Incapacity and Hospital Care of Aged Beneficiaries of Old-Age and Survivors Insurance

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In the national survey of the economic resources of aged beneficiaries made by the Bureau of Old-Age and Survivors Insurance in 1951, beneficiaries were asked how many weeks they had spent in the hospital or had been confined to bed at home during the survey year. The answers to these questions are analyzed here, in relation to such factors as age, sex, and ownership of voluntary insurance against hospital costs.

IT IS common knowledge that the aging process is accompanied by a slowing down in physical capacity. Little information has been available, however, to indicate the extent to which this slowing down results in incapacity that confines the individual to bed. Studies have shown that the hospital days per year per aged person are about double the average for younger adults. But are these longer hospital stays of older persons accompanied by substantial periods of confinement to bed at home? How are their hospitalization rates affected by income and by ownership of insurance protection against these costs or by living arrangements? These are among the questions that can now be answered for a particular group of aged persons by data collected in the 1951 national survey of aged beneficiaries.[1]

Survey Procedures

Answers to the questions about incapacity are necessarily subject to important overall qualifications arising out of the survey procedures. Because the survey was designed to permit an analysis of income and assets for a situation existing throughout the year, adjustment of the sample was necessary for deaths or long-term hospitalization during the survey year. These adjustments —sometimes an outright discard of the case from the sample and sometimes an arbitrary classification of the beneficiary type—are summarized here because of their important influence on the subsequent analysis of incapacity.

Beneficiaries who died during the year were not covered by the survey, and therefore all these data on incapacity exclude terminal illnesses. The survey was made from a 1-percent random sample of old-age beneficiaries and widows whose benefits were in force in December 1950. There were 22,384 cases in the sample, from which 4,719 were discarded. Of these, 1,603 were discarded because of the death of the old-age beneficiary or the aged widow before the date of the interview or because of the death of the spouse during the survey year.[2]

When the old-age beneficiary's wife died during the survey year, one of several special procedures was used, depending on the time of death. If death occurred near the close of the survey year (within 3 weeks and 6 days of the year's end), the case was classified as a couple during the entire year. If it took place near the start of the survey year (within 3 weeks and 6 days of the beginning), the case was classified as a nonmarried man during the entire year, and no information has been included about the wife. If the wife's death occurred at any other time within the year, the case was discarded from the sample as it constituted a change in beneficiary type.

Similarly, special procedures were used when one member of a couple had been hospitalized or in an institution for 4 weeks or more during the survey year. The procedures had the same result whether the old-age beneficiary drawn in the sample was the male or female member of the couple but, for simplification, are described only for cases in which the husband was the member drawn. When the male old-age beneficiary had been in a hospital or institution for as long as 48 weeks, the case was classified as a nonmarried man, and information on the wife was not included. If the old-age beneficiary had been in an institution or hospitalized for as long as 4 weeks but not so long as 48 weeks, the case was classified as a couple, provided the wife managed the finances during the husband's absence. If she did not handle the finances, the case was discarded to avoid a change in beneficiary type during the survey year. Actually, there were relatively few discards of this type.

When the wife was hospitalized or in an institution for as long as 48 weeks, the old-age beneficiary was

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1 For survey methods and description and for findings from the preliminary data see the *Bulletin* for August 1952. See also the *Bulletin* for August 1954 for an analysis of the beneficiaries' voluntary health insurance coverage; the issues of June and August 1953 for findings related to income and to assets, liabilities, and net worth; the issue of April 1954 for an evaluation of their economic resources; and the issue of May 1955 for an analysis of reasons for retirement and for return to work.

2 A detailed study of the mortality rates under old-age and survivors insurance and other public and private pension programs shows that "in the absence of any special circumstances, the mortality rates for voluntarily retired workers during the first year or two of retirement are considerably higher than the general level that otherwise might be expected but that they thereafter merge with that level." (Robert J. Myers, "Mortality After Retirement," *Social Security Bulletin*, June 1954.)

treated as nonmarried. If the wife's period of absence was as long as 4 weeks but less than 48, and she was in a publicly financed institution, the case was discarded, again because a change in beneficiary type would have been involved. If, on the other hand, she had been in a private institution and the husband had paid for 50 percent or more of her support (actually, if he had been billed for her charges), the case was classified as a couple throughout the year.

Obviously, these survey procedures cut down the measured incapacity rate below that actually experienced by aged beneficiaries of old-age and survivors insurance. In addition to discards because of death, there were 299 cases that had to be discarded because the beneficiary was in an institution or was incompetent or too ill to be interviewed and had no spouse from whom the information could be obtained.

