8,763	$8,644
		Percent		
Medicare benefits for inpatient hospital physician care as a percent of:				
All Medicare physician benefits for enrollees hospitalized in the year	70.2	73.7	75.9	78.4
All Medicare physician and outpatient facility benefits for enrollees hospitalized in the year	58.2	62.1	64.0	67.0
All Medicare physician and outpatient facility benefits for enrollees, whether or not hospitalized in the year	34.8	38.0	43.8	48.2

NOTE: "Physician" includes physician and nonphysician suppliers of medical goods and services.

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

Table 7

Number of Medicare short-stay hospital discharges, by diagnosis-related group (DRG) status and major diagnostic category: 1983-86

DRG status and major diagnostic category	1986	1985	1984	1983[1]
	Number in thousands			
All discharges	10,345	10,728	11,433	11,720
Surgical DRG's	2,726	2,783	3,046	2,849
Medical DRG's	7,619	7,945	8,387	8,871
Surgical DRG's	2,726	2,783	3,046	2,849
Eye	119	180	464	—
Circulatory	397	367	343	—
Digestive	466	480	494	—
Musculoskeletal	528	533	526	—
Reproductive (male and female)	365	368	371	—
Kidney and urinary	177	182	183	—
Ear, nose, and throat	43	46	51	—
Skin	137	142	147	—
Respiratory	48	47	45	—
Nervous	102	111	116	—
All other	344	327	306	—
Medical DRG's	7,619	7,945	8,387	8,871
Eye	17	21	30	—
Circulatory	2,152	2,192	2,217	—
Digestive	763	820	925	—
Musculoskeletal	433	482	561	—
Reproductive (male and female)	62	74	102	—
Kidney and urinary	336	337	364	—
Ear, nose, and throat	97	108	131	—
Skin	158	167	195	—
Respiratory	1,229	1,275	1,273	—
Nervous	775	812	844	—
Hepatobiliary	163	173	191	—
All other	1,434	1,484	1,554	—

[1]Surgical data estimated from incomplete DRG information. Accurate data by DRG disease category not available.

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

Table 8

Average length of short-stay hospital stay for Medicare enrollees, by diagnosis-related group (DRG) status, with and without cataract surgery: 1983-86

DRG status	1986	1985	1984	1983[1]
	Average length of stay in days			
Total	8.7	8.6	8.9	9.8
Without cataract surgery	8.7	8.7	9.1	10.1
Surgical	10.8	10.3	10.1	10.3
Without cataract surgery	10.8	10.7	11.2	11.9
Medical	8.0	8.0	8.5	9.7

[1]Estimated from incomplete DRG length-of-stay data.

NOTE: Cataract surgery is DRG 039.

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

Table 9

Number and percent distribution of short-stay hospital days of care for Medicare enrollees, by diagnosis-related group (DRG) status: 1983-86

DRG status	1986	1985	1984	1983
	Number in millions			
Total	90.0	92.3	101.8	114.9
Surgical DRG's	29.4	28.7	30.8	27.9
Medical DRG's	60.6	63.6	71.0	87.0
	Percent distribution			
Total	100.0	100.0	100.0	100.0
Surgical DRG's	32.7	31.1	30.3	24.3
Medical DRG's	67.3	68.9	69.7	75.7

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

Benefit reimbursements tend to rise at a faster rate than allowed charges because the fixed Part B deductible, $75 since January 1982, comprises an increasingly smaller proportion of allowed charges (Table 11). In estimates of deductible amounts applicable to physicians and other Medicare suppliers shown in Table 11, Part B deductible amounts for outpatient facility services are excluded.

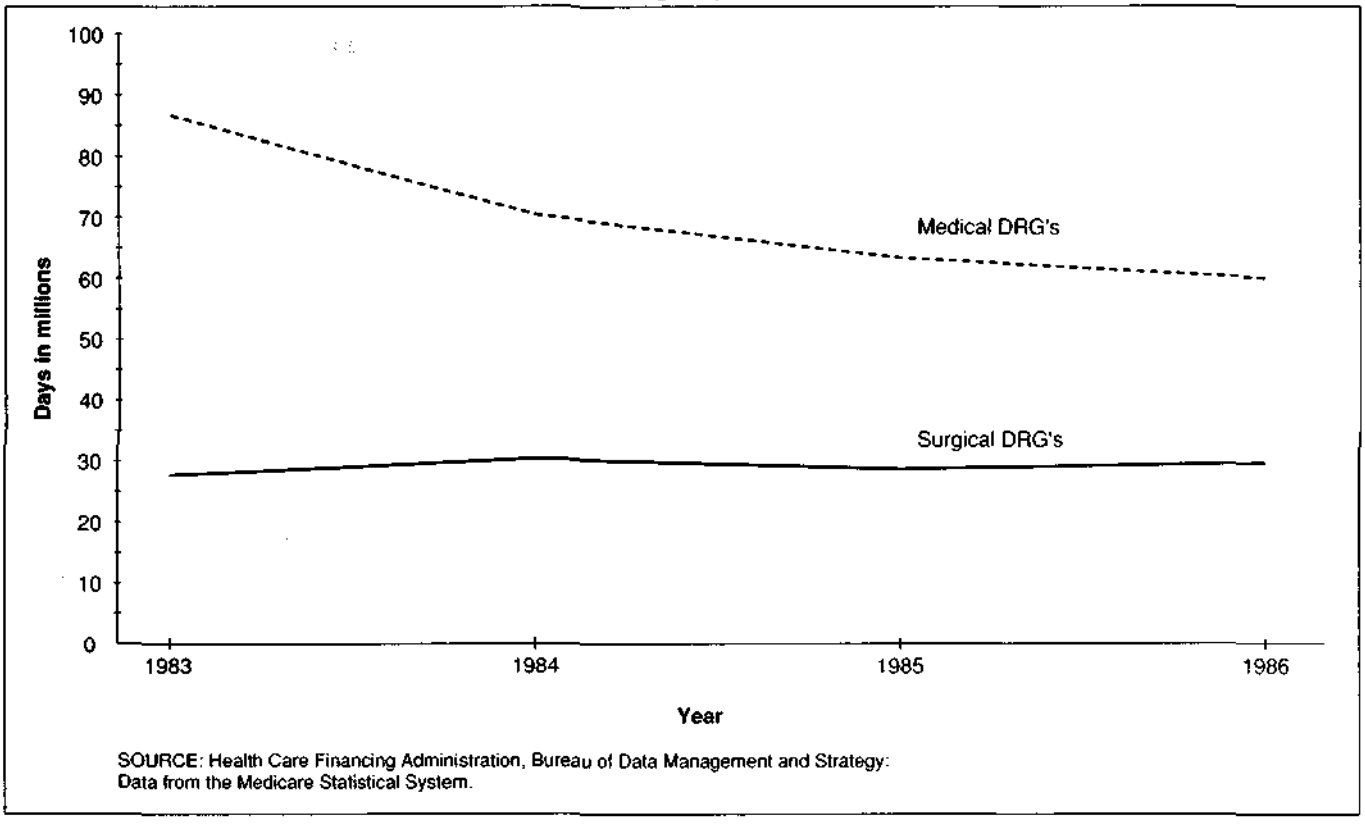
Trends in inpatient hospital care and in joint use of physician care and outpatient facilities were described in the previous sections. These trends are manifested clearly in changing patterns in Medicare-allowed charges for physician and other noninstitutional suppliers of medical services by place and type of services (Table 12). Although data for 1982 are shown in the table, 1983 was used as the base year for analysis. The following trends are more apparent from Figure 4:

- Rapid increases in charges for surgical care and surgical-related care (anesthesiology and assistance at surgery) accounted for 38 percent of the increase in total allowed charges from 1983 to 1986.
- Increases in charges for medical care (primarily physician visits) accounted for 18 percent of the increase in charges.
- The remaining services—consultations, diagnostic X-ray and clinical laboratory services, nonphysician medical supplies and services, and radiation therapy—accounted for the remaining 44 percent of the increase.

If charges by major type of service are further examined by place of service, these trends are apparent:

- Virtually all of the increases in surgical charges were for office or outpatient facility settings (Figure 4).
- Virtually all of the increases in physician medical charges were for office settings; charges for inpatient hospital services remained constant.
- Total clinical laboratory charges as a percent of total allowed charges for all services have remained constant, slightly more than 9 percent. However, a shift in place of service to "other" and to outpatient hospital seems to have occurred. This shift may result from regulatory changes prohibiting physicians from billing for services actually performed by independent laboratories and from including payments for inpatient hospital laboratory services performed by independent laboratories in the DRG payment.

Figure 2
Short-stay hospital days of care for Medicare enrollees, by diagnosis-related group (DRG) status: 1983-86



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

Increases in charges for services in office and outpatient facility settings accounted for about three-fourths of the total increase in allowed charges from 1983 to 1986. Major contributors to increased charges in office settings were surgical and surgical-related (anesthesia) service charges.

Data for 1982 are included in Tables 11-13 to demonstrate changing charge patterns prior to PPS, a period marked by rapidly increasing physician charges for both office and inpatient settings. Physician charges for inpatient surgical services continued to increase in 1984 as charges for inpatient medical services declined. Further analysis is required to determine whether the shift of surgical charges from inpatient settings to office and outpatient settings in 1985 was a response to PPS or to other regulatory and reimbursement policy changes.

Although frequencies of service by place and type have been reported to HCFA for many years, definitions of units of service changed over time as physicians and other medical suppliers changed their billing practices in response to new regulatory requirements or to new reimbursement policies. This has made it difficult to determine trends in the number of services provided by type and place of service. Only with the implementation of new statistical reporting procedures, primarily the Part B Medicare Annual Data (BMAD) system, which effectively began in 1985, could specific procedure-related charges and common units of measurement be identified. Despite these difficulties, an attempt was made to portray trends in those types of services for which such definitional changes were presumed to be minimal (Table 14). The data should be interpreted cautiously, however, because separation of surgical charges from other charges (unbundling) could account for part of these trends.

The following information can be derived from Table 14.

Table 10

Number and percent distribution of days of short-stay hospital inpatient care for Medicare enrollees, by intensity of care: Selected years 1983-86

Intensity of care	1986	1985	1983
	Number in millions		
Total	90.0	92.3	114.9
Routine days	79.6	82.4	105.8
Nonroutine days	10.4	9.9	9.1
Intensive care	7.0	6.8	6.3
Coronary care	3.4	3.1	2.8
	Percent distribution		
Total	100.0	100.0	100.0
Routine days	88.4	89.3	92.1
Nonroutine days	11.6	10.7	7.9
Intensive care	7.8	7.4	5.5
Coronary care	3.8	3.3	2.4

