

*In comparison with other members of HIP, those over 65 have a higher rate of physician visits. Greater use of services from both specialists and family physicians and more visits in the hospital account for the differences.*

## Experience With Older Members in a Prepaid Medical Care Plan

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**V**OLUNTARY health insurance for older people (those 65 years and over) has expanded in recent years but still lags behind coverage for the population of the United States as a whole. It is estimated that in 1955 about 65 percent of the total population had some type of health insurance (1), while only about 41 percent of the noninstitutionalized aged were covered (2).

Reduced incomes, retirement, and enrollment restrictions are among the reasons why most of the aged do not have health insurance. Also contributing is the fact that when many of today's older people were in the labor force health insurance was not so widespread as it is now.

The need for finding ways to extend the benefits of voluntary health insurance to more of the aged is generally recognized as acute and is receiving attention by government, employer and union groups, and the prepayment plans (2).

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Necessary in considering solutions to this problem is information regarding requirements and expenditures for medical care of the aged. In the last few years, this type of information has expanded significantly through studies of general population groups (3). An item about which a great deal more knowledge is needed, however, is the experience of health plans that currently enroll the aged.

The Health Insurance Plan of Greater New York is such a plan. A prepaid voluntary plan now about 11 years old, HIP is organized on a group practice basis and provides comprehensive medical care. Persons covered are entitled to receive medical care from family physicians and specialists in the office, the home, and the hospital. The insurance pays for preventive and diagnostic medical services and for treatment of illness. Laboratory, radiological, and other diagnostic tests as well as physical therapy and services of visiting nurses are included. The only medical services excluded are treatment by a psychiatrist, purely cosmetic surgery, care for drug addiction, anesthesia, and care for chronic illnesses in institutions other than general hospitals.

There are no waiting periods for service in HIP, no exclusions from enrollment because of preexisting conditions, and no limitations on the number of services or duration of medical

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## Explanatory Notes

Statistics in this report are derived from an enrollment card prepared for each HIP subscriber and from a physician's report form on which the physician records information about each contact with an HIP member. The enrollment card gives the age, sex, and a history of all changes in coverage status for each person insured. The physician's report includes statistics on the age and sex of patients as well as information on where the service was given and the medical specialty.

*Physician visits.* In general, physician visits refer to face-to-face contacts between the physician and the patient in the office, home, or hospital. Each preoperative visit and each postoperative visit, as well as the operation itself, is considered one physician service. Similarly, each prenatal visit and each postpartum visit is counted as one service.

In counting services of radiologists each reading of an X-ray film of a body part and each field treated with deep roentgen therapy is considered one service. Also counted as one service is each visit for superficial therapy irrespective of the number and location of the fields treated.

*Physician visit rates.* The average number of physician visits per person per year is obtained by

relating the number of visits to HIP physicians during the year to the average number of persons enrolled in the plan. Average enrollment is the total number of person-months of coverage in a year divided by 12. This, in effect, takes account of the fact that some members are in the plan for only part of a year.

*Sampling ratios.* Tables showing enrollment and physician utilization experience are based on sample tabulations. The sampling ratio for a specific set of data is indicated in a footnote to the pertinent table. To reduce sampling variability, data are usually combined for a 2- or 3-year period.

*Hospitalization rates.* Hospitalization rates reflect experience of a 20 percent sample of HIP subscribers who are employees of the city of New York and their dependents enrolled in HIP throughout 1955. All of the enrollees have Blue Cross hospital insurance. Data regarding hospital admissions and length of stay in 1955 were obtained from the claim files of Blue Cross and refer to all hospitalizations in the group, regardless of the type of hospital (voluntary, proprietary, or municipal) or whether the physician was associated with HIP.

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care. Medical services are provided by physicians associated with 32 medical groups. Each medical group receives an annual capitation payment for each insured person in that group. Members receive no bill for medical services, the premium paying the entire cost. (The only exception is a possible \$2.00 charge for a night call to the home between 10 p.m. and 7 a.m.)

### Enrollment Composition

On June 30, 1957, there were 513,052 persons enrolled in the Health Insurance Plan. About 67 percent were employees of New York City and their dependents; 19 percent were insured through health and welfare plans established by labor groups; 7 percent had converted from group to individual contract; and the remaining 7 percent came from a variety of small employment groups and housing projects.

Initial enrollment is on a group basis only, the usual requirement being that at least 75 percent of those eligible enroll. Contracts ordinarily provide for coverage of the employee (referred to in this report as the subscriber), spouse, and dependent children under 18 years of age. However, a number of union health and welfare plans have signed contracts providing coverage only for the employee. On June 30, 1957, 7.2 percent of HIP's members (subscribers and dependents) were under this type of contract.

Two provisions in the enrollment regulations of HIP are particularly important to older people. First, there are no exclusions because of age or physical condition. Second, any subscriber leaving his group, because of change of job, retirement, or the like, may convert to an individual contract without any loss in benefits. This privilege to convert is not restricted in

any way, not by age, medical condition, nor previous use of services.

In 1957, 23 percent of HIP's members aged 65 years or over had individual contracts as compared with 5.4 percent for all other ages. The age and sex composition of the aged converttees more closely approximates that of the older people in the general population than does the composition of the aged under group contract. More than half of the aged who had converted are over 70 years old, whereas only a fourth of the other aged in HIP are that old (table 1). Also, women constitute a higher proportion of the converttees 65 and over than of the aged under group contract.

Despite the comparatively high percentage of older people with individual contracts through conversion, the proportion of HIP's total enrollment that is 65 years or over (3.6 percent) is substantially lower than the figure for New York City as a whole (9.1 percent). This differential is not surprising since the source of HIP's subscribers is basically employment groups. In time, it might be expected that the conversion privilege would result in a narrowing of the differential. However, there are important deterrents to this process, as discussed in the next section.

