Physician charges and utilization trends

by Winston O. Edwards and Charles R. Fisher

A synopsis of charge and payment trends of Medicare physicians and other noninstitutional suppliers of goods and services is provided in this article. Included are longitudinal variations in charges for services, trends in program expenditures, and patterns in beneficiary liabilities.

Background

Services provided by physicians and other noninstitutional suppliers generate potential payment liabilities that are shared by the supplementary medical insurance (SMI) trust fund and the Medicare patients. Total liabilities are comprised of charges allowed by the Medicare program as “reasonable” charges and “balance billing” charges not allowed as reasonable on unassigned claims. Physicians who do not accept Medicare reasonable charge determinations as their full payment (i.e., do not accept assignment) may bill patients for amounts exceeding reasonable charges (balance billings). Physicians who accept Medicare reasonable charge determinations (i.e., accept assignment) may not bill patients for amounts exceeding reasonable charges. Allowed charges are comprised of amounts paid from the SMI trust fund (program payments) and patient liabilities (coinsurance and deductible amounts). Medicare coinsurance rates are generally 20 percent of allowed charges except for certain fixed-fee services that require no coinsurance or deductible payments.

All tabular data represent total fee-for-service physician and other noninstitutional supplier billings, including all the billings for services of certain hospital-based physicians prior to fiscal year 1984. Institutional billings for medical goods and services (i.e., billings by inpatient hospitals facilities, outpatient hospital facilities, nursing homes, home health agencies, etc.) are not included in this article.

With the inception of the prospective payment system (PPS) in October 1983, all claims for services rendered by fee-for-service physicians and other noninstitutional suppliers have been processed by Part B carriers. Prior to PPS, the services of certain hospital-based physicians were included in hospital bills processed by fiscal intermediaries (combined billing). A portion of the payment on the institutional bill, therefore, represented a professional component.

Hence, an adjustment was necessary for such billings through fiscal year 1983.

Claims for covered Medicare services are sometimes not submitted to Part B carriers because the annual allowed charges are less than the deductible amount; therefore, no program payments are necessary. Estimates of these nonbilled charges are included in the appropriate tables.

Dollar amounts for physician and supplier services in any time period may be portrayed either on a cash-flow basis or on an accrued basis. The former reflects the period in which a payment was made, and the latter reflects the period in which a service was rendered and thus an expense was incurred. Dollar amounts in this article represent accrued amounts.

General trends

Total potential liabilities for physician and supplier services increased sixfold from 1975 to 1987 (Table 1 and Figure 1). Program payments as a percent of total potential liabilities increased steadily from 61.0 percent in 1975 to more than 70.0 percent in 1987 except for a brief interruption in 1982 when the annual SMI deductible amount was raised from $60 to $75. Balance billing as a percent of total potential liabilities steadily increased from 1975 to 1984, but subsequently has declined primarily because of the Medicare Physician Participation Program.

Deductibles as a percent of total potential liabilities have decreased steadily, from 14.7 percent of total liabilities in 1975 to 4.8 percent in 1987, except for 1982 when the annual deductible amount increased. Annual deductible amounts were $50 from 1966 through 1972, $60 from 1973 through 1981, and $75 from 1982 to the present.

Annual rates of change in total potential liabilities have exceeded 10 percent in all years except 1985 and 1986 (Table 2 and Figure 2). However, rates of change were much higher prior to 1982. The average annual rate of growth in program payments from 1976 to 1987 (16.9 percent) was about 1 percentage point larger than the average annual rate of growth in allowed charges (15.7 percent). This was primarily a result of the diminishing effect of the relatively fixed annual deductible amounts in a period of increasing inflation in physician charges. The percent of enrollees exceeding the SMI deductible and receiving payments for physician and supplier services increased from 48.2 percent in 1975 to 68.8 percent in 1986 (Table 3 and Figure 3).

Preliminary data indicate that incurred approved charges billed to Part B carriers were about $33 billion in calendar year 1988, up about 10 percent from 1987. The rate of increase was well below that for 1987 over 1986, 15.8 percent. Estimated total incurred potential liabilities for physician and other

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noninstitutional suppliers of services, including balance billing amounts, were approximately $35.5 billion in 1988, about 8.9 percent above 1987. Balance billing amounts continued to decline in 1988 both in absolute dollar amounts (about $2.3 billion in 1988 compared with $2.5 billion in 1987) and as a percent of total potential liabilities for physician and other noninstitutional supplier of services (about 6.5 percent in 1988 compared with 7.7 percent in 1987).

The relatively slow growth in allowed charges in 1985 and 1986 appears to be related in part to limitations on prevailing charge increases imposed by the Deficit Reduction Act of 1984 and by the Emergency Extension Act of 1985 (Table 2). Other limitations on prevailing charge increases imposed by the Omnibus Budget Reconciliation Act of 1987 appear to have limited the rate of growth in allowed charges in 1988.