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

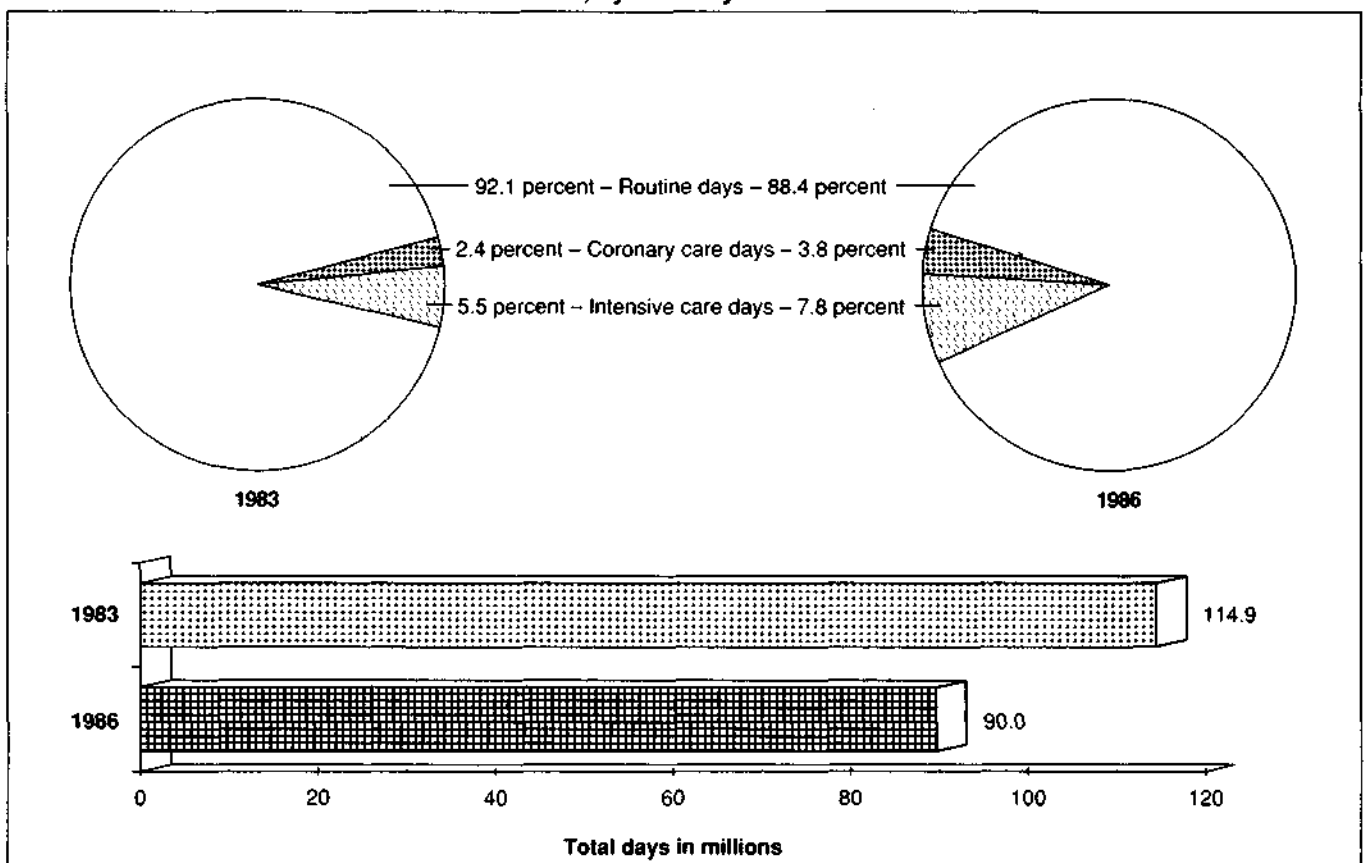
- Increases in medical services in an office setting were offset by decreases in medical services in inpatient hospital settings. The average annual rate of growth in combined medical services for both settings from 1983 to 1986 was about the same as the SMI population growth, about 2 percent per year. Thus, it seems valid to tentatively conclude that office medical services are being substituted for inpatient medical services and that no net increase in such services per capita occurred during the period.

- By contrast, surgical services per capita grew at an average annual rate of about 7 percent from 1982 to 1984 and at an average annual rate of more than 13 percent from 1984 to 1986. Out-of-hospital surgical services accounted for all of this growth in more recent years, as inpatient hospital surgical services declined after 1984.

In this section, it is demonstrated that charges for surgical services, primarily services in out-of-hospital settings, were mainly responsible for total increases in

Figure 3

Number and percent distribution of short-stay hospital days of care for Medicare enrollees, by intensity of care: 1983 and 1986



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

Table 11

Medicare-allowed charges for physician/supplier services, by type of liability: 1982-86

Year	Total allowed charges[1]	Program reimbursements		Beneficiary obligation	
		Amount	Percent of total	Coinsurance	Deductible
	Amount in millions			Amount in millions	
1986	$25,945	$19,500	75.2	$4,875	$1,570
1985	23,705	17,753	74.9	4,438	1,514
1984	21,402	15,967	74.6	3,992	1,443
1983	19,431	14,478	74.5	3,587	1,366
1982	16,599	12,250	73.8	3,030	1,319

[1]Excludes beneficiary responsibility for amounts in excess of reasonable charge on unassigned claims.

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

Table 12

Amount and percent distribution of Medicare-allowed charges for physicians/suppliers, by type of service and place of service: 1982-86