### Maintenance of Coverage

Experience during the period 1952-54 indicates that each year about 20 percent of the

aged subscribers under group contract are listed for termination of enrollment (table 2). Mortality accounts for almost a fourth of this group. The remaining 16 percent may be listed for termination because the subscriber left his employment group or because he decided to drop HIP. Considering the age group, the principal factor would appear to be retirement from the labor force. (For a detailed analysis of termination rates, based on 1948-51 experience, see reference 4.)

Of the 16 percent listed each year for termination for reason other than death, close to two-thirds fail to convert from group to individual coverage. Since retirement from the labor force is in prospect for all the aged, this rate of loss means that most subscribers at advanced ages drop their insurance. The loss among subscribers under 65 listed for termination is also high (81 percent), but future medical insurance coverage for this group is a distinct possibility, through new jobs or through employed spouses, for example. On the other hand, coverage for the aged once their enrollment has terminated is very unlikely.

The high loss in coverage among subscribers 65 or over is undoubtedly due in part to the financial burden conversion represents. The premium rate under individual contract obtained on conversion is only slightly higher than the rate under group contract. For a two-person family, for example, a group contract costs \$85.45 a year, and an individual contract, \$90

**Table 1. Age, sex, and enrollment status of HIP members, June 30, 1957**

| Age and sex     | Number of members |                                   |                | Percentage distribution of members |                                   |                |
|-----------------|-------------------|-----------------------------------|----------------|------------------------------------|-----------------------------------|----------------|
|                 | Total             | Individual contract by conversion | Group contract | Total                              | Individual contract by conversion | Group contract |
| All ages.....   | 501, 360          | 30, 240                           | 471, 120       | 100. 0                             | 100. 0                            | 100. 0         |
| Under 65.....   | 483, 330          | 26, 170                           | 457, 160       | 96. 4                              | 86. 5                             | 97. 0          |
| 65-69.....      | 12, 150           | 1, 900                            | 10, 250        | 2. 4                               | 6. 3                              | 2. 2           |
| 70 or over..... | 5, 880            | 2, 170                            | 3, 710         | 1. 2                               | 7. 2                              | . 8            |
| 65 or over..... | 18, 030           | 4, 070                            | 13, 960        | 100. 0                             | 100. 0                            | 100. 0         |
| Males.....      | 11, 410           | 2, 140                            | 9, 270         | 63. 3                              | 52. 6                             | 66. 4          |
| Females.....    | 6, 620            | 1, 930                            | 4, 690         | 36. 7                              | 47. 4                             | 33. 6          |

NOTE: Data are based on a 10 percent sample. They refer to persons enrolled in HIP medical groups and exclude a small number of members residing outside

the areas covered by the medical groups. Including out-of-area members, the enrollment on June 30, 1957, was 513,052.

**Table 2. Conversion to individual contract in HIP, annual averages, 1952-54**

| Enrollment action   | Number of subscribers <sup>1</sup> |                       |                         | Percent of total      |                       |                         |
|---|------------------------------------|-----------------------|-------------------------|-----------------------|-----------------------|-------------------------|
|   | All ages <sup>2</sup>              | Under 65 <sup>2</sup> | 65 or over <sup>3</sup> | All ages <sup>2</sup> | Under 65 <sup>2</sup> | 65 or over <sup>3</sup> |
| Listed for termination, all causes <sup>4</sup> -----     | 45, 500                            | 42, 470               | 3, 030                  | 11. 6                 | 11. 3                 | 20. 4                   |
| Listed for termination, excluding deaths <sup>5</sup> --- | 41, 730                            | 39, 400               | 2, 330                  | 10. 7                 | 10. 5                 | 15. 7                   |
| Subscribers who convert-----                              | 8, 300                             | 7, 430                | 870                     | 19. 9                 | 18. 9                 | 37. 3                   |

<sup>1</sup> Subscribers under group contract except those under contracts with special provisions for insuring the aged on retirement. Subscriber is the person (usually an employee) through whom the family obtained the insurance.

<sup>2</sup> Based on a 2 percent sample of changes in enrollment status.

<sup>3</sup> Based on a 10 percent sample of changes in enrollment status.

<sup>4</sup> The group for whom a change in status from group enrollment to either individual enrollment or discon-

tinuation in coverage is required. Occurs when subscriber leaves his group because of retirement or loss or change of job, death, or decision to drop HIP insurance.

<sup>5</sup> Mortality estimated on basis of rates for white males and white females in Middle Atlantic States, Life Tables for the Geographic Divisions of the United States, 1949-51, Vital Statistics—Special Reports, vol. 41, No. 4, 1956.

<sup>6</sup> Percent of subscribers listed for termination, excluding deaths.

(not including costs for hospital insurance). The difference, however, is not usually the total increase in out-of-pocket cost to the subscriber, since the great majority enter HIP through group contracts in which part or all of the premium (most often half) is paid by the employer or the union health and welfare fund. On conversion, the subscriber must pay the total premium himself. Thus, on retirement from the labor force the aged are usually faced with a substantial increase in cost of health insurance at a time when their income is reduced and, as will be shown, when their medical needs are great.

Finding ways to permit the aged to maintain their insurance is a major challenge to the community, employer and labor groups, and voluntary health agencies. Steps have already been taken by a number of health and welfare funds to retain the aged employee as part of the group after retirement and to continue paying the premium, but this arrangement is the exception rather than the rule. Only 10 percent of the subscribers in mid-1957 were enrolled by contractor groups that continue to pay the premium after the employee retires.

What about the subscribers who do convert? How long do they remain covered? At the end of the first year, 89 percent of the aged convertees are still in HIP. The rate of attrition diminishes in succeeding years, and by the end of the fourth year 76 percent remain excluding the loss due to death (table 3).

Among subscribers under 65 who convert, the pattern of retention of coverage in HIP is quite different from that for the aged. Only 73 percent are left after a year and 61 percent after 2 years. The loss becomes negligible after that, and 59 percent of these subscribers are in HIP for 4 or more years after conversion.

