reporting receiving private pensions from their longest job accounted for about 80 percent of the respondents on private pensions in the income section of the survey questionnaire. Furthermore, respondents reporting receiving private pension amounts from longest job represented 95 percent of all questionnaires in which private pensions were reported to be received on one or more sections of the job questions. As the tabulation shows, men who were not employed at the time of the survey whose most recent (last) job was their longest job made up the vast majority of those responding on private pension receipt from longest jobs.

### Response to the Survey

Because the large majority of questionnaires were completed by the respondents themselves and returned by mail, the incidence of omitted or incomplete responses may be relatively higher than it would have been if the survey were conducted by personal interview. In surveys—both those conducted by mail and those through personal interviews—the highest rates of nonresponse are among items related to current income.

Response to the pension questions was high for

private wage and salary jobs, as the following percentages indicate: the rate was 92 percent for the question on coverage and 94 percent for the question on pension amount. The rates were identical for men and women.

The response rates for characteristics such as industry, occupation, duration on longest job, and interval since longest job were also high. The response rates for earnings on longest job for persons receiving private pensions, however, were slightly lower than those for the question on pension amount: 89 percent for the entire group, 90 percent for men, and 85 percent for women.

For SNEB, income reports were obtained for varying reference periods, with the amounts reported to be converted to "annual rates." Earnings are reported by the hour, week, month, or year, at the option of the respondent. When the earnings are reported by the hour or week, the annual rate is obtained by applying the reported hours of work per week and/or number of weeks worked per year, as appropriate. Monthly earnings are multiplied by 12. Private pension benefits are reported by the month and are multiplied by 12 to obtain an annual rate. The data presented on P/E ratios are, therefore, based on the estimated annual rates of earnings and private pensions.

# Notes and Brief Reports

## Utilization and Reimbursements Under Medicare for 1967 and 1968 Decedents\*

Deaths are relatively frequent in the population aged 65 and over and often are preceded by serious illnesses requiring substantial expenditures for medical services. Many of these aged decedents were among Medicare beneficiaries for whom large reimbursements were made under the program. In light of the concern with rising Medicare costs, it is important to examine the size of reimbursements for decedents, as their services and charges represent a relatively inflexible proportion of the total.

The numbers of persons enrolled in the Medicare program who died during 1967 and 1968 and the amount reimbursed on their behalf for covered services are contrasted here with the experience of survivors in the same period. Tabular data for both years are presented. Though the analysis makes reference only to the 1967 figures, the relationships are the same for both years.

Of the 21 million persons aged 65 and over who were enrolled under Medicare for some time during 1967, about 5.4 percent died. Twenty-two percent of all reimbursements under the program were made on behalf of these decedents. In general, under every part of the program, proportionately more persons who died used reimbursed medical services (table 1).

<sup>\*</sup>Prepared by Paula A. Piro and Theodore Lutins, Division of Health Insurance Studies, Office of Research and Statistics.

| TABLE 1.—Number en | enrolled and percent | served under Medicare | by type of service and survival st | atus, 1967 and 1968 |
|--------------------|----------------------|-----------------------|------------------------------------|---------------------|
|--------------------|----------------------|-----------------------|------------------------------------|---------------------|