The survey procedures also make meaningless some of the conclusions that might be drawn concerning the beneficiary types. The data show, for example, that the rate of institutionalization was especially high among nonmarried men. The immediate conclusion would be that such beneficiaries are more apt to require institutional care because there is no wife to provide home care. The system of discards and of classification of beneficiary type by its very nature, however, resulted in a concentration of long-term institutionalization among beneficiaries classified as nonmarried men. For this reason, the ensuing analysis largely ignores the classification by beneficiary type that had been assigned primarily for the purpose of studying the income and resources of the beneficiary group.

Table 1.—*Percent of aged beneficiaries reporting no incapacity [1] during survey year 1951, by sex and age at end of survey year and by ownership of hospitalization insurance*

Age and sex	Total	With insurance	Without insurance
All aged beneficiaries	69.3	70.9	68.8
Under 70	70.8	72.0	70.3
70–74	69.3	71.9	68.6
75–79	67.8	67.4	67.9
80 and over	65.7	65.5	65.7
Men	71.5	73.3	70.9
Under 70	73.4	75.9	72.5
70–74	71.6	73.8	70.9
75–79	69.9	68.8	70.1
80 and over	68.1	68.1	68.1
Women	66.5	67.9	66.1
Under 70	68.2	68.0	68.2
70–74	66.5	69.5	65.6
75–79	64.5	64.7	64.4
80 and over	60.5	58.9	60.7

[1] Measured in terms of confinement to bed at home, in an institution, or in a short-term general hospital.

All Incapacity

Aged beneficiaries were asked how many weeks during the past year they had been confined to bed at home and how many weeks they had spent in the hospital. The measure was thus in terms of more or less complete incapacity. Excluded were all the ambulatory cases of disability and all the days when beneficiaries—despite heart conditions, arthritis, or other of the degenerative ailments that plague old age—nevertheless managed to be up and around.

In asking the question about weeks in the hospital, no attempt was made to define "hospital" or to delimit the term to general hospitals. Accordingly the reported stays in hospitals included time spent in nursing or rest homes, in mental or tuberculosis hospitals, and in veterans' homes and public or private welfare institutions primarily domiciliary in nature.

For many purposes and especially for comparison with other surveys of hospitalization rates, it was desirable to exclude such stays and to study the hospital utilization of aged beneficiaries in terms of short-term general hospitals only. Fortunately, the schedules were profusely annotated, especially in cases of long stays in institutions, and it was therefore possible to make the subtractions and arrive at hospitalization rates that could be assumed, with a reasonable degree of assurance, to represent rates in general hospitals.

For the purpose at hand, however, it is desirable to have an overall measurement—in terms of the number of days "in bed"—of the incapacity of aged beneficiaries. Hence, in this analysis of all incapacity the data are used as reported and include stays in institutions that, although primarily domiciliary in nature, were considered hospitals by the respondent.

Table 2.—*Percentage distribution of aged beneficiaries reporting incapacity, by sex and by weeks of incapacity [1] during survey year 1951*

Weeks of incapacity	Percentage distribution		
	Total	Men	Women
Total	100.0	100.0	100.0
1 or less	19.5	20.3	18.7
2	18.5	18.4	18.5
3	12.2	12.6	11.7
4	9.6	9.6	9.7
5	4.7	5.0	4.4
6	5.8	5.5	6.2
7–13	16.0	15.3	16.7
14–26	6.8	6.2	7.4
27–39	1.9	2.1	1.7
40–52	5.0	5.0	5.0

[1] Total number of weeks confined to bed at home and/or in an institution and/or short-term general hospital.

Seven in every 10 aged beneficiaries were not confined to bed either at home or in a hospital or institution during the year (table 1). This indication of good health was somewhat greater among the men than among the women. The proportion for the men was 71.5 percent and for the women, 66.5 percent.

Although relatively more of the younger beneficiaries than of those in the oldest group reported no hospitalization or confinement to bed at home, the differences were not striking. For all male beneficiaries, the proportion dropped from 73 percent among those under age 70 to 68 percent for those aged 80 and over. The corresponding decrease for the women was from 68 percent to 60 percent.

Beneficiaries who owned hospitalization insurance were somewhat less frequently confined to bed than were the others. To some extent, this finding is a reflection of their relatively younger age, but there is also the possibility that beneficiaries in poorer physical condition were unable to obtain or continue hospitalization insurance.