The far greater loss in the first year among subscribers under 65 than among the aged may well reflect a difference between the two groups in the type of services they anticipate. The aged may expect to need medical care of long duration, whereas the group under 65 will more

**Table 3. Retention of coverage by HIP subscribers after conversion to individual contract, 1952-54**

| Minimum duration of coverage after conversion (years) | Percent of subscribers <sup>1</sup> retaining coverage, excluding deaths <sup>2</sup> |                       |                         |
|---|---|-----------------------|-------------------------|
|   | All ages <sup>3</sup>   | Under 65 <sup>3</sup> | 65 or over <sup>4</sup> |
| 1-----  | 74. 4   | 72. 5                 | 88. 5                   |
| 2-----  | 63. 5   | 60. 8                 | 82. 0                   |
| 3-----  | 62. 1   | 59. 7                 | 76. 9                   |
| 4-----  | 61. 7   | 58. 9                 | 75. 5                   |

<sup>1</sup> Subscriber is the person (usually an employee) through whom the family obtained the insurance.

<sup>2</sup> See footnote 5, table 2.

<sup>3</sup> Based on a 2 percent sample of changes in enrollment status.

<sup>4</sup> Based on a 10 percent sample of changes in enrollment status.

likely require short-term care, such as obstetrical or pediatric services. Furthermore, other opportunities for group enrollment may appear for the subscriber under 65, but not for the aged.

### Volume of Services

The amount of medical care an HIP member receives is unrestricted by administrative regulation. Members are encouraged to use medical group service efficiently and to employ sound health practices based on current scientific knowledge through a varied and continuous educational program which HIP's division of health education has helped each medical group to develop.

In this setting, one might expect a pattern of medical care behavior different in some respects from that of the general community. The results of a household survey conducted in 1952 suggest that this is indeed true (5). This study indicates that the proportion of HIP members who see a physician sometime during the year is higher than the figure for the total popula-

tion of New York City, 69 percent as compared with 57 percent. The time between onset of illness and when a doctor is seen seems to be somewhat shorter for persons covered by the plan, but once having seen a physician for a particular ailment HIP members appear to make fewer visits than do persons in the city as a whole. These findings provide a broad, general background for interpreting the rates of medical care presented in the rest of this report.

Seventy percent of the members 65 years of age and over see an HIP physician at least once during the year (table 4). This is about the same proportion as in the age group 45-64 years, but it is somewhat below the figure for younger adults and appreciably lower than the figure for children. The finding that 3 in 10 of those of middle and advanced age do not see a doctor during the year is of particular interest because of the special emphasis on the value of periodic medical examinations at these ages. It is apparent that the availability of comprehensive medical care with no economic deterrent does

**Table 4. Physician visits by age, sex, and conversion status of HIP members**

| Age and conversion status                | Percent of members seen by HIP physicians, July 1, 1955-June 30, 1956 <sup>1</sup> |      |        | Number of physician visits per person per year, 1955-56 |      |        |
|--|--|------|--------|---|------|--------|
|  | Total  | Male | Female | Total   | Male | Female |
| <i>All members</i>                       |  |      |        |   |      |        |
| All ages.....                            | 74.0   | 72.5 | 75.5   | <sup>2</sup> 5.2  | 4.8  | 5.5    |
| Under 65.....                            | 74.2   | 72.8 | 75.7   | 5.1   | 4.7  | 5.5    |
| Under 15.....                            | 82.0   | 82.7 | 81.4   | 5.0   | 5.4  | 4.7    |
| 15-44.....                               | 72.1   | 69.7 | 74.3   | 4.9   | 3.9  | 5.9    |
| 45-64.....                               | 68.8   | 66.6 | 71.4   | 5.5   | 5.2  | 5.9    |
| 65 or more.....                          | 69.7   | 68.6 | 72.0   | 7.3   | 7.6  | 6.8    |
| <i>Individual contract by conversion</i> |  |      |        |   |      |        |
| All ages.....                            | 85.6   | 83.8 | 87.3   | 7.5   | 6.8  | 8.1    |
| Under 65.....                            | 85.8   | 83.9 | 87.5   | 7.3   | 6.3  | 8.2    |
| 65 or more.....                          | 83.6   | 81.3 | 85.9   | 9.3   | 10.8 | 7.6    |
| <i>Group contract</i>                    |  |      |        |   |      |        |
| All ages.....                            | 73.2   | 71.9 | 74.7   | 5.0   | 4.7  | 5.4    |
| Under 65.....                            | 73.5   | 72.3 | 74.9   | 5.0   | 4.7  | 5.4    |
| 65 or more.....                          | 65.6   | 65.9 | 65.0   | 6.9   | 7.0  | 6.5    |

<sup>1</sup> Data apply to subscribers enrolled in HIP throughout this period and their dependents who were insured on June 30, 1956.

<sup>2</sup> This figure differs somewhat from the rate (5.3) based on 100 percent counts.

NOTE: Data based on a 10 percent sample of the HIP enrollment.

not, by itself, insure the use of preventive services.

Despite the comparatively low proportion of older members who see a physician, the average number of visits this group makes during the year (7.3) is 40 percent higher than the rate for HIP as a whole (5.2). The difference results from the fact that more of the older people than of other age groups receive large volumes of service. Among the aged 8.3 percent see a doctor at least 20 times in a year as compared with 4.2 percent of all members. Another point of interest is that aged members who receive this many services account for almost half the care (47 percent) obtained by the entire group 65 or older.

The rate at which physicians' services are received is higher among the aged not only as compared with all HIP members but also as compared with any other 5-year age group (see chart). The high rate at the older ages, however, does not represent a sharp departure from the experience at earlier ages, but rather is the end point of an upward trend in the rate after ages 35-39.