Type of service and place of service	1986	1985	1984	1983	1982	1986	1985	1984	1983	1982
	Amount in millions					Percent distribution				
Total	$25,945.0	$23,705.0	$21,402.0	$19,431.0	$16,599.0	100.0	100.0	100.0	100.0	100.0
Medical	7,872.2	7,460.3	6,999.0	6,675.8	5,969.0	30.3	31.5	32.7	34.4	36.0
Office	3,727.5	3,456.3	3,053.0	2,738.7	2,403.7	14.4	14.6	14.3	14.1	14.5
Inpatient	3,247.1	3,206.8	3,269.7	3,368.4	3,044.3	12.5	13.5	15.3	17.3	18.3
Outpatient hospital	493.5	359.3	297.4	238.4	222.9	1.9	1.5	1.4	1.2	1.3
Other	404.1	437.9	379.0	330.3	298.1	1.6	1.8	1.8	1.7	1.8
Surgical	7,986.1	7,156.2	6,472.5	5,709.5	4,781.3	30.8	30.2	30.2	29.4	28.8
Office	1,241.0	1,088.2	878.2	738.3	601.2	4.8	4.6	4.1	3.8	3.6
Inpatient	4,551.5	4,463.4	4,801.1	4,546.6	3,919.2	17.5	18.8	22.4	23.4	23.6
Outpatient hospital	2,096.4	1,526.7	735.7	382.1	228.2	8.1	6.4	3.4	2.0	1.4
Other	97.1	77.9	57.5	42.5	32.7	0.4	0.3	0.3	0.2	0.2
Consultation	818.1	699.4	659.4	595.6	502.0	3.2	3.0	3.1	3.1	3.0
Office	175.5	148.1	121.9	104.1	85.1	0.7	0.6	0.6	0.5	0.5
Inpatient	603.1	519.4	509.4	468.1	398.0	2.3	2.2	2.4	2.4	2.4
Outpatient hospital	22.0	18.2	14.9	12.0	10.0	0.1	0.1	0.1	0.1	0.1
Other	17.5	13.7	13.2	11.4	9.0	0.1	0.1	0.1	0.1	0.1
Diagnostic X-ray	2,213.5	1,918.6	1,700.9	1,515.4	1,238.1	8.5	8.1	7.9	7.8	7.5
Office	851.2	775.0	635.0	554.9	471.3	3.3	3.3	3.0	2.9	2.8
Inpatient	826.0	742.3	742.5	704.9	573.2	3.2	3.1	3.5	3.6	3.5
Outpatient hospital	469.8	335.3	267.4	210.2	156.9	1.8	1.4	1.2	1.1	0.9
Other	66.4	66.0	56.0	45.4	36.6	0.3	0.3	0.3	0.2	0.2
Clinical laboratory	2,439.1	2,184.4	1,952.5	1,798.0	1,519.1	9.4	9.2	9.1	9.3	9.2
Office	1,073.8	983.4	931.0	832.0	704.9	4.1	4.1	4.4	4.3	4.2
Inpatient	451.5	435.2	457.4	524.0	456.0	1.7	1.8	2.1	2.7	2.7
Outpatient hospital	164.3	122.1	94.0	68.7	53.7	0.6	0.5	0.4	0.4	0.3
Other[1]	749.4	643.7	470.1	373.2	304.5	2.9	2.7	2.2	1.9	1.9
Radiation therapy	314.5	273.7	238.1	214.7	180.4	1.2	1.2	1.1	1.1	1.1
Office	134.1	110.5	87.8	73.8	60.0	0.5	0.5	0.4	0.4	0.4
Inpatient	41.1	37.1	41.9	49.4	53.8	0.2	0.2	0.2	0.3	0.3
Outpatient hospital	131.3	118.4	101.6	86.0	62.9	0.5	0.5	0.5	0.4	0.4
Other	8.0	7.7	6.8	5.5	3.6	0.0	0.0	0.0	0.0	0.0
Anesthesia	981.6	945.0	871.7	805.8	695.2	3.8	4.0	4.1	4.1	4.2
Office	6.9	9.1	4.3	3.3	2.5	0.0	0.0	0.0	0.0	0.0
Inpatient	777.2	808.6	819.3	783.7	681.5	3.0	3.4	3.8	4.0	4.1
Outpatient hospital	191.4	119.7	44.1	18.2	11.0	0.7	0.5	0.2	0.1	0.1
Other	6.1	7.7	3.9	0.6	0.2	0.0	0.0	0.0	0.0	0.0
Assistance at surgery	322.9	356.8	327.2	291.3	254.3	1.2	1.5	1.5	1.5	1.5
Office	4.9	7.6	4.1	3.8	3.1	0.0	0.0	0.0	0.0	0.0
Inpatient	285.6	284.2	294.1	278.2	247.7	1.1	1.2	1.4	1.4	1.5
Outpatient hospital	30.2	62.0	27.8	8.9	3.4	0.1	0.3	0.1	0.0	0.0
Other	2.2	3.1	1.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0
Other type of service	2,997.1	2,710.7	2,180.8	1,825.0	1,459.7	11.6	11.4	10.2	9.4	8.8
Office	294.7	162.8	100.9	86.3	80.8	1.1	0.7	0.5	0.4	0.5
Inpatient	34.9	64.7	18.9	82.2	84.3	0.1	0.3	0.1	0.4	0.5
Outpatient hospital	159.4	50.8	23.3	14.6	12.3	0.6	0.2	0.1	0.1	0.1
Other	2,508.2	2,432.4	2,037.7	1,642.0	1,282.2	9.7	10.3	9.5	8.5	7.7

[1]Includes independently billing laboratories.

NOTE: Data for ambulatory surgical centers are included in outpatient hospital.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system and the 5-Percent Sample Bill Summary Record.

allowed charges during the period. Other sectors, particularly charges for diagnostic X-rays, clinical laboratory services, and miscellaneous goods and services, contributed significantly also. A more detailed examination of major changes from 1985 to 1986, made possible by HCFA's new statistical system, BMAD, provides further insight into these long-term trends.

Physician charges and services, 1985-86

Medical

In the prior section, we saw that overall charges for medical services increased only one-half as fast as

charges for all services from 1983 to 1986. This relative rate of change was corroborated for 1985 to 1986 by analysis of detailed procedure-specific data first available in 1985 from BMAD. A more detailed examination of trends in medical services provides some insight into these changes.

Medical charges are made for physician visits and for a wide variety of diagnostic and therapeutic services. In 1986, charges for physician visits comprised about 46 percent of all office medical charges and about 75 percent of all Medicare inpatient hospital medical charges.