Total Medicare per capita potential liabilities in current dollars for physician and supplier services increased from $227 in 1975 to $899 in 1987 (Table 4 and Figure 4). During the period 1975-87, program expenditures increased at a faster average annual rate, 14.4 percent, than did beneficiary potential liabilities, 10.5 percent. Although the balance billing portion of beneficiary liabilities increased at a faster average annual rate during the period 1975-87, 11.3 percent, than copayments (i.e., deductibles and coinsurance), 10.5 percent, balance billing dollar amounts per capita dropped sharply in 1987.

Part of the growth in physician and supplier services as a percent of the gross national product (GNP) and national health expenditure is because of the faster annual rate of growth of the Medicare population, about 2 percent, than the general population, about 1 percent. Increases in Medicare enrollment above the general population growth accounted for only 15 percent of the increase in liabilities as a proportion of the GNP. Medicare prices and services per capita, which together rose faster than general prices and general outputs per capita, accounted for the remaining 85 percent of the increase in liabilities as a percent of the GNP.

Faster growth in the Medicare population accounted for about one-third of the increases in physician and supplier liabilities as a percent of national health

Table 1
Estimated dollar amounts of total potential liability for Medicare physicians and other noninstitutional suppliers of Medicare-covered goods and services and components of total liability: Calendar years 1975-87

| Calendar year | Total potential liability | Balance billing | Allowed charges | Percent distribution |
|---------------|--------------------------|----------------|----------------|---------------------|
|               | Total | Program payments | Coinsurance amount | Deductible amount | Total | Program payments | Coinsurance amount | Deductible amount |
| 1975 | $5,782 | $5,218 | $3,512 | $862 | $544 | $544 |
| 1976 | 6,805 | 6,077 | 4,172 | 1,023 | 730 | 730 |
| 1977 | 8,048 | 7,221 | 5,059 | 1,245 | 825 | 825 |
| 1978 | 9,302 | 8,361 | 5,942 | 1,464 | 941 | 941 |
| 1979 | 10,962 | 9,775 | 7,047 | 1,739 | 1,187 |
| 1980 | 13,371 | 11,785 | 8,628 | 2,132 | 1,586 | 1,586 |
| 1981 | 15,781 | 13,840 | 10,249 | 2,536 | 1,940 | 1,940 |
| 1982 | 18,922 | 16,599 | 12,250 | 3,030 | 2,323 | 2,323 |
| 1983 | 21,990 | 19,431 | 14,478 | 3,587 | 2,559 | 2,559 |
| 1984 | 24,190 | 21,402 | 15,967 | 3,992 | 2,788 | 2,788 |
| 1985 | 26,362 | 23,705 | 17,753 | 4,438 | 2,657 | 2,657 |
| 1986 | 28,892 | 25,945 | 19,500 | 4,875 | 2,947 | 2,947 |
| 1987 | 32,550 | 30,050 | 22,800 | 5,700 | 2,500 | 2,500 |

1Total potential liabilities are the sum of balance billings, program payments, coinsurance amounts, and deductible amounts. The amounts of potential liabilities for balance billing, coinsurance, and deductibles actually collected are unknown.

NOTE: Excludes amounts paid on Medicare secondary payer claims by private insurers. The amount of such payments on claims submitted to Part B carriers was $468 million in fiscal year 1988.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System and Bureau of Program Operations Workload Report System.
spending. Faster growth in Medicare prices and per capita utilization accounted for the remaining two-thirds.

No general price index is available for Medicare physician average allowed charges under Medicare.

Table 2
Annual rate of change in total liabilities, allowed charges, and program payments under Medicare: Calendar years 1976-87

| Calendar year | Total liabilities | Allowed charges | Program payments |
|---------------|------------------|----------------|-----------------|
| 1976          | 18.1             | 16.5           | 18.8            |
| 1977          | 18.2             | 18.6           | 21.3            |
| 1978          | 15.6             | 15.8           | 17.5            |
| 1979          | 17.8             | 16.9           | 18.6            |
| 1980          | 22.0             | 20.6           | 22.4            |
| 1981          | 18.0             | 17.4           | 18.8            |
| 1982          | 19.9             | 19.9           | 19.5            |
| 1983          | 16.2             | 17.1           | 18.2            |
| 1984          | 10.0             | 10.1           | 10.3            |
| 1985          | 9.0              | 10.2           | 11.2            |
| 1986          | 9.6              | 9.4            | 9.8             |
| 1987          | 12.7             | 15.8           | 16.9            |