|   | Total ever enrolled,<br>served in year   |   | Persons served, alive<br>at end of year  |   | Persons served who<br>died during year <sup>1</sup>   |  |
|---|--|---|--|---|---|--|
| Type of service reimbursed  | Number<br>(in thou-<br>sands)  | Percent   | Number<br>(in thou-<br>sands)  | Percent   | Number<br>(in thou-<br>sands)   | Percent  |
| , r 1   | 1967   |   |  |   |   | ·  |
| Total enrollment  | 20,716   | <u> </u>  | 19,602   |   | 1,114   |  |
| Hospital insurance and/or supplementary medical insurance.<br>Both hospital insurance and supplementary medical insurance.<br>Hospital insurance only.<br>Supplementary medical insurance only.<br>Hospital insurance.<br>Inpatient hospital services.<br>Outpatient hospital services.<br>Home health agency services.<br>Supplementary medical insurance.<br>Physician and other medical services.<br>Outpatient hospital services.<br>Home health agency services.<br>Home health agency services. | 3,328<br>632<br>3,195<br>3,960<br>3,601<br>466<br>354<br>126<br>6,523<br>6,415<br>1,045                        | $\begin{array}{c} 34 \ 5\\ 16 \ 1\\ 3 \ 0\\ 15 \ 4\\ 19 \ 1\\ 17 \ 4\\ 2 \ 2\\ 1.7\\ 0 \ 6\\ 31 \ 0\\ 5 \ 0\\ 0 \ 6\end{array}$ | 6,362<br>2,781<br>477<br>3,104<br>3,258<br>2,920<br>436<br>258<br>101<br>5,884<br>5,783<br>961<br>97                       | 32.5<br>14.2<br>24<br>15.8<br>16.6<br>14.9<br>2<br>2.3<br>30.0<br>29.5<br>4.9<br>.5                                       | 793<br>547<br>154<br>91<br>702<br>681<br>30<br>96<br>25<br>639<br>632<br>632<br>632<br>84<br>21           | $\begin{array}{c} 71.2\\ 49.1\\ 13.8\\ 8.2\\ 63.0\\ 61.1\\ 2.7\\ 8.6\\ 2.3\\ 57.3\\ 56.7\\ 7.6\\ 1.9\end{array}$ |
| · · · ·   | 1968   |   |  |   |   |  |
| Total enrollment  | 21,055   |   | 19,854   |   | 1,201   |  |
| Hospital insurance and/or supplementary medical insurance_<br>Both hospital insurance and supplementary medical insurance.<br>Hospital insurance only.<br>Hospital insurance<br>Inpatient hospital services.<br>Outpatient hospital services.<br>Extended-care facilities services.<br>Home health agency services.<br>Supplementary medical insurance.<br>Physician and other medical services.<br>Outpatient hospital services.<br>Home health agency services.                                     | $\begin{array}{r} 3,573\\ 461\\ 3,850\\ 4,034\\ 3,897\\ 148\\ 401\\ 164\\ 7,423\\ 7,251\\ 1,364\\ \end{array}$ | $\begin{array}{c} 37.4\\ 17.0\\ 2.2\\ 18.3\\ 19.2\\ 18.5\\ .7\\ 1.9\\ .8\\ 35.3\\ 34\\ 36.5\\ .6\\ .6\end{array}$               | $\begin{array}{c} 7,013\\ 2,940\\ 324\\ 3,749\\ 3,264\\ 3,141\\ 132\\ 289\\ 131\\ 6,689\\ 6,625\\ 1,253\\ 112 \end{array}$ | $\begin{array}{c} 35 \ 3\\ 14 \ 8\\ 1.6\\ 18.9\\ 16 \ 4\\ 15 \ 8\\ .7\\ 1.5\\ .7\\ 33 \ 7\\ 32.9\\ 6 \ 3\\ .6\end{array}$ | 871<br>632<br>137<br>102<br>769<br>755<br>16<br>112<br>33<br>734<br>726<br>724<br>726<br>112<br>112<br>24 | 72 5<br>52 7<br>11 4<br>8 5<br>64.0<br>62.9<br>1.3<br>9.3<br>2.7<br>61.1<br>60 5<br>9.3<br>2.0                   |

<sup>1</sup> Represents HI terminations.

Among the decedents, 71.2 percent had used some reimbursed service, more than double the proportion for the Medicare population alive at the end of 1967 (32.5 percent). The average reimbursement recorded for decedents—\$1,157 was also more than twice that paid out for survivors—\$522 (table 2).

With only one exception, every type of reimbursed service was used by proportionately more decedents than survivors. For users of supplementary medical insurance (SMI) services only, the percentage served was lower for decedents, as might be expected in a seriously ill population. Among all persons who used SMI services, reimbursements were almost twice as frequent for decedents than for survivors. The contrast among persons reimbursed for hospital insurance (HI) services was even greater: the percentage of decedents reimbursed was almost four times larger than the proportion for survivors.