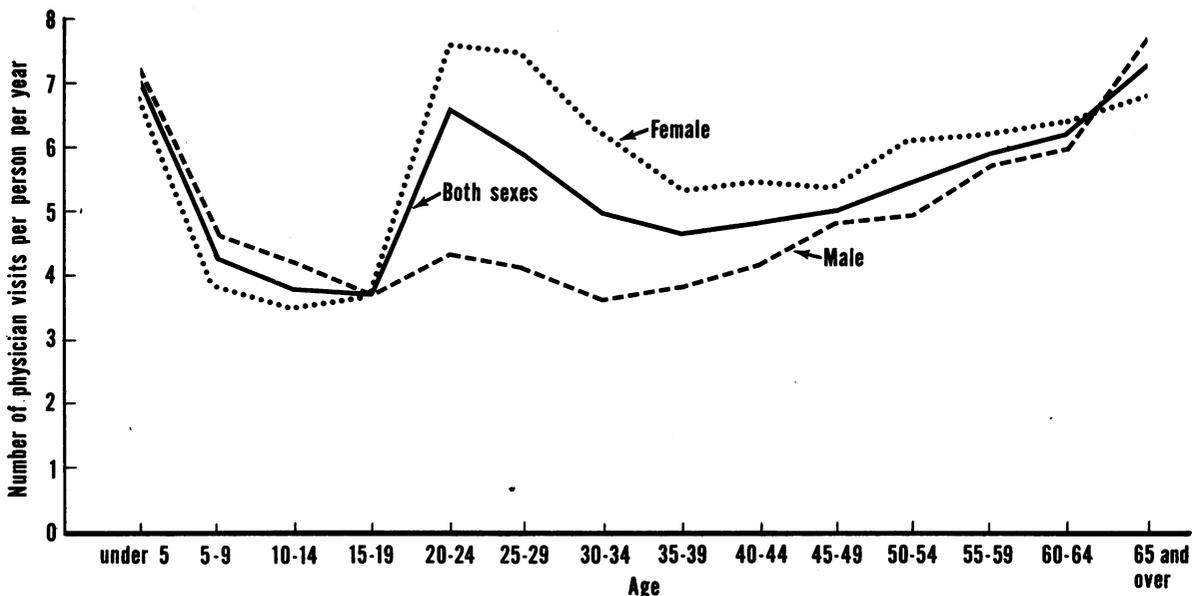
This difference between older persons and others in physician utilization is a decided change from the experience of HIP in 1948 and 1949. During this early period, the aged received physicians' services in HIP at only a

slightly higher rate, about 10 percent, than all members (6). The 1948-49 experience may have been strongly influenced by special factors applicable to the first few years of the plan, for example, greater dependence of the members on physicians not in HIP than is true today.

Utilization of physicians' services differs among men and women 65 years and over. At these ages a higher proportion of the women than of the men see a doctor during the year, but the relative volume of services is greater among the men. Among all other adults the rate at which women see a doctor is either the same as for men or higher. Actually, the rate for women in HIP is greater at the high fertility ages of 20-29 than at the advanced ages. Among adult males the rate at ages 65 and over is far above that at any other age.

Particularly illuminating are the figures in table 4 on physician visits for two categories of the aged, those who have converted to individual contract and those under group contract. Utilization, it will be noted, is much higher in the former group (who are older on the average) with respect both to the proportion who see a physician during the year and to the average number of such visits. This type of differential is not peculiar to the aged, as indicated by the data for those under 65. It may result

Physician visit rates by age and sex of HIP member, 1955-56



**Table 5. Physician visit rates by type of physician for HIP members of specified age and enrollment status, 1955-56**

| Type of physician                         | Number of physician visits per 100 persons per year |          |       |       |            |                                   |          |            |                       |            |
|---|---|----------|-------|-------|------------|-----------------------------------|----------|------------|-----------------------|------------|
|   | All members   |          |       |       |            | Individual contract by conversion |          |            | Group contract        |            |
|   | All ages  | Under 15 | 15-44 | 45-64 | 65 or over | All ages                          | Under 65 | 65 or over | All ages <sup>1</sup> | 65 or over |
| All physicians <sup>2</sup> .....         | 517.4   | 504.5    | 494.2 | 552.0 | 732.0      | 748.2                             | 730.5    | 931.6      | 504.7                 | 686.1      |
| Family physician <sup>3</sup> .....       | 298.2   | 386.8    | 237.7 | 289.2 | 405.4      | 416.9                             | 406.4    | 529.7      | 291.7                 | 376.8      |
| Internist.....                            | 19.5  | 2.1      | 14.7  | 40.7  | 63.3       | 36.9                              | 31.5     | 80.5       | 18.5                  | 59.4       |
| Ophthalmologist and otolaryngologist..... | 32.9  | 28.2     | 28.3  | 43.2  | 55.8       | 40.1                              | 37.2     | 60.5       | 32.5                  | 54.7       |
| Radiologist.....                          | 40.3  | 20.9     | 42.8  | 55.9  | 55.2       | 48.7                              | 46.7     | 64.6       | 39.8                  | 53.0       |
| Surgeon.....                              | 24.1  | 10.6     | 23.6  | 37.7  | 47.2       | 37.1                              | 34.7     | 59.6       | 23.4                  | 44.3       |
| Urologist.....                            | 7.7   | 3.0      | 4.5   | 13.8  | 46.4       | 14.1                              | 8.9      | 53.4       | 7.4                   | 44.8       |
| Orthopedist.....                          | 15.8  | 15.7     | 12.8  | 19.8  | 23.5       | 26.0                              | 26.2     | 26.6       | 15.2                  | 22.8       |
| Dermatologist.....                        | 13.5  | 9.8      | 15.1  | 14.8  | 16.5       | 18.1                              | 17.6     | 22.8       | 13.2                  | 15.1       |
| Allergist.....                            | 20.1  | 20.3     | 24.6  | 15.3  | 5.6        | 25.5                              | 27.9     | 10.7       | 19.8                  | 4.4        |
| Obstetrician-gynecologist.....            | 41.4  | 5.5      | 86.9  | 14.5  | 5.3        | 78.0                              | 88.0     | 5.4        | 39.4                  | 5.2        |

<sup>1</sup> Rates for persons under 65, not shown separately, closely approximate the rates for all ages.