Of the beneficiaries reporting hospital or institutional stays or confinement to bed at home, one-fifth were incapacitated for a week or less and almost another fifth for 1–2 weeks (table 2).

The individuals incapacitated for 14 weeks or longer represented 13.7

percent of the aged beneficiaries with some incapacity (4.2 percent of all aged beneficiaries). Incapacity of this duration cannot help but have a serious impact on the general well-being of the family unit even if there is no hospitalization expense involved. The group with incapacity of at least 14 weeks is divided almost evenly into those with durations of 14–26 weeks and those with durations of more than half a year. The extremely long durations of 40 weeks or more—and almost all of these were actually full-year durations—were reported by 1 in 20 of the beneficiaries with some incapacity; the proportion was the same for men and women beneficiaries.

When distributed among all beneficiaries, whether or not incapacitated during the year, the days of incapacity per person per year averaged about 14 1/3 for the men and 17 1/3 for the women (table 3). The higher rate for women resulted from incapacity confining them to bed at home, averaging about 14½ days during the year. The average number of days spent in general hospitals or in other types of institutions was lower for the women beneficiaries than for the men.

To some extent, the hospital or institutional care of the women is understated by the survey procedure of excluding a wife beneficiary who was out of the household virtually the entire year. The man or woman retired-worker or aged-widow beneficiary, on the other hand, was always a member of the beneficiary group and, even if in an institution the entire year, was included in the survey. To indicate the possible understatement due to the survey procedures, the average number of days spent in general hospitals or institutions has been calculated for women beneficiaries other than wives of old-age beneficiaries. The average spent in short-term general hospitals was virtually the same (2.12 days, compared with the average of 2.07 days shown in table 3). The average for other institutions, however, was half again as high (1.20 days in contrast to 0.80 days).

The beneficiaries covered by hospital insurance averaged more days in general hospitals than did those without protection against these costs—2.80 days in contrast to 2.10. This difference is especially significant in the light of the lower average number of days of incapacity of all kinds for beneficiaries with hospitalization insurance; their average was 12.70 days, while beneficiaries not protected against hospital costs averaged 16.57 days. For both men and women alike, the average duration of incapacity was 4 days less for beneficiaries with hospitalization insurance than for the uninsured.

The percentage distribution of days of incapacity, shown in the lower part of table 3, highlights the interrelation of ownership of hospitalization insurance and the place where beneficiaries spent their days of incapacity. For men, whether with or without insurance, three-fourths of the days were spent at home in bed. For men with hospitalization insurance, virtually all the days of incapacity not spent at home in bed were spent in short-term general hospitals; less than 1 percent of the total number of their days of incapacity were in other institutions. Days of incapacity not spent at home in bed were much less concentrated for men without hospitalization insurance. Days in general hospitals accounted for 15 percent of their total and days in other institutions for 11 percent. Undoubtedly persons insured against hospitalization costs are freer to go to short-term general hospitals when care is needed. There is, however, another factor contributing to this difference between the insured and uninsured men. Men who spent the entire survey year—and sometimes preceding years as well—in veterans' hospitals accounted for a fairly sizable portion of the total number of days in institutions other than general hospitals; such beneficiaries possibly had neither opportunity nor need to acquire voluntary insurance against hospitalization costs.

Table 3.—*Number of days of incapacity per aged beneficiary during survey year 1951 and percentage distribution of days by place of incapacity and by sex and ownership of hospitalization insurance*

Sex and insurance ownership	Number of days per beneficiary during survey year			
	Total	General hospitals	Institutions	At home in bed
All aged beneficiaries	15.69	2.25	1.06	12.37
With insurance	12.70	2.80	.24	9.66
Without insurance	16.57	2.09	1.30	13.17
Men	14.38	2.40	1.26	10.72
With insurance	11.45	2.78	.07	8.60
Without insurance	15.25	2.29	1.61	11.35
Women	17.32	2.07	.80	14.45
With insurance	14.28	2.83	.46	10.99
Without insurance	18.22	1.84	.91	15.47
	Percentage distribution of days			
All aged beneficiaries	100.0	14.4	6.8	78.8
With insurance	100.0	22.0	1.9	76.1
Without insurance	100.0	12.7	7.8	79.5
Men	100.0	16.7	8.8	74.5
With insurance	100.0	24.3	0.6	75.1
Without insurance	100.0	15.0	10.6	74.4
Women	100.0	12.0	4.6	83.4
With insurance	100.0	19.8	3.2	77.0
Without insurance	100.0	10.1	5.0	84.9

Incapacity in Institutions

Analysis of incapacity in institutions other than general hospitals must necessarily be made on a basis that approaches a case-by-case study. The reasons are that so few of the beneficiaries reported incapacity in such institutions and that the survey procedures resulted in a concentration among beneficiaries classified as nonmarried men.