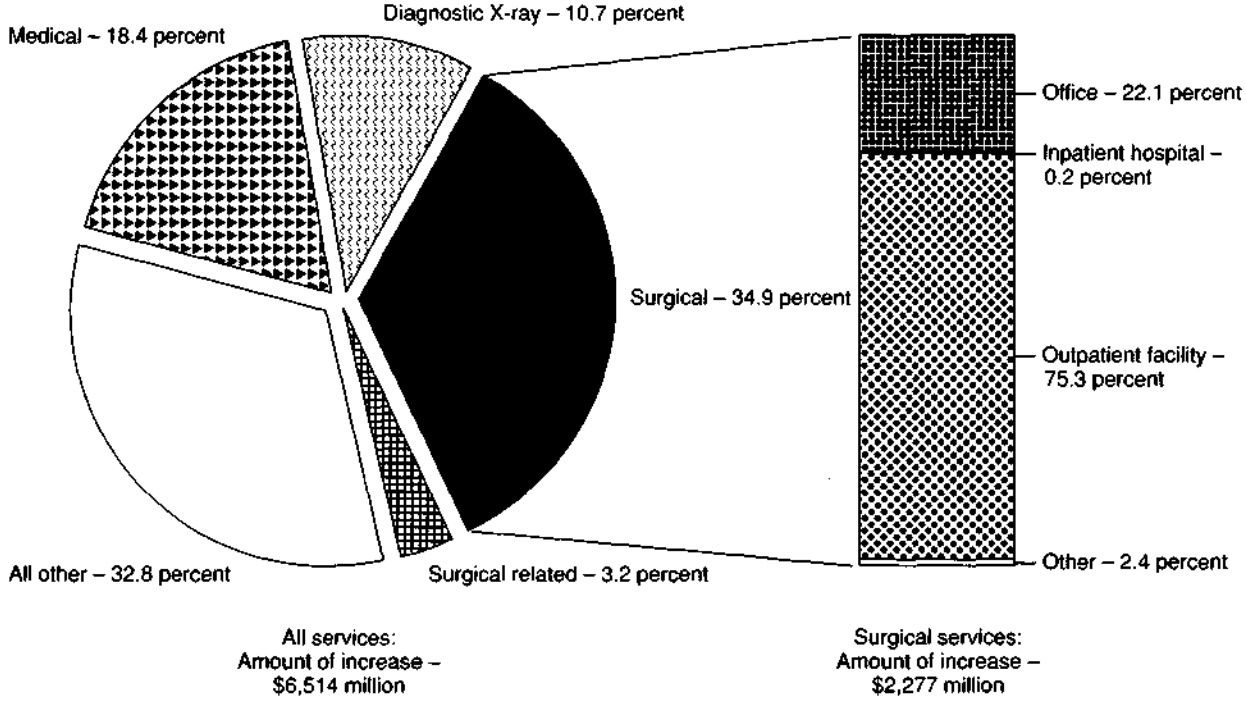
The structure of physician visits in both office and inpatient settings changed significantly from 1985 to 1986. Inpatient hospital visits decreased from 87 million to 80 million, but office visits increased from 73 to 76 million (Tables 15 and 16). Average charges for inpatient hospital visits increased slightly faster, 5.4 percent, than average charges for office visits, 4.7 percent. The offsetting effect of these changes resulted in a relatively minimal increase in total visit charges for both settings combined, only $64 million (3 percent of the increase in total physician charges from 1985 to 1986).

Changes in the mix of visits in both office and inpatient hospital settings are evident from the data in Tables 15 and 16. In particular, such changes contributed about one-third of the increase in average charges for "established patient" office visits and "subsequent care" inpatient hospital visits. However, declining hospital utilization and increasing intensity of inpatient hospital care, noted in the prior sections, and the simultaneous increase in office care for persons who would otherwise be hospitalized seems to explain at least part of the changes in the mix of services. Increases in office medical charges for ophthalmological services and cardiography from 1985 to 1986 (about $150 million) and increases in office visit charges (about $148 million) accounted for most of the increase in total office charges during the period.

Total charges for medical services grew more slowly than charges for other types of service from 1985 to 1986, largely because of declining charges for inpatient hospital physician visits. If inpatient hospital admissions increase (as they apparently did in 1987) and if inpatient hospital lengths of stay remain stable (as they apparently did in 1987), charges for physician inpatient visits are a likely source of future growth in Medicare SMI spending (Table 12).

Figure 4

Percent distributions of sources of increase in Medicare-approved charges for physicians/suppliers, by type of service, and for surgical services, by place of service: 1983-86



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System and the 5-Percent Sample Bill Summary Record.

Surgical

The largest single source of growth in surgical charges was cataract lens surgery. These procedures (HCFA Common Procedure Coding System, or HCPCS, numbers 66980, 66983, and 66984) accounted for 18 percent of all surgical charges in 1986 and one-third of all increases in surgical charges from 1985 to 1986 (Tables 12 and 17, Figure 5). The total number of surgical cataract lens procedures increased 18 percent from 1985 (735,000) to 1986 (869,000). The Medicare population increased only 2 percent, so it is evident that per capita cataract procedures increased 16 percent in the 1-year period. Most of the growth occurred in outpatient facility settings.

Surgical procedures other than cataract lens operations have also shifted from inpatient hospital to outpatient facility settings. For example, two major groups of endoscopies (related to the esophagus and to the rectum) shifted from both office and inpatient settings to outpatient facility settings from 1985 to 1986 (Table 18). The relatively rapid growth in boththe volume and price of these procedures accounted for about $113 million of total surgical charge increases from 1985 to 1986.

Table 13

Amount and percent distribution of Medicare-allowed charges for physicians/suppliers for selected places of service, by type of service: 1982-86