<sup>2</sup> Includes specialists not shown separately.

<sup>3</sup> Includes pediatricians' services. Exclusion of these

services reduces the family physician rate for all persons to 243.8 and the rate for children under 15 to 196.8.

NOTE: Data based on a 10 percent sample of the HIP enrollment.

to a considerable extent from self-selection on the part of a subscriber, whether or not aged, when faced with a choice of converting to individual enrollment or dropping his insurance.

In view of the comparatively high requirements among the aged for physicians' services, the question might well be asked, what would happen to the volume of physician services in HIP if the aged were represented in the plan in the same proportion as they are in the general population? Some indication of the result can be obtained if it is assumed that (a) the rate of visits found among the aged on group contract is applicable to all the aged in the city's labor force and (b) the rate for those who converted to individual contracts is applicable to all of the noninstitutionalized aged not in the labor force. Under these assumptions, increasing the proportion of the aged in HIP from 3.6 percent to 9.1 percent would raise the average number of physician visits per member per year from 5.2 to 5.5.

The impact of this relatively small increase on the operations of a medical care plan may not be reflected entirely by what happens to the overall rate. A full assessment would require, among other things, currently unavailable data

on ancillary services to the aged and knowledge about the kinds of physicians' services this age group receives. The latter is discussed in the sections that follow.

### Specialists' Services

Associated with each medical group in HIP are physicians in 12 basic specialties. The opportunity to call on a specialist is one of the most important advantages of the plan both to the member and to his family physician.

As medical problems vary with age, so do requirements for services from specialists. Throughout adult life, visits to all but a few of the specialists increase to reach a peak among the aged (table 5). Utilization of surgeons, internists, and urologists is especially high at ages 65 and over as compared with the rates for all ages combined.

Paralleling the increase in the requirement among the aged for care from the specialist is the greater volume of services that the family physician is called on to give. While the average number of visits to the family physician for older persons is 4.1, the corresponding figure for adults in each of the 2 age groups shown in table 5 is less than 3.0 per person.

The pattern of utilization of medical services is very similar among men and women 65 or over in a number of important respects. The rates for the two sexes are virtually the same in the use of family physicians, ophthalmologists and otolaryngologists, and radiologists (table 6). However, the men have a substantially higher rate of service from the internists and, of course, from the urologist, while women see the orthopedist more often.

No specialty can be identified as bearing a particularly heavy part of the greater utilization by the aged who have converted to individual contract as compared with the aged under group contract. The rate at which general physicians are used increases by about the same proportion as the rate for all services, and major increases occur in a wide range of specialties, including internal medicine, surgery, and radiology.

#### Place of Service

The proportions of physician visits that take place in the office, in the home, and in the hos-

pital differ greatly according to age. The outstanding characteristic of the pattern among the older people is the exceptionally high proportion of visits in the hospital, 21 percent as compared with 11 percent for all ages. The difference is even greater on a rate basis. Services in the hospital are received from HIP physicians by the aged at the rate of 154 per 100 members, which is almost three times the rate of 57 for all persons in HIP (table 7). Contributing to the high rate for the aged are both high hospital admission rates and long hospital stays (table 8).

The average number of visits to the physician's office is likewise greater among those 65 and over, but the margin is far smaller than is found in hospital care. Although the home call rate for the aged is higher than for other adults, it is slightly below the rate for persons of all ages, which is affected markedly by frequent home visits to children.

Among the aged, men utilize physician services in the hospital at an appreciably higher rate than do women (table 7). The differential

**Table 6. Physician visit rates by type of physician for HIP members of specified age, sex, and enrollment status, 1955-56**

| Type of physician, by sex of HIP member   | Number of physician visits per 100 persons per year |              |                                   |              |                |                       |              |
|---|---|--------------|-----------------------------------|--------------|----------------|-----------------------|--------------|
|   | All members   |              | Individual contract by conversion |              |                | Group contract        |              |
|   | All ages <sup>1</sup>                               | 65 or over   | All ages                          | Under 65     | 65 or over     | All ages <sup>1</sup> | 65 or over   |
| <b>Males<sup>2</sup></b> .....            | <b>481.4</b>  | <b>759.7</b> | <b>681.2</b>                      | <b>629.1</b> | <b>1,075.0</b> | <b>471.1</b>          | <b>703.0</b> |
| Family physician <sup>3</sup> .....       | 292.4   | 409.5        | 410.0                             | 387.7        | 593.6          | 286.4                 | 376.3        |
| Internist.....                            | 21.4  | 66.6         | 34.0                              | 25.8         | 87.9           | 20.8                  | 62.8         |
| Ophthalmologist and otolaryngologist..... | 32.9  | 55.5         | 36.8                              | 33.3         | 58.9           | 32.7                  | 54.9         |
| Radiologist.....                          | 38.9  | 56.6         | 46.2                              | 43.0         | 68.2           | 38.6                  | 54.5         |
| Surgeon.....                              | 27.1  | 54.3         | 41.6                              | 35.6         | 86.8           | 26.4                  | 48.4         |
| Urologist.....                            | 12.2  | 67.7         | 25.3                              | 14.6         | 95.7           | 11.5                  | 62.7         |
| Orthopedist.....                          | 15.7  | 16.2         | 25.5                              | 26.2         | 23.2           | 15.2                  | 14.9         |
| <b>Females<sup>2</sup></b> .....          | <b>554.5</b>  | <b>678.9</b> | <b>809.3</b>                      | <b>820.0</b> | <b>765.7</b>   | <b>539.6</b>          | <b>649.5</b> |
| Family physician <sup>3</sup> .....       | 304.2   | 397.5        | 423.2                             | 423.0        | 455.8          | 297.2                 | 377.8        |
| Internist.....                            | 17.5  | 57.0         | 39.6                              | 36.6         | 71.9           | 16.2                  | 52.0         |
| Ophthalmologist and otolaryngologist..... | 32.8  | 56.3         | 43.0                              | 40.7         | 62.4           | 32.2                  | 54.3         |
| Radiologist.....                          | 41.6  | 52.5         | 51.0                              | 50.0         | 60.3           | 41.1                  | 49.8         |
| Surgeon.....                              | 21.0  | 33.6         | 32.9                              | 33.8         | 28.1           | 20.3                  | 35.4         |
| Urologist.....                            | 3.2   | 5.6          | 3.9                               | 3.9          | 4.5            | 3.2                   | 6.0          |
| Orthopedist.....                          | 15.8  | 37.5         | 26.4                              | 26.2         | 30.6           | 15.2                  | 39.9         |
| Obstetrician-gynecologist.....            | 82.2  | 15.3         | 144.8                             | 160.6        | 11.6           | 78.6                  | 16.6         |