Of the more than 22,000 aged beneficiaries (retired workers, wives, and widows) included in the survey, only 88 (four-tenths of 1 percent) were identified as having been incapacitated during the year in mental or tuberculosis hospitals, in veterans' homes, or in such institutions as rest homes, nursing homes, convalescent homes, welfare institutions, and fraternal homes. Of the 88 cases, more than half had been classified as nonmarried men, a significantly higher proportion than their representation among all aged beneficiaries (slightly more than one-fifth of the total). Few as the cases were, their time spent in institutions amounted to 23,500 days, or slightly more than 1 day apiece when averaged over all the aged beneficiaries in the survey.

Slightly more than half the 88 cases were incapacitated for the full year in such institutions. Others

spent significant portions of the year in the institution and for the remainder of the survey year were bedbound at home. For still others, this so-called "institutional" incapacity consisted of a week or so in a nursing home after a stay in a short-term general hospital.

For the 88 beneficiaries, incapacity in such institutions averaged 267 days, or almost three-fourths of a full year. The average was slightly higher for the men than for the women, 274 days as against 255 days. If the time that they also spent in general hospitals or in bed at home is added, the average duration of their days of incapacity is raised to 277, with 284 the average for the men and 263 the average for the women.

Obviously, much of this institutional care was financed at public expense. Of the total number of days of institutional incapacity measured in the survey, about two-thirds were identified as having been in mental hospitals, tuberculosis sanatoriums, veterans' hospitals, or county or city infirmaries—all institutions that depend on public financing even though some patients may be charged on an ability-to-pay basis. Much of the remaining one-third was in fraternal and nonprofit institutions that may or may not be self-supporting through charges levied on the patients. Even for the cases identified as having been in proprietary nursing homes, an element of public financing was often present in that the public assistance agency was paying the nursing-home bill.

Table 4.—*Aged beneficiaries confined to bed at home as percent of all aged beneficiaries and number of days in bed at home per case during survey year 1951, by age at end of year and by sex and ownership of hospitalization insurance*

Sex and insurance ownership	Total	Age at end of survey year			
		Under 70	70–74	75–79	80 and over
	Those confined to bed as percent of all aged beneficiaries				
Total	26.1	25.2	26.0	27.1	28.5
With insurance	23.5	23.0	22.8	26.0	25.0
Without insurance	26.9	26.0	26.9	27.4	29.0
Men	23.1	21.9	22.7	24.3	25.9
With insurance	20.5	19.1	20.1	23.2	22.9
Without insurance	23.9	23.0	23.5	24.5	26.4
Women	29.9	28.3	30.1	31.9	34.1
With insurance	27.3	27.0	26.1	31.2	30.3
Without insurance	30.7	28.9	31.2	32.0	34.6
	Number of days in bed per case during survey year				
Total	46.4	40.2	44.2	51.1	71.3
With insurance	39.3	33.4	37.6	49.7	65.0
Without insurance	48.3	42.5	45.8	51.4	72.1
Men	45.3	40.5	41.9	51.4	57.9
With insurance	40.5	34.7	34.4	53.9	60.5
Without insurance	46.5	42.3	43.7	50.8	57.6
Women	47.5	40.0	46.4	50.7	92.8
With insurance	38.2	32.4	40.8	43.7	73.7
Without insurance	49.9	42.6	47.8	52.2	94.9

Confinement to Bed at Home

Beneficiaries reporting some confinement to bed at home comprised 23 percent of all the aged men beneficiaries and 30 percent of all the women. Somewhat higher proportions of the beneficiaries who had no insurance against hospitalization costs than of those with such protection spent some part of the year bedbound at home. That this is not a difference due entirely to age is apparent from table 4. In each age grouping, proportionately more of the beneficiaries without insurance than of those with insurance spent time in bed at home and the number of days in bed averaged higher.

Although the proportion of all aged beneficiaries who were confined to bed at home rose only slightly with advancing age, the number of days of incapacity per bedfast case showed a marked increase at the highest age levels, especially for the women. Thus, of the women beneficiaries who were bedfast, those aged 80 and over spent more than twice as many days in bed as did those under age 70. For the men, the average for the highest age group was about half again as high as for the group under age 70.