The average reimbursement for services during the year is higher for decedents using most types of covered services than the average for survivors. Reimbursements for services in extended-care facilities and from home health agencies are exceptions, with average amounts lower for decedents than for survivors. These high average expenditures are reflected again in the proportion of all amounts reimbursed for the different Medicare services that went to persons dying in the year. The decedents accounted for 25 percent of all HI reimbursements and 14 percent of SMI.

#### DISTRIBUTION OF REIMBURSEMENTS

As noted in an earlier publication,<sup>1</sup> a small proportion of Medicare beneficiaries account for a disproportionately large share of the total reimbursements. Of all persons reimbursed in 1967, the 7.5 percent whose individual reimbursements

<sup>&</sup>lt;sup>1</sup>See Medicare: Health Insurance for the Aged, 1967, Section 1: Summary, Social Security Administration, Office of Research and Statistics, 1971.

| Type of service reimbursed  | All reimbursements   |   | Reimbursements for<br>persons alive at<br>end of year  |   | Reimbursements for persons<br>who died during year  |   |  |
|---|--|---|--|---|---|---|--|
| · · · ·   | Total (in<br>thousands)  | Average<br>amount   | Total (in<br>thousands)  | Average<br>amount   | Total (in<br>thousands)   | Average<br>amount   | As percent<br>of all<br>reimburse-<br>ments  |
|   | 1967   |   |  |   |   |   |  |
| Total   | \$4,238,633  | \$592   | \$3,321,318  | \$522   | \$917,315   | \$1,157   | 21.6   |
| Both hospital insurance and supplementary medical insurance<br>Hospital insurance only<br>Supplementary medical insurance only<br>Hospital insurance.<br>Inpatient hospital services.<br>Extended-care facilities services.<br>Home health agency services.<br>Supplementary medical insurance.<br>Physician and other medical services.<br>Outpatient hospital services.<br>Home health agency services.         | 286,773<br>288,487<br>2,966,732<br>2,659,393<br>-7,261<br>274,295<br>25,783<br>1,271,901<br>1,223,845<br>-30,995                       | $1,101 \\ 454 \\ 90 \\ 749 \\ 738 \\ 16 \\ 774 \\ 204 \\ 195 \\ 191 \\ 30 \\ 145$ | $\begin{array}{r} 2,847,196\\ 198,804\\ 275,549\\ 2,233,278\\ 1,993,055\\ 6,721\\ 211,623\\ 21,979\\ 1,088,040\\ 1,044,887\\ 28,170\\ 14,983\\ \end{array}$  | 1.024<br>416<br>89<br>685<br>683<br>15<br>819<br>218<br>185<br>181<br>29<br>154 | 816,465<br>87,969<br>12,938<br>733,454<br>666,338<br>540<br>62,772<br>3,804<br>183,861<br>178,958<br>2,825<br>2,078 | $1.491 \\ 571 \\ 142 \\ 1.045 \\ 978 \\ 18 \\ 654 \\ 150 \\ 288 \\ 283 \\ 34 \\ 100 \\$ | $\begin{array}{c} 22.3\\ 30.7\\ 4.5\\ 24.7\\ 25.1\\ 7.4\\ 22.9\\ 14.8\\ 14.5\\ 14.6\\ 9.1\\ 12.2\end{array}$ |
|   | 1968   |   |  |   |   |   |  |
| Total   | \$5,282,992  | \$670   | \$4,101,647  | \$585   | \$1,181,345   | \$1,356   | 22.4   |
| Both hospital insurance and supplementary medical insurance<br>Hospital insurance only<br>Supplementary medical insurance only<br>Inpatient hospital services.<br>Outpatient hospital services.<br>Extended-care facilities services.<br>Home health agency services.<br>Supplementary medical insurance<br>Physician and other medical services.<br>Home health agency services.<br>Home health agency services. | $\begin{array}{c} 236,738\\ 362,937\\ 3,769,172\\ 3,401,047\\ 2,091\\ 327,393\\ 38,642\\ 1,513,821\\ 1,437,023\\ 54,620\\ \end{array}$ | 1,311<br>513<br>94<br>934<br>873<br>14<br>817<br>236<br>204<br>198<br>40<br>164   | $\begin{array}{c} \textbf{3,600,430}\\ \textbf{153,217}\\ \textbf{348,414}\\ \textbf{2,811,910}\\ \textbf{2,525,786}\\ \textbf{1,863}\\ \textbf{261,303}\\ \textbf{32,959}\\ \textbf{1,289,738}\\ \textbf{1,220,593}\\ \textbf{1,220,593}\\ \textbf{49,692}\\ \textbf{19,453} \end{array}$ | 1,225<br>472<br>93<br>861<br>804<br>14<br>870<br>252<br>193<br>187<br>40<br>174 | $1,083,670\\83,521\\14,523\\957,262\\875,261\\228\\76,090\\5,683\\216,430\\4,928\\2,725$                            | $1,713 \\ 611 \\ 143 \\ 1,244 \\ 1,158 \\ 15 \\ 680 \\ 174 \\ 305 \\ 298 \\ 44 \\ 114$  | 23.1<br>35.3<br>4.0<br>25.4<br>25.7<br>10.9<br>23.2<br>14.7<br>14.8<br>15.1<br>9.0<br>12.3                   |