<sup>1</sup> Rates for persons under 65, not shown separately, closely approximate the rates for all ages.

<sup>2</sup> Includes specialists not shown separately.

<sup>3</sup> Includes services by pediatricians. Exclusion of

these services reduces the family physician rate for all males to 235.3 and for all females to 252.5

NOTE: Data based on a 10 percent sample of the HIP enrollment.

is due entirely to a wide gap in hospital admission rates for the two sexes, the average length of stay being virtually the same. The

relationship between the rates of service in the hospital for men and women is not repeated for services in the office or at home. In fact,

**Table 7. Physician visit rates by place of service for HIP members of specified age, sex, and enrollment status, 1955-56**

| Place of service,<br>by sex of HIP<br>member | Number of physician visits per 100 persons per year |              |              |              |               |                                      |              |                |                          |               |
|--|---|--------------|--------------|--------------|---------------|--------------------------------------|--------------|----------------|--------------------------|---------------|
|  | All members   |              |              |              |               | Individual contract by<br>conversion |              |                | Group contract           |               |
|  | All<br>ages   | Under<br>15  | 15-44        | 45-64        | 65 or<br>over | All<br>ages                          | Under<br>65  | 65 or<br>over  | All<br>ages <sup>1</sup> | 65 or<br>over |
| <b>Both sexes</b> .....                      | <b>517.4</b>  | <b>504.5</b> | <b>494.2</b> | <b>552.0</b> | <b>732.0</b>  | <b>748.2</b>                         | <b>730.5</b> | <b>931.6</b>   | <b>504.7</b>             | <b>686.1</b>  |
| Office.....                                  | 408.9   | 358.3        | 411.6        | 453.1        | 530.1         | 564.9                                | 558.2        | 643.9          | 400.3                    | 503.9         |
| Home.....                                    | 51.8  | 115.0        | 25.3         | 25.8         | 48.4          | 73.8                                 | 75.2         | 69.3           | 50.6                     | 43.5          |
| Hospital.....                                | 56.7  | 31.3         | 57.3         | 73.1         | 153.5         | 109.5                                | 97.1         | 218.4          | 53.8                     | 138.6         |
| <b>Males</b> .....                           | <b>481.4</b>  | <b>535.7</b> | <b>388.2</b> | <b>522.1</b> | <b>759.7</b>  | <b>681.2</b>                         | <b>629.1</b> | <b>1,075.0</b> | <b>471.1</b>             | <b>708.0</b>  |
| Office.....                                  | 380.9   | 379.7        | 342.2        | 420.8        | 535.6         | 517.9                                | 494.6        | 697.9          | 373.9                    | 506.4         |
| Home.....                                    | 51.4  | 119.8        | 21.7         | 22.8         | 43.3          | 68.9                                 | 72.5         | 53.2           | 50.5                     | 41.5          |
| Hospital.....                                | 49.1  | 36.2         | 24.3         | 78.5         | 180.8         | 94.4                                 | 62.1         | 323.9          | 46.7                     | 155.0         |
| <b>Females</b> .....                         | <b>554.5</b>  | <b>471.3</b> | <b>589.7</b> | <b>586.8</b> | <b>678.9</b>  | <b>809.3</b>                         | <b>820.0</b> | <b>765.7</b>   | <b>539.6</b>             | <b>649.5</b>  |
| Office.....                                  | 437.7   | 335.4        | 474.2        | 490.7        | 519.5         | 607.9                                | 614.4        | 581.4          | 427.7                    | 498.6         |
| Home.....                                    | 52.2  | 109.9        | 28.4         | 29.3         | 58.0          | 78.2                                 | 77.6         | 88.0           | 50.7                     | 47.8          |
| Hospital.....                                | 64.6  | 26.0         | 87.1         | 66.8         | 101.4         | 123.2                                | 128.0        | 96.3           | 61.2                     | 103.1         |

<sup>1</sup> Rates for persons under 65, not shown separately, closely approximate the rates for all ages.

NOTE: Data based on a 10 percent sample of the HIP enrollment.