Only about a fourth of all beneficiaries who spent some time in bed at home also had a period of hospitalization in a general hospital. For beneficiaries with hospitalization insurance, however, this percentage was closer to a third, and for those without insurance it was not much more than one-fifth. Of the beneficiaries confined to bed at home, the following proportions were also hospitalized at some time during the year:

Insurance ownership	Total	Men	Women
Total	23.9	24.5	23.2
With insurance	32.6	32.7	32.5
Without insurance	21.6	22.4	20.8

Beneficiaries who were hospitalized as well as confined to bed at home during the year averaged longer incapacity at home than did those whose incapacity was solely at home —probably a finding indicative of a difference in the seriousness of the physical condition. The days spent at home in bed by beneficiaries who were also hospitalized during the year averaged 53 for the men and 56 for the women; both averages were about a fourth higher than for those not hospitalized (table 5).

Hospitalization in General Hospitals

The information that the national beneficiary survey provides on confinement to bed at home and on institutional hospitalization has a unique value since such data had not hitherto been available. Data on beneficiaries' hospitalization in general hospitals, however, are probably of wider interest, in part because such hospitalization is likely to result in heavy financial burdens on the beneficiary and in part because data

Table 5.—*Number of days in bed at home per case by whether or not beneficiary was in short-term hospital during survey year 1951, by sex and age at end of survey year*

Age and sex	Number of days in bed at home during survey year	
	No hospital stay	Hospital stay
Men	42.8	53.1
Under 70	37.5	50.1
70–74	39.6	50.2
75–79	49.0	57.9
80 and over	56.2	63.8
Women	44.8	56.4
Under 70	38.1	46.7
70–74	43.8	54.5
75–79	46.7	64.1
80 and over	90.2	101.0

from other studies permit a comparison of old-age and survivors insurance beneficiaries with the total aged population. Hence, the remainder of this analysis is more detailed than were the preceding sections and draws in, whenever possible, related data from the survey of the total noninstitutional population aged 65 and over made in March 1952 by the Bureau of the Census.[3]

Hospitalization rates.—One out of every 10 aged beneficiaries spent time in the hospital during the survey year.[4] The rates, which were not significantly different for the men and the women, show increasing hospital utilization as age advances (table 6).

Proportionately more of the beneficiaries who had hospitalization insurance than of those without this protection had hospital care. The higher rates for beneficiaries with insurance against hospital costs are consistent with the findings of the census survey, also summarized in table 6. The old-age and survivors insurance beneficiary survey adds the information, however, that the higher hospitalization rates of the group with insurance are associated with lower rates of incapacity of all types —or all types measured by the survey —than were experienced by the group without insurance.

The proportions of aged beneficiaries of old-age and survivors insurance who had hospitalized illnesses are considerably higher than the proportions found for the total noninstitutional population aged 65 and over in March 1952. A difference in this direction is to be expected. Of the total aged population in the census survey, almost one-fourth were still employed—a rough indication of physical capacity—while aged beneficiaries were for the most part out of the labor force.

Table 6.—*Number hospitalized per 100 aged beneficiaries, survey year 1951, and per 100 in the aged noninstitutional population,*[1] *calendar year 1951, by age*[2] *and by sex and ownership of hospitalization insurance*

Age and employment status	Total			Men			Women		
	Total	With insurance	Without insurance	Total	With insurance	Without insurance	Total	With insurance	Without insurance
Aged beneficiaries, total	10.5	13.1	9.7	10.7	12.8	10.0	10.3	13.5	9.3
Under 70	9.6	11.7	8.8	9.6	10.6	9.2	9.6	12.8	8.4
70–74	10.6	13.3	9.8	10.6	13.2	9.9	10.5	13.4	9.7
75 and over	11.5	15.6	10.6	11.8	15.4	11.0	11.0	16.0	10.1
75–79	11.3	15.4	10.3	11.8	15.5	10.8	10.4	15.2	9.4
80 and over	12.2	16.5	11.6	11.8	15.3	11.3	13.1	19.6	12.3
Aged noninstitutional population, total	6.7	9.2	5.8	7.3	10.6	5.9	6.1	7.6	5 7
65–69	6.9	9.3	5.5	8.2	11.0	6.1	5.7	7.2	5.0
70–74	6.1	8.8	5.2	6.2	8.2	5.4	6.1	9.6	5.1
75 and over	6.8	9.2	6.4	7.1	12.8	6.0	6.6	6.0	6.7
In the labor force	5.8	8.2	3.9	6.3	9.0	4.2	3.3	4.0	2.8
65–69	6.1	8.1	4.1	7.1	9.5	4.6	1.9	1.4	2.2
70–74	5.8	8.5	4.1	6.1	8.3	4.7	3.9	9.1	0
75 and over	4.4	7.8	3.1	3.3	6.8	1.9	(3)	(3)	(3)
Not in the labor force	6.9	9.8	6.1	7.9	12.9	6.7	6.3	8.1	5.8
65–69	7.3	10.4	6.0	9.6	14.4	7.5	6.3	8.5	5.3
70–74	6.3	9.1	5.5	6.3	8.1	5.8	6.2	9.6	5.4
75 and over	7.1	9.4	6.7	7.9	15.7	6.8	6.5	5.6	6.6