Average annual rate
1976-87        15.5  15.7  16.9

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

Table 3
Medicare persons enrolled for supplementary medical insurance and persons receiving benefits for physician and other noninstitutional supplier goods and services: Calendar years 1975-86

| Calendar year | Enrollment1 | Total   | Percent of enrollment |
|---------------|-------------|---------|-----------------------|
| 1975          | 25,369      | 12,261  | 48.2                  |
| 1976          | 26,123      | 13,279  | 50.8                  |
| 1977          | 26,898      | 14,096  | 52.4                  |
| 1978          | 27,617      | 15,182  | 55.0                  |
| 1979          | 28,292      | 16,105  | 56.9                  |
| 1980          | 28,935      | 17,258  | 59.6                  |
| 1981          | 29,522      | 18,097  | 61.3                  |
| 1982          | 29,990      | 18,017  | 60.1                  |
| 1983          | 30,557      | 18,923  | 61.9                  |
| 1984          | 31,030      | 19,960  | 64.3                  |
| 1985          | 31,655      | 21,410  | 67.6                  |
| 1986          | 32,280      | 22,205  | 68.8                  |

1Persons with eligibility for supplementary medical insurance at any time in the calendar year.
2Persons receiving services for which there were Medicare payments.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System, Person Summary File.
However, price trends for office and inpatient hospital visits may be inferred from Laspeyres indexes\(^1\) that are based on 1985 relative weights for each category of visit and 1985, 1986, and 1987 charges for each category of visit. Prices for office visits increased about 3.4 percent from 1985 to 1986 and about 8.6 percent from 1986 to 1987. Prices for inpatient hospital visits increased about 3.1 percent from 1985 to 1986 and about 10.6 percent from 1986 to 1987. Weighted price increase for combined office and inpatient visits increased about 3.3 percent from 1985 to 1986 and about 9.5 percent from 1986 to 1987.

The difference between price increases and average charge per visit increases represents a measure of upcoding of services in the family groups. Upcoding accounted for about 0.8 percentage point of the 4.2 percent increase in average office visit charges from 1985 to 1986 and about 0.7 percentage point of the 9.4 percent increase in average office visit charges from 1986 to 1987. In addition, upcoding accounted for about 1.9 percentage points of the 5.0 percent increase in average inpatient hospital visit charges from 1985 to 1986 and about 0.6 percentage point of the 11.3 percent increase in average inpatient hospital visit charges from 1986 to 1987. Amounts paid by private insurers on Medicare services as secondary payer claims for physician and supplier services are not detailed in this article. The total amount of these payments in fiscal year 1988 was about $468 million.

\(^1\)A weighted aggregative price index, using base year quantities.
Figure 3

Persons enrolled for supplementary medical insurance (SMI) and persons receiving benefits for physician and other noninstitutional suppliers of goods and services under Medicare: 1975-86

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System, Person Summary File.
Table 4
Total potential liability, program expenditures, and potential beneficiary liability per Medicare enrollee, in current dollars:
Calendar years 1975-87

| Calendar year | Total potential liability^1 | Program expenditures | Potential beneficiary liability^1 |
|---------------|----------------------------|----------------------|----------------------------------|
|               | Amount     | Percent | Amount | Percent | Amount | Percent | Amount | Percent |
| 1975          | $227       | 100.0   | $138   | 61.0    | $89    | 39.0    | $21    | 9.4     | $67    | 29.6   |
| 1976          | 260        | 100.0   | 160    | 61.3    | 100    | 38.7    | 28     | 10.7    | 73     | 28.1   |
| 1977          | 299        | 100.0   | 183    | 62.9    | 116    | 37.1    | 31     | 10.3    | 80     | 26.9   |
| 1978          | 337        | 100.0   | 215    | 63.9    | 122    | 38.1    | 34     | 10.1    | 88     | 26.0   |
| 1979          | 387        | 100.0   | 248    | 64.3    | 138    | 35.7    | 42     | 10.8    | 96     | 24.9   |
| 1980          | 462        | 100.0   | 298    | 64.5    | 164    | 35.5    | 55     | 11.9    | 109    | 23.6   |
| 1981          | 562        | 100.0   | 374    | 65.0    | 188    | 35.0    | 66     | 11.7    | 122    | 21.6   |
| 1982          | 631        | 100.0   | 408    | 64.7    | 223    | 35.3    | 77     | 12.3    | 145    | 23.0   |
| 1983          | 720        | 100.0   | 474    | 65.8    | 246    | 34.2    | 84     | 11.6    | 162    | 22.5   |
| 1984          | 780        | 100.0   | 515    | 66.0    | 265    | 34.0    | 90     | 11.5    | 175    | 22.5   |
| 1985          | 833        | 100.0   | 561    | 67.3    | 272    | 32.8    | 84     | 10.1    | 188    | 22.6   |
| 1986          | 895        | 100.0   | 604    | 67.5    | 291    | 32.5    | 91     | 10.2    | 200    | 22.3   |
| 1987          | 989        | 100.0   | 693    | 70.1    | 296    | 29.9    | 76     | 7.7     | 221    | 22.3   |

Average annual percentage change
1975-87  13.0  14.4  10.5  11.3  10.5

^1Potential liability represents dollar amounts incurred for services of providers. Amounts of beneficiary potential liability actually collected are unknown.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System and Bureau of Program Operations Workload Report System.
Figure 4
Total potential liability, program expenditures, and beneficiary liability per Medicare enrollee, in current dollars: Calendar years 1975-87

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