**Table 8. Hospital admission rates and average length of hospital stay for HIP members, by age and sex, 1955**

| Age   | Both sexes          |                                   | Males | Females             |                                   |
|---|---------------------|-----------------------------------|-------|---------------------|-----------------------------------|
|   | All ad-<br>missions | Nonobstet-<br>rical<br>admissions |       | All ad-<br>missions | Nonobstet-<br>rical<br>admissions |
| <i>Hospital admission per 1,000 persons</i> |                     |                                   |       |                     |                                   |
| All ages <sup>1</sup> .....                 | 77.4                | 59.6                              | 54.0  | 101.2               | 65.2                              |
| 15-44.....                                  | 93.2                | 57.0                              | 40.4  | 154.3               | 71.6                              |
| 45-64.....                                  | 79.1                | 79.1                              | 71.9  | 87.6                | 87.6                              |
| 65 or over.....                             | 121.2               | 121.2                             | 131.0 | 102.0               | 102.0                             |
| <i>Days in hospital per admission</i>       |                     |                                   |       |                     |                                   |
| All ages <sup>1</sup> .....                 | 7.6                 | 8.1                               | 8.8   | 6.9                 | 7.6                               |
| 15-44.....                                  | 6.5                 | 7.0                               | 7.5   | 6.2                 | 6.8                               |
| 45-64.....                                  | 11.0                | 11.0                              | 11.9  | 10.2                | 10.2                              |
| 65 or over.....                             | 13.2                | 13.2                              | 13.4  | 12.6                | 12.6                              |
| <i>Days in hospital per 100 persons</i>     |                     |                                   |       |                     |                                   |
| All ages <sup>1</sup> .....                 | 58.8                | 48.6                              | 47.6  | 70.3                | 49.6                              |
| 15-44.....                                  | 65.3                | 40.0                              | 30.4  | 96.1                | 48.5                              |
| 45-64.....                                  | 87.3                | 87.3                              | 85.3  | 89.5                | 89.5                              |
| 65 or over.....                             | 159.5               | 159.5                             | 175.7 | 128.0               | 128.0                             |

<sup>1</sup> Includes hospitalizations of children under 15.  
SOURCE: Prepaid Medical Care and Hospital Utilization, by Paul M. Densen, Eve Balamuth, and Sam

Shapiro, Hospital Monograph Series No. 3, Chicago, American Hospital Association, 1958.

care in the home is received relatively more often by aged women than by aged men.

As pointed out previously, among members both over 65 years and under that age those who have converted to individual contract use physician services at a considerably higher rate than the group subscribers. This difference results from more frequent use of physicians' services not only in the office but also in the home and in the hospital (table 7).

One of the most interesting utilization experiences among the aged converttees is the rate at which the men receive physician services in the hospital. This figure (324 per 100 persons per year) is more than twice the rate among aged men under group contract (155) and several times the average for HIP as a whole (57).

### Hospitalized Surgery

The rate of operations performed in the hospital is higher for the aged (45 per 1,000 persons per year) than for all HIP (35 per 1,000) (table 9). The differential is far smaller than that in the rate for all hospital admissions, but it represents a difference of 27 percent, a not inconsequential margin.

The surgery rate is comparatively high in the aged group mainly because of the high rate for men. The rate for aged women (36 per 1,000) is near the average for all females (34) and, in fact, is slightly lower than that for other adult females. On the other hand, the rate for aged men (50) is well above the figure for men at younger ages.

Unlike other categories of utilization, hospitalized surgery for the aged is not more frequent among the converttees than among persons covered by group contracts. The rates are nearly the same, 43 and 45 per 1,000 respectively.

Requirements for surgery are only partly defined by total rates. Detailed data regarding operative procedures are needed for complete analysis. Only a few such data are now available. As indicated by the rates in table 9 for broad categories of procedures, the aged differ substantially from persons of all ages in the types of operations they undergo.

Gastrointestinal, abdominal, and genitourinary operations account for about three-fifths of the hospitalized surgery among the aged as compared with two-fifths of the surgery at all ages. Furthermore, from the limited data

**Table 9. Hospitalized surgery rates for HIP members, by type of operation and age and sex, 1956**

| Type of operation, by sex           | Number of operations per 1,000 persons per year |                          |             |             |             |
|-------------------------------------|---|--------------------------|-------------|-------------|-------------|
|                                     | All ages  | Under 15                 | 15-44       | 45-64       | 65 or over  |
| <b>Both sexes</b> .....             | <b>35.3</b>                                     | <b>40.2</b>              | <b>30.6</b> | <b>36.7</b> | <b>44.7</b> |
| Eye, ear, nose, and throat.....     | 6.5   | 17.3                     | 2.0         | 2.3         | 5.0         |
| Gastrointestinal and abdominal..... | 7.6   | 4.9                      | 6.3         | 11.8        | 13.1        |
| Genitourinary.....                  | 6.4   | 14.6                     | 1.6         | 4.5         | 13.1        |
| Obstetrical-gynecological.....      | 6.4   | ( <sup>1</sup> )         | 11.3        | 6.5         | 2.0         |
| Orthopedic.....                     | 2.0   | 1.7                      | 1.9         | 2.4         | 2.8         |
| Other.....                          | 6.3   | 1.8                      | 7.5         | 9.2         | 8.7         |
| <b>Male</b> .....                   | <sup>2</sup> <b>36.5</b>                        | <sup>2</sup> <b>57.3</b> | <b>20.9</b> | <b>34.7</b> | <b>49.5</b> |
| Eye, ear, nose, and throat.....     | 7.4   | 18.0                     | 2.9         | 2.8         | 5.1         |
| Gastrointestinal and abdominal..... | 9.7   | 7.1                      | 7.6         | 14.9        | 14.1        |
| Genitourinary.....                  | <sup>3</sup> 11.6                               | <sup>3</sup> 27.9        | 1.8         | 6.7         | 18.7        |
| Orthopedic.....                     | 2.2   | 2.4                      | 2.1         | 2.2         | 2.3         |
| Other.....                          | 5.7   | 2.0                      | 6.4         | 8.1         | 9.3         |
| <b>Female</b> .....                 | <b>34.1</b>                                     | <b>22.1</b>              | <b>39.2</b> | <b>38.9</b> | <b>36.1</b> |
| Eye, ear, nose, and throat.....     | 5.7   | 16.6                     | 1.3         | 1.8         | 4.8         |
| Gastrointestinal and abdominal..... | 5.4   | 2.5                      | 5.3         | 8.3         | 11.3        |
| Genitourinary.....                  | 1.3   | .3                       | 1.3         | 2.2         | 3.1         |
| Obstetrical-gynecological.....      | 12.9  | ( <sup>1</sup> )         | 21.2        | 13.5        | 5.5         |
| Orthopedic.....                     | 1.7   | .9                       | 1.6         | 2.7         | 3.8         |
| Other.....                          | 7.0   | 1.6                      | 8.6         | 10.3        | 7.6         |

<sup>1</sup> Rate is less than 0.1.