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), table 37.
[2] For old-age and survivors insurance beneficiaries, age at end of survey year; for noninstitutional population, age in March 1952.
[3] Percentage not computed; base too small.

The rates for the beneficiaries, however, are higher even than the rates for the noninstitutional population not in the labor force and of relatively comparable age groups. Here it must be emphasized that the age group "under 70" for old-age and survivors insurance beneficiaries is not comparable with the age group "65–69" of the census survey. Beneficiaries tend to be concentrated at the upper end of this interval, since the average age at which they start to draw benefits has been close to 69 and, for inclusion in the survey, they had to have been on the rolls at least a year. Furthermore, the census survey encompassed the hospital experience of persons under age 65 in 1951. The population surveyed was aged 65 or over in March 1952, and the ages are tabulated as of that date; the age distribution is affected all along the line.

The higher hospitalization rates for old-age and survivors insurance beneficiaries may also be due in part to inclusion of persons who were in institutions. Although the measurement for purposes of the present analysis has been adjusted to approximate hospitalization in short-term general hospitals, the beneficiary population includes persons in mental, tuberculosis, and other institutions, and the "hospitalization" includes periods when persons in domiciliary institutions were receiving medical care for acute illnesses. (As an example of the latter, a beneficiary living at a county farm who spent several weeks in the hospital ward with pneumonia was counted as spending that period in a "short-term general hospital.") Hence, if the institutionalized population is more likely than the noninstitutionalized to receive hospital care for acute illnesses or for acute phases of their conditions, somewhat higher hospitalization rates would be expected for the beneficiaries.[5] The beneficiary survey data indicate that this may be the case. When beneficiaries are classified by living arrangements, the proportion hospitalized becomes roughly 10 percent for those living in their own homes, 11 percent for those residing in the

[3] I. S. Falk and Agnes W. Brewster, *Hospitalization and Insurance Among Aged Persons: A Study Based on a Census Survey in March 1952*, Bureau Report No. 18, Division of Research and Statistics, Social Security Administration, April 1953. The findings are summarized in the *Bulletin* for November 1952.

[4] The old-age and survivors insurance survey data are in terms of persons hospitalized in the course of the year, disregarding the number of times they were admitted to a hospital. The census data included in this article are also in terms of persons hospitalized; additional data from that survey show 1.1 admissions per hospitalized person.

[5] The effect on the total would be slight, however, since only a very small proportion of the beneficiaries were institutionalized; 1.7 percent were in institutions at the end of the survey year.

Table 7.—*Number hospitalized per 100 aged insurance beneficiaries, survey year 1951, and per 100 in the aged noninstitutional population,* [1] *calendar year 1951, by place of residence and by sex and ownership of hospitalization insurance*

Residence and size of community	Total			Men			Women		
	Total	With insurance	Without insurance	Total	With insurance	Without insurance	Total	With insurance	Without insurance
Aged beneficiaries:									
Urban	10.6	13.2	9.9	11.0	12.8	10.5	10.2	13.6	9.1
More than 100,000	10.4	13.6	9.4	11.1	14.0	10.2	9.6	13.1	8.5
10,000–99,999	11.0	11.8	10.7	11.1	10.4	11.3	10.9	13.6	10.1
2,500–9,999	10.7	14.5	9.7	10.5	13.2	9.7	11.0	16.2	9.7
Rural-nonfarm	9.9	12.6	9.2	9.1	12.1	8.4	11.1	13.6	10.6
Farm	9.3	15.0	7.8	9.2	16.9	7.3	9.4	(2)	9.1
Aged noninstitutional population:									
Urban	6.5	9.0	5.4	7.1	10.2	5.3	6.0	7.6	5.4
Rural-nonfarm	7.6	8.4	7.3	8.5	11.0	7.6	6.7	5.1	7.1
Farm	6.2	12.3	5.1	6.5	12.2	5.4	5.8	12.5	4.7

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), table 35.