TABLE 2.—Total and average reimbursements per person served under Medicare, by type of service and survival status, 1967 and 1968

were \$2,000 or more accounted for almost 40 percent of the amount reimbursed. When amounts paid out for illnesses of persons who died in 1967 are estimated separately, the concentration of large reimbursements amounts (as might be expected) is increased. The 19 percent of the decedents who were reimbursed amounts of \$2,000 or more accounted for more than half of the expenditures for all decedents (table 3). Of all persons with reimbursements at that level, 28 percent were beneficiaries who died in 1967.

## SOURCE AND QUALIFICATION OF DATA

In summarizing Medicare utilization and reimbursement of beneficiaries for whom HI coverage was terminated because of death either during 1967 or 1968, the number of deaths of enrollees was assumed to be the same as the number of terminations recorded in that program. The small number of deaths among persons insured for SMI only was ignored. Since termination of HI benefits occurs in the month following death, 1967 deaths include terminations in the period February 1967-January 1968.<sup>2</sup> Deaths in 1968 include terminations from February 1968 through January 1969. Selected tables paralleling figures published <sup>3</sup> earlier for the total Medicare population were prepared with respect to all HI benefit terminations. Except in table 3, utilization and reimbursements for decedents were subtracted from figures for the total population to obtain the experiences for beneficiaries alive at the end of the year. In table 3, reimbursements by dollar class were estimated for all population groups.

The HI terminations are based on a total count of these events, but the utilization and reimbursement figures are inflated from records for a 5percent sample of the population. The number

<sup>&</sup>lt;sup>2</sup> Because of differences in the population covered and in the reports of age at death, as well as possible delays in recording deaths in the Social Security Administration file, these figures do not correspond exactly to data on deaths published by the Division of Vital Statistics, National Center for Health Statistics.

<sup>&</sup>lt;sup>3</sup> Medicare . . . 1967, Section 1: Summary, op. cit., and Medicare: Health Insurance for the Aged, 1968, Section 1: Summary (in press).

TABLE 3.—Number and percentage distribution of persons served and estimated reimbursements under Medicare, by survival status and amount of reimbursement, 1967 and 1968