Place of service and type of service	1986	1985	1984	1983	1982	1986	1985	1984	1983	1982
	Amount in millions					Percent distribution				
Total	$22,085.9	$20,015.2	$18,376.7	$16,979.9	$14,631.9	100.0	100.0	100.0	100.0	100.0
Office	7,509.6	6,741.0	5,816.2	5,135.2	4,412.5	34.0	33.7	31.6	30.2	30.2
Medical	3,727.5	3,456.3	3,053.0	2,738.7	2,403.7	16.9	17.3	16.6	16.1	16.4
Surgical	1,241.0	1,088.2	878.2	738.3	601.2	5.6	5.4	4.8	4.3	4.1
Diagnostic X-ray	851.2	775.0	635.0	554.9	471.3	3.9	3.9	3.5	3.3	3.2
Clinical laboratory	1,073.8	983.4	931.0	832.0	704.9	4.9	4.9	5.1	4.9	4.8
Other	616.1	438.1	319.0	271.3	231.4	2.8	2.2	1.7	1.6	1.6
Inpatient hospital	10,818.0	10,561.7	10,954.3	10,805.5	9,458.1	49.0	52.8	59.6	63.6	64.6
Medical	3,247.1	3,206.8	3,269.7	3,368.4	3,044.3	14.7	16.0	17.8	19.8	20.8
Surgical	4,551.5	4,463.4	4,801.1	4,546.6	3,919.2	20.6	22.3	26.1	26.8	26.8
Consultation	603.1	519.4	509.4	468.1	398.0	2.7	2.6	2.8	2.8	2.7
Diagnostic X-ray	826.0	742.3	742.5	704.9	573.2	3.7	3.7	4.0	4.2	3.9
Clinical laboratory	451.5	435.2	457.4	524.0	456.0	2.0	2.2	2.5	3.1	3.1
Anesthesia	777.2	808.6	819.3	783.7	681.5	3.5	4.0	4.5	4.6	4.7
Assistance at surgery	285.6	284.2	294.1	278.2	247.7	1.3	1.4	1.6	1.6	1.7
Other	76.0	101.8	60.8	131.6	138.2	0.3	0.5	0.3	0.8	0.9
Outpatient hospital	3,758.3	2,712.5	1,606.2	1,039.2	761.3	17.0	13.6	8.7	6.1	5.2
Medical	493.5	359.3	297.4	238.4	222.9	2.2	1.8	1.6	1.4	1.5
Surgical	2,096.4	1,526.7	735.7	382.1	228.2	9.5	7.6	4.0	2.3	1.6
Diagnostic X-ray	469.8	335.3	267.4	210.2	156.9	2.1	1.7	1.5	1.2	1.1
Clinical laboratory	164.3	122.1	94.0	68.7	53.7	0.7	0.6	0.5	0.4	0.4
Radiation therapy	131.3	118.4	101.6	86.0	62.9	0.6	0.6	0.6	0.5	0.4
Anesthesia	191.4	119.7	44.1	18.2	11.0	0.9	0.6	0.2	0.1	0.1
Other	211.6	131.0	66.0	35.6	25.7	1.0	0.7	0.4	0.2	0.2

NOTE: Data for ambulatory surgical centers are included in outpatient hospital.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system and the 5-Percent Sample Bill Summary Record.

Table 14

Number of selected services to Medicare enrollees, by place of service: 1982-86

Type of service and place of service	1986	1985	1984	1983	1982
Medical:			Number in millions		
Office	166.7	161.6	147.1	137.6	131.2
Inpatient	97.1	104.9	110.0	119.7	118.6
Outpatient	15.7	14.6	12.9	11.4	10.4
Surgical:					
Office	22.9	19.5	15.9	14.8	13.5
Inpatient	8.0	8.3	8.6	8.4	8.0
Outpatient	4.4	3.8	1.6	1.6	1.4
Consultation, all places	11.8	10.3	9.3	8.6	7.8
Diagnostic X-ray, all places	63.1	58.6	55.9	49.9	46.5
Assistance at surgery, all places	1.1	1.3	1.2	1.1	1.1

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system and the 5-Percent Sample Bill Summary Record.

Growth in inpatient surgical DRG discharges for circulatory disease was noted earlier (Table 7). Parallel growth in expenditures for inpatient physician services for such conditions also occurred, offsetting, to some extent, shifts in other activities to outpatient sectors. For example, Medicare-approved physician charges for coronary artery bypass surgical procedures increased about $63 million (21 percent) from 1985 to 1986. About one-half of this increase was attributable to the increasing volume of such procedures and one-half to the increasing approved charge per procedure (Table 19). Although a slight shift upward in the complexity of the bypass operations performed can be seen from Table 19, pure price increases accounted for about 95 percent of the increase in average approved charge per procedure.

Rapid growth from 1985 to 1986 in the number of surgical procedures performed in office settings was previously noted (Table 14). Most of this growth was caused by the proliferation of relatively lower priced surgical procedures. For example, surgical procedures related to skin and nail conditions and the destruction of lesions that were performed in office settings accounted for one-half of the growth in the total number of office-performed procedures (Tables 14 and 20) and for about $50 million of the approximately $150 million growth in surgical charges in this setting from 1985 to 1986 (Tables 13 and 20).

Table 15

Percent distribution of office visits for Medicare enrollees and average charge per visit, by patient status and type of visit: 1985 and 1986

Patient status and type of office visit[1]	1986		1985	
	Percent distribution of visits	Average charge	Percent distribution of visits	Average charge
All visits	100.0	$22.82	100.0	$21.79
New patients	7.4	36.34	7.6	34.00
Established patients	92.6	21.74	92.4	20.79
New patients	100.0	36.34	100.0	34.00
Brief service	8.8	21.52	9.4	20.41
Limited service	19.4	26.38	22.2	24.50
Intermediate service	27.8	31.63	26.5	30.96
Extended service	8.5	34.19	8.2	34.09
Comprehensive service	35.5	49.65	33.7	47.20
Established patients	100.0	21.74	100.0	20.79
Minimal service	2.0	12.26	2.5	12.99
Brief service	13.5	15.94	16.0	15.65
Limited service	38.5	19.01	39.2	18.69
Intermediate service	35.3	23.47	32.2	22.41
Extended service	7.2	30.27	6.4	28.94
Comprehensive service	3.5	44.67	3.7	42.36

[1]Includes Health Care Financing Administration Common Procedure Coding System (HCPCS) numbers 90000-90080.

NOTE: The estimated number of office visits is 76.3 million for 1986 and 73.1 million for 1985.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system.

Table 16

Percent distribution of physician visits to Medicare inpatients and average charge per visit, by type and length of visit: 1985 and 1986

Type and length of visit	1986		1985	
	Percent distribution	Average charge	Percent distribution	Average charge
All visits	100.0	$30.56	100.0	$29.00
Initial care	10.8	64.25	10.6	60.45
Subsequent care	86.4	26.37	87.2	25.19
Discharge day management	2.8	30.30	2.2	29.18
Initial care	100.0	64.25	100.0	60.45
Brief	7.9	43.79	10.2	42.94
Intermediate	23.2	55.64	23.9	54.59
Comprehensive	68.9	69.51	65.9	65.29
Subsequent care	100.0	26.37	100.0	25.19
Brief	13.6	19.40	16.5	18.66
Limited	35.6	23.41	36.7	22.94
Intermediate	38.2	28.46	35.9	27.68
Extended	9.1	35.07	8.1	34.20
Comprehensive	3.4	38.21	2.7	35.51
Discharge day management	100.0	30.30	100.0	29.18

NOTE: The estimated number of hospital visits is 79.8 million for 1986 and 87.0 million for 1985.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system.