<sup>2</sup> Includes circumcision of newborn. Exclusion of these procedures reduces the rate for all males to 29.4, and the rate for males under 15 to 32.8.

<sup>3</sup> Includes circumcision of newborn. Exclusion of

these procedures reduces the rate for all males to 4.4 and the rate for males under 15 to 3.5.

NOTE: Data based on a sample consisting of all operations performed in hospitals during alternate months in 1956.

available, it appears that the nature of the operations within broad categories differs with age. This is illustrated most clearly with respect to eye, ear, nose, and throat operations. In this category two-thirds of the operations among the aged are for cataract and glaucoma (3.4 per 1,000 persons over 65) whereas at younger ages by far the most frequent surgical procedure is tonsillectomy (5.0 per 1,000 persons under 65).

### Summary and Discussion

The enrollment and medical care experience of the aged in the Health Insurance Plan of Greater New York has been examined from a number of standpoints bearing on current discussions of health insurance for the aged. In generalizing it is important to keep in mind the characteristics of this medical care plan. It is prepaid, comprehensive in coverage for all medical services, and it provides care through medical groups. There are no restrictions on enrollment because of age or preexisting conditions. Initial enrollment is principally through employment groups, but subscribers leaving their groups have an unrestricted privilege of converting to individual contract.

The outstanding feature of HIP's enrollment experience with aged subscribers is that despite the conversion privilege most of those who must decide whether to convert or to terminate coverage drop their insurance. This situation illustrates the paradoxical position of many members of health insurance plans when they reach retirement age. Group coverage is obtained while they are employed and for an increasing proportion of them under arrangements whereby the employer or a health and welfare fund pays at least part of the premium. On leaving employment, many of the subscribers are faced with the dual economic problem of reduced income and increased out-of-pocket costs to maintain their insurance. And this occurs at a time when their medical needs are increasing. A pertinent question for the community is where and how do the aged whose health insurance is terminated obtain medical care. It would be of much interest, for example, to determine the extent to which former HIP enrollees become dependent on hospital clinics and ward facilities.

With respect to the medical care requirements of the aged, HIP's experience affords several observations:

1. The aged see a physician on the average considerably more often than do persons of all ages combined. The rates are 7.3 physicians' visits per member per year for the aged and 5.2 for the total enrollment. The older people who have converted to individual contract average 9.3 visits to a physician per year.

These rates are unquestionably high, but they are not quite so forbidding when it is realized that the rates are also high in other age groups (60-64, 20-29, and under 5 years). Viewing voluntary health insurance as a community institution, it is appropriate to consider what would happen if the aged were represented in HIP in the same proportion as in the total population. In New York City, this would mean an increase in the aged subscribers from 3.6 to 9.1 percent, and an estimated rise in the rate of physician visits of 6 percent (provided the aged added to HIP were representative of all the noninstitutionalized aged in the city). This is a small quantitative increase, but its true impact on the medical care plan cannot be fully assessed without information about the qualitative aspects of the care received by the aged.

2. Most of the medical specialties are affected by the comparatively high medical requirements of the aged. The greatest effect is on the surgeon, the internist, and the urologist. Of equal significance is the fact that the family physician continues to occupy a central position in providing medical care to the aged. Thus an increase in enrollment of the aged would require not only an expansion, in varying degrees, in some of the specialties but also the addition of family physicians.

3. Extensive use of hospital care is a major reason for the comparatively large volume of physicians' services received by the aged in HIP. More than a fifth of the contacts the aged have with the physician (21 percent) take place in the hospital; the corresponding figure for members of all ages is 11 percent. A higher surgery rate is an important factor in this situation, although there are indications that admissions for services other than surgery contribute more to the high hospital rate. The type of operation performed on the aged differs from

the type for younger persons. This may have greater bearing in evaluating the surgical requirements of the aged than the general rates of operations performed. A full exploration of this point is dependent on the development of data concerning specific operations.

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### Arthur S. Flemming, Secretary

**Marion B. Folsom**, Secretary of Health, Education, and Welfare, resigned from his post July 31, 1958. Mr. Folsom became Secretary August 1, 1955, after having served as Under Secretary of the Treasury for 2½ years.

He had previously been active in social security programs for more than 25 years.

In 1928, he developed a life insurance, retirement, and disability plan for employees of Eastman Kodak Company and 3 years later Mr. Folsom developed an unemployment benefit plan which included 13 other companies in Rochester, N. Y.

His work in Federal social security began with membership on the President's Advisory Council on Economic Security which helped draft the original Social Security Act in 1934.

In 1942 he helped organize the Committee for Economic Development, of which he later became chairman, and in 1944-46 he served as staff director for the House Committee on Postwar Economic Policy and Planning.

During his tenure with the Treasury Department, he worked with the Department of Health, Education, and Welfare on a study of old-age and survivors insurance resulting in extension of coverage and liberalization of benefits under the 1954 amendments to the Social Security Act.

**Arthur S. Flemming**, president of Ohio Wesleyan University since 1948, succeeds Secretary Folsom. While on leave from his university post, Mr. Flemming served as director of the Office of Defense Mobilization, during 1953-57, and as assistant to the Director of that agency in the years 1951-53.

A member of the United States Civil Service Commission during 1939-48, he was also chief of labor supply in the Office of Production Management in 1941-42, chairman of the Management-Labor Policy Committee of the War Manpower Commission during the next 4 years, and on the Manpower Survey Board of the Department of the Navy in 1943 and 1944.

Mr. Flemming was twice a member of the Commission on Organization of the Executive Branch of Government, during 1947-49 and again in 1953-55, and served as chairman of the Advisory Committee on Personnel Management of the Atomic Energy Commission from 1948 to 1953. He has been a member of the International Civil Service Advisory Board since 1950 and of the President's Advisory Committee on Government Organization since 1953.

From 1930 to 1934, Mr. Flemming was on the editorial staff of the publication now known as the *U. S. News & World Report*.