|   | Persons alive at end of year   |   |  |  | Persons who died during year   |   |  |  |  |  |
|---|--|---|--|--|--|---|--|--|--|--|
| Amount reimbursed   | Persons served   |   | Estimated<br>reimbursement   |  | Persons served   |   | Estimated<br>reimbursement   |  | Number<br>served as                                      |  |
|   | Number   | Percent-<br>age dis-<br>tribution                         | Amount<br>(in thou-<br>sands)  | Percent-<br>age dis-<br>tribution                        | Number   | Percent-<br>age dis-<br>tribution                         | Amount<br>(in thou-<br>sands)  | Percent-<br>age dis-<br>tribution  | percent of<br>all persons<br>served                      |  |
|   | 1967   |   |  |  |  |   |  |  |  |  |
| Total   | 6,361,720  | 100 0   | \$3,321,318  | - 100 0  | 792,680  | 100.0   | \$917,315  | 100 0  | 11.1   |  |
| Less than \$50<br>50-99<br>100-249<br>250-499<br>500-999<br>1,000-1,499<br>1,500-1,999<br>2,000 or more | 780,060<br>846,780   | 27.0<br>14.2<br>16.7<br>12 3<br>13 3<br>6 7<br>3 7<br>6 0 | 65,022<br>67,710<br>172,649<br>284,188<br>615,938<br>533,900<br>416,255<br>1,165,656 | 20<br>20<br>52<br>86<br>185<br>161<br>125<br>351         | 73,800<br>47,020<br>91,620<br>107,000<br>147,660<br>103,060<br>70,380<br>152,240 | 9.3<br>59<br>11.6<br>13.5<br>18.6<br>13.0<br>8.9<br>19.2  | $\begin{array}{r} 2,796\\ 4,347\\ 13,851\\ 37,947\\ 108,868\\ 127,327\\ 122,051\\ 500,128\\ \end{array}$ | $\begin{array}{c} & .3 \\ .5 \\ 1.5 \\ 4 \\ 11.9 \\ 13 \\ 9 \\ 13 \\ 3 \\ 54 \\ 5 \end{array}$ | 4.1<br>50<br>7.9<br>12.1<br>14.8<br>19.4<br>22.8<br>28.4 |  |
|   | 1968   |   |  |  |  |   |  |  |  |  |
| Total   | 7,013,060  | 100.0   | \$4,101,647  | 100.0  | 871,040  | 100.0   | \$1,181,345  | 100.0  | 11.0   |  |
| Less than \$50<br>50-99<br>100-249<br>500-999<br>500-999<br>1,000-1,499<br>1,500-1,999<br>2,000 or more | 1,900,180<br>969,380<br>1,138,200<br>818,520<br>900,840<br>479,700<br>277,340<br>528,900 | 27.1<br>13.8<br>16 2<br>11.7<br>12.8<br>6.8<br>4.0<br>7.5 | 81,119<br>72,704<br>184,880<br>297,857<br>656,040<br>599,625<br>485,345<br>1,724,077 | 2.0<br>1.8<br>4.5<br>7.3<br>16.0<br>14.6<br>11.8<br>42.0 | 79,680<br>49,880<br>92,640<br>106,520<br>150,600<br>107,200<br>78,660<br>205,860 | 9.1<br>5.7<br>10 6<br>12.2<br>17.3<br>12.3<br>9 0<br>23.6 | 3,409<br>1,258<br>21,157<br>40,255<br>109,993<br>134,711<br>138,048<br>732,514                           | .3<br>.1<br>1.8<br>3.4<br>.9.3<br>11.4<br>11.7<br>62.0   | 4.0<br>49<br>7.5<br>11.5<br>14.3<br>18.3<br>22.1<br>28.0 |  |

of persons with reimbursed services in 1967, the amounts paid by the program for these services and the type of benefits provided were entered in the Social Security Administration records through October 1969; for 1968, data recorded by October 1970 are included. Persons are counted individually for each service but only once in the total column for all services under the program. Utilization may have included more than one hospitalization and the services of several physicians during the year, but the individual is counted only once under the respective services. All bills received, however, are summed under the reimbursement amounts.

Each person included in the tabulations used sufficient medical services to be eligible for reimbursement and had a claim filed on his behalf for the amount due. It should be noted that figures shown for decedents refer not only to the services used during their terminal illness but to all of the reimbursed medical care received in the calendar year. Since deaths occur all during the year, the utilization of services by decedents does not reflect a full year's experience. Persons not alive at the end of the year had, on the average, only 6 months in which to accumulate medical expenses; for the survivors, a full year's experience is shown.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Data for new enrollees present an exception. They are mostly 65-year-olds aging into the program, for whom on the average only 6 months' experience is reported. See, Medicare: Health Insurance for the Aged, 1967, Section 2: Enrollment, 1972, and Medicare ... 1968, Section 2: Enrollment, 1973.