Table 17

Number of Medicare cataract lens procedures and total and average allowed charges, by place of service: 1985 and 1986

Place of service	1986			1985		
	Number in thousands	Amount in millions	Average charge[1]	Number in thousands	Amount in millions	Average charge[1]
Total	869	$1,432	$1,648	735	$1,163	$1,582
Office	35	54	1,565	32	48	1,502
Inpatient hospital	97	161	1,652	166	262	1,588
Outpatient facility	737	1,217	1,652	537	853	1,582

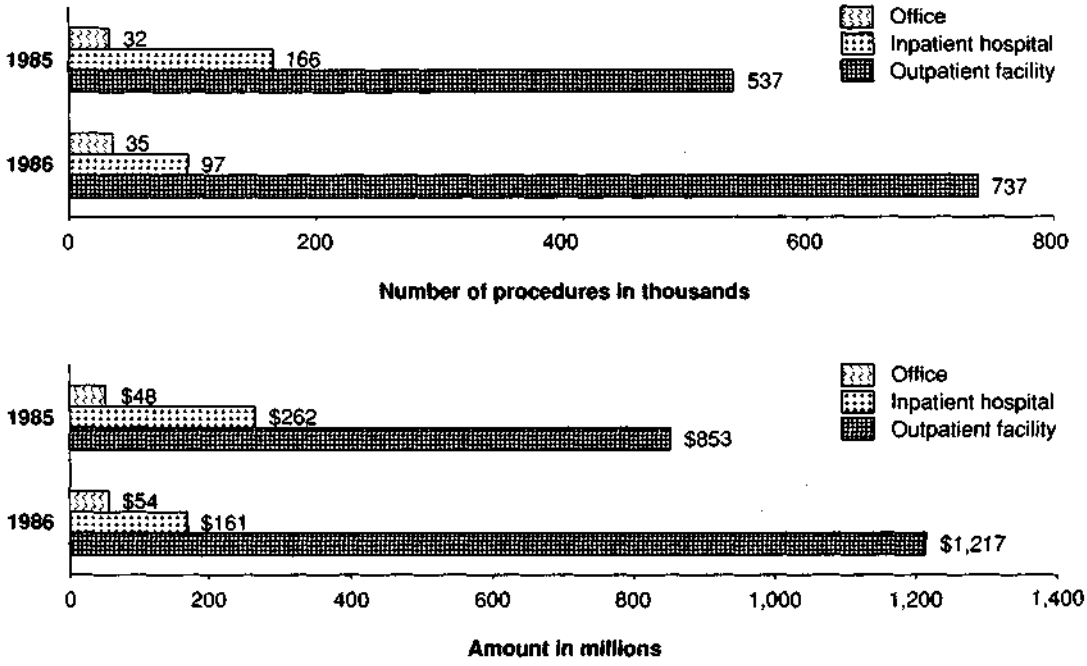
[1]Based on unrounded data.

NOTE: Cataract lens procedures are Health Care Financing Administration Common Procedure Coding System (HCPCS) numbers 66980, 66983, and 66984.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system.

Figure 5

Number of procedures and allowed charges for Medicare cataract lens surgery, by place of service: 1985 and 1986



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system.

Growth in charges for surgical services from 1985 to 1986 was evident for all places of service.

- A shift of charges for cataract lens operations from inpatient to noninpatient settings has been supplemented by a substantial increase in the number of such procedures performed. Further, other types of surgical procedures, primarily diagnostic procedures, are also being shifted to noninpatient settings and are increasing rapidly in number.
- Certain complex surgical procedures continue to be performed in inpatient hospital settings in increasing volume and at increasing cost.
- The proliferation of low-charge surgical procedures in office settings contributed significantly to the growth in total surgical charges. Whether the growth resulted from new services or unbundling of services not previously identified as surgical requires further study.

Charges by physician specialty

Two physician specialties, internal medicine and ophthalmology, accounted for nearly 30 percent of all Medicare-allowed physician charges in 1986 (Table 21). (Nonphysician suppliers of goods and services, allowed charges for local carrier codes not consistent with HCPCS, and clinical laboratory charges paid under fee schedules are excluded from Table 21.) Surgical specialties accounted for the largest share of physician charges for professional services, 37 percent.

The distribution of charges by type of service varies widely by physician specialty. General and family practice and internal medicine specialties derive the bulk of their charges from visits or consultations (Table 22). In contrast, surgical specialties derive only a minimal share of their charges from visits or consultations and most of their charges from surgery or surgery-related types of service.

Conclusion

The period 1983-86 was characterized by decreasing inpatient hospital utilization and by rapid growth in supplementary medical insurance reimbursements, especially reimbursements for physicians and other suppliers of medical services in a noninpatient hospital

Table 18

Percent distribution of Medicare procedures for esophagus and rectum endoscopies and average allowed charge per procedure, by place of service: 1985 and 1986

Place of service	1986		1985	
	Percent distribution	Average charge	Percent distribution	Average charge
Total	100.0	$231.23	100.0	$205.78
Office	41.1	124.93	42.7	106.97
Inpatient hospital	34.1	298.68	36.5	275.55
Outpatient facility	24.8	315.01	20.8	286.52

NOTE: The number of procedures is 2.9 million for 1986 and 2.7 million for 1985.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system.