[2] Percentage not computed; base too small.

home of a relative, and 12 percent for roomers or boarders. The proportion is as high as 17 percent, however, for the relatively small group consisting mainly of persons in institutions.

Still another difference between the samples of the two surveys could be expected to produce higher hospitalization rates for the beneficiaries. Old-age and survivors insurance beneficiaries are predominantly urban dwellers. Of the retired-worker and aged-widow beneficiaries surveyed, 84 percent were living in urban communities (with populations of 2,500 or more) and only 3 percent on farms. In contrast, 64 percent of the total aged population included in the census survey resided in urban communities, and as many as 15 percent lived on farms. Among persons without protection against hospital costs —and the bulk of the aged lack insurance—hospitalization rates tend to be lower for farm dwellers than for persons living in urban or rural-nonfarm communities. Although the findings of both surveys show this farm-nonfarm difference, any comparison of the specific rates in table 7 must recognize that the census data relate to the total aged population, including employed persons.

By covering the aged population in general, the census survey took in groups apt to be less financially secure than old-age and survivors insurance beneficiaries, as well as those whose earnings place them at a relative economic advantage. (The total aged population includes, for example, proportionately twice as many women aged 75 and over as were found among aged beneficiaries surveyed in 1951.) It is possible, therefore, that financial barriers to medical care were partly responsible for keeping hospitalization rates among the aged population not in the labor force below those for aged beneficiaries.

No substantiating data on the effect of income on hospitalization rates are available. The beneficiary survey permits a comparison of hospital rates with amount of independent retirement income during the survey year,[6] but the results are inconclusive. The fact that there was no consistent or significant increase in utilization of general hospitals as income rose could have a number of interpretations. Retirement income, while the best measure of what the beneficiary can count on for day-to-day living, does not necessarily reflect the level of total money income or the amount of assets available for meeting such unusual expenses as hospitalization. Furthermore, the beneficiary did not necessarily pay his own hospital bill; the hospitalization may have been financed by children or other relatives or, frequently, was at public expense. There is still another possibility; beneficiaries with higher retirement incomes may have been in better health so that they were less likely to need hospitalization. On this latter point, although tabulations were not made of the total number of days of incapacity by income group, background data indicate that the lowest retirement incomes tend to be associated not only with the most advanced ages but with poor health, since poor health may actually have caused low retirement benefits through interruptions in earnings.

Thus, about the only conclusion that can be drawn from table 8 is that, within each income group, beneficiaries who had some insurance against hospital bills were more likely to be hospitalized in a general hospital than were those who lacked such protection.

Days per person hospitalized.—The aged beneficiaries who were hospitalized during the survey year spent an average of 3 weeks (21.5 days) in a short-term general hospital. While

[6] Retirement income is money income from independent sources that can be expected to continue for the lifetime of the beneficiary. Thus it includes, in addition to 12 months' old-age and survivors insurance benefits, employer and union pensions, veterans' pensions, private annuities, and income from trust funds, rents, interest, and dividends. It does not include earnings, nor does it include nonindependent sources, such as public assistance and contributions and gifts from relatives or friends.

Table 8.—*Number hospitalized in short-term general hospitals per 100 aged beneficiaries, by ownership of hospitalization insurance and independent money retirement income,* [1] *for survey year 1951*

Marital classification and ownership of insurance	Retirement income during survey year					
	Total	Less than $300	$300–599	$600–1,199	$1,200–1,799	$1,800 and over
Nonmarried	11.5	11.0	11.4	11.2	10.5	16.8
With insurance	14.4	15.5	14.3	14.5	10.6	18.6
Without insurance	10.8	10.4	10.9	10.2	10.4	15.7
Married	9.5	8.4	9.8	9.0	10.6	9.5
With insurance	11.9	12.3	13.8	11.2	13.6	10.6
Without insurance	8.6	7.4	8.9	8.3	9.2	8.9

[1] For beneficiary (and spouse, if any) represents, in addition to 12 months' old-age and survivors insurance benefits, income from employer and union pensions, veterans' pensions, and private annuities and from trust funds, rents, interest, and dividends.