Table 19

Percent distribution of Medicare inpatient hospital procedures for coronary artery bypass and autogenous graft and average allowed charge per procedure, by number of grafts: 1985 and 1986

Number of grafts	1986		1985	
	Percent distribution	Average charge	Percent distribution	Average charge
Total	100.0	$3,709	100.0	$3,371
One graft	7.3	2,473	8.8	1,914
Two grafts	16.5	3,357	16.8	3,050
Three grafts	34.1	3,719	32.8	3,453
Four grafts	27.4	3,978	26.8	3,689
Five grafts or more	14.6	4,195	14.9	3,840

NOTE: The number of procedures is 98,000 for 1986 and 89,000 for 1985.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system.

setting and for outpatient facility care. Growth in physician surgical charges, primarily for outpatient facility settings, was a primary source of increased charges for physician services. Growth in cataract lens procedures appears to have been a major source of increase in physician charges for surgery in outpatient facilities. Other procedures, mostly diagnostic procedures, also contributed to increases in physician charges for outpatient facility services. As inpatient utilization declined, physician charges appear to have shifted from visit charges to charges for other types of services, primarily surgical, diagnostic X-ray, and clinical laboratory services. These changes in physician billings were accompanied by rapid increases in the use of and expenditures for outpatient facility services.

Technical note

Two basic data sources were used in preparing this article. Administrative data from HCFA's Medicare Statistical System and Hospital Cost Report

Table 20

Number of Medicare surgical procedures performed in physicians' offices and total allowed charges for selected surgical procedures in offices: 1985 and 1986

Procedure	1986		1985	
	Number in millions	Amount in millions	Number in millions	Amount in millions
Total	11.3	$403.4	9.6	$355.3
Skin and nails[1]	6.4	302.8	5.2	271.6
Destruction of lesions and related procedures[2]	4.9	100.6	4.4	83.7

[1]Health Care Financing Administration Common Procedure Coding System (HCPCS) numbers 10000-11970.
[2]HCPCS numbers 17000-17999.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Part B Medicare Annual Data system.

Table 21

Amount and percent distribution of Medicare-allowed charges for physicians' services, by specialty: 1986

Specialty	Total allowed charges in millions	Percent distribution
Total	$19,728	100.0
General practice	1,694	8.6
Family practice	801	4.1
General practice	893	4.5
Medical specialties	5,747	29.1
Cardiology	1,255	6.4
Internal medicine	3,304	16.7
Other	1,188	6.0
Surgical specialties	7,351	37.3
General surgery	1,610	8.2
Ophthalmology	2,546	12.9
Orthopedic surgery	1,086	5.5
Thoracic surgery	676	3.4
Urology	725	3.7
Other	708	3.6
RAP's[1]	2,954	15.0
Anesthesiology	930	4.7
Pathology	217	1.1
Radiology	1,806	9.2
All other	1,983	10.1

[1]Radiologists, anesthesiologists,and pathologists.

SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Part B Medicare Annual Data system.

Information System were supplemented with data from special statistical systems, including the Part B Medicare Annual Data system, the source of data for 1986, and the 5-Percent Sample Bill Summary Record, the source of data for 1982-85.

Data for all files and for all years are incomplete for a variety of reasons.

- 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.

Table 22

Percent distribution of Medicare-allowed charges for physicians' services, by type of service and specialty: 1986

Specialty	Type of service					
	All types of service	Visits and consultations	Other medical	Surgery related[1]	Radiology	Pathology
	Percent distribution					
Total	100.0	32.5	9.8	43.8	12.6	1.3
General practice	100.0	74.0	10.1	11.3	4.5	0.1
Family practice	100.0	76.0	9.9	9.5	4.5	0.1
General practice	100.0	72.2	10.3	13.0	4.4	0.1
Medical specialties	100.0	55.1	18.8	21.7	3.8	0.6
Cardiology	100.0	35.9	32.7	25.7	5.7	0.0
Internal medicine	100.0	68.5	16.4	10.9	3.9	0.3
Other	100.0	38.1	10.8	47.5	1.5	2.1
Surgical specialties	100.0	15.7	2.9	77.9	3.5	0.0
General surgery	100.0	15.7	2.6	80.9	0.8	0.0
Ophthalmology	100.0	16.4	3.6	75.1	4.9	0.0
Orthopedic surgery	100.0	13.4	1.3	77.0	8.3	0.0
Thoracic surgery	100.0	5.4	3.2	90.9	0.5	0.0
Urology	100.0	17.7	0.4	80.1	1.8	0.0
Other	100.0	24.5	5.8	67.9	1.8	0.0
RAP's[2]	100.0	1.5	1.2	32.1	58.7	6.5
Anesthesiology	100.0	0.7	1.1	98.1	0.1	0.0
Pathology	100.0	7.8	0.9	0.8	2.3	88.2
Radiology	100.0	1.2	1.2	1.9	95.7	0.0
All other	100.0	40.1	21.9	26.3	10.7	1.0

[1]Includes surgery, assistance at surgery, and anesthesia.
[2]Radiologists, anesthesiologists, and pathologists.

NOTE: Surgery includes cardiac catheterization.

SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from the Part B Medicare Annual Data system.

- 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 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 point in time.
- Statistical files, such as BMAD, are obtained about 3 months after the close of a reporting period. Therefore, some services incurred in the reporting period are likely to be omitted from such files because not all bills have been recorded by Part B carriers and some bills have been received but have not yet been processed.
- Complete and accurate data for certain subgroups of Medicare enrollees are not available. For example, information on the working aged, who receive primary health insurance coverage under private health insurance, is not clearly distinguished from other fee-for-service data in HCFA's record system. An attempt was made to exclude from this article identifiable utilization data for prepaid health plan enrollees. However, Medicare utilization data for the working aged are difficult to identify; therefore, no attempt was made to exclude data on these persons or their utilization from the analysis. We think that the inclusion of data for these persons had a minimal effect on the overall data and the conclusions in this article.
- Complete data on Part B deductible amounts for certain persons not meeting the Part B deductible are not currently collected in any HCFA administrative or statistical data file and were partially estimated from household survey information.

To adjust for these limitations, we have estimated total utilization, charges, benefit expenditures, and person-use information to ensure internal consistency based on the best data sources available. Thus, benefit expenditures for physicians and other medical suppliers were estimated first. Then the relationships between incurred expenditures and total allowed charges were derived. Finally, the distributions of charges were made from existing statistical files. Our estimates may therefore vary from other estimates from the same data sources.

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