Table 9.—*Average number of days of hospitalization per hospitalized person among aged beneficiaries, survey year 1951, and among the aged noninstitutional population,* [1] *calendar year 1951, by age* [2] *and ownership of hospitalization insurance*

Age and employment status	Total			Men			Women		
	Total	With insurance	Without insurance	Total	With insurance	Without insurance	Total	With insurance	Without insurance
Aged beneficiaries, total	21.5	21.3	21.6	22.5	21.7	22.8	20.1	20.9	19.8
Under 70	20.5	19.4	21.0	21.2	18.8	22.3	19.7	19.9	19.6
70–74	22.1	19.8	23.0	23.2	17.6	25.4	20.6	22.4	19.9
75 and over	21.9	26.5	20.4	22.8	29.7	20.6	20.1	20.4	20.0
75–79	21.5	24.3	20.5	22.7	25.8	21.5	19.3	21.2	18.6
80 and over	22.9	35.7	20.2	23.1	45.1	18.6	22.3	(3)	23.4
Aged noninstitutional population, total	24.8	16.4	29.5	25.2	16.0	32.4	24.3	17.1	27.1
65–69	20.4	15.2	25.6	16.5	14.3	19.4	25.7	16.8	31.4
70–74	34.7	17.8	44.1	45.8	13.9	64.9	24.7	21.7	26.3
75 and over	22.4	18.4	23.5	22.3	23.3	21.9	22.6	9.1	24.6
In the labor force	13.9	12.5	16.2	13.4	12.0	15.7	18.4	17.3	19.5
Not in the labor force	27.5	18.5	31.3	31.7	20.1	37.4	24.6	17.1	27.4

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), table 48.
[2] For old-age and survivors insurance beneficiaries, age at end of survey year; for noninstitutional population, age in March 1952.
[3] Percentage not computed; base too small.

the overall averages of those with and without hospitalization insurance were almost identical, there were variations when the insured and the uninsured were compared by age group and by sex. In the age groups under 75 the insured men spent fewer days in the hospital on the average than the uninsured; after age 75 the insured men spent more days than the uninsured in the hospital. The stays for the women beneficiaries—which on the average were nearly 2½ days shorter than those for men—were slightly higher among women with protection against hospital costs than among the women without such protection.

In comparison with the average for the total noninstitutional aged population, including both those in and those out of the labor force, the average stay of beneficiaries was 3 days shorter per hospitalized person. As might be expected, the census survey showed much longer stays among persons not in the labor force (averaging about 4 weeks) than among those still working (averaging 2 weeks). The average for aged beneficiaries fell about halfway between these two averages for the total aged population.

That there are basic differences between the population groups covered by the two surveys has been pointed out in relation to the hospitalization rates. These differences affect the duration of hospital stays as well. To account for the wide variation in durations shown in table 9, it is helpful to have a distribution of the hospitalized persons in the two surveys by the time each person spent in the hospital and a similar distribution of the days of hospital care by

Table 10.—*Percentage distribution of persons hospitalized and of hospital days, by specified number of days in hospital among aged beneficiaries, survey year 1951, and among aged noninstitutional population,* [1] *calendar year 1951*

Sex and insurance ownership	Aged beneficiaries, by specified number of days in hospital per hospitalized person								Aged noninstitutional population, by specified number of days in hospital per hospitalized person							
	Total	1–7	8–14	15–21	22–30	31–60	61–90	91 and over	Total	1–7	8–14	15–21	22–30	31–60	61–90	91 and over
	Percentage distribution of hospitalized persons															
Total	100.0	29.9	25.9	14.4	9.4	14.3	3.4	2.7	100.0	32.1	23.7	17.9	9.4	10.2	4.6	2.4
With insurance	100.0	28.7	27.4	14.5	9.2	13.9	4.1	2.1	100.0	36.6	23.2	19.0	9.9	9.2	2.1	0
Without insurance	100.0	30.4	25.3	14.3	9.4	14.4	3.2	2.9	100.0	29.6	24.0	16.8	9.2	10.8	6.0	3.6
Men	100.0	28.3	25.6	14.8	9.7	15.2	3.4	3.0	100.0	32.3	21.4	18.4	12.9	10.0	2.5	2.5
With insurance	100.0	28.7	24.5	15.9	9.5	15.3	4.2	1.9	100.0	38.6	23.9	18.2	8.0	9.1	2.3	0
Without insurance	100.0	28.1	25.9	14.4	9.8	15.2	3.1	3.4	100.0	27.4	19.5	18.6	16.8	10.6	2.7	4.4
Women	100.0	32.1	26.4	13.8	8.9	13.0	3.5	2.3	100.0	31.9	26.2	16.8	5.8	10.5	6.8	2.0
With insurance	100.0	28.8	30.8	12.9	8.9	12.3	4.0	2.3	100.0	33.3	22.2	20.4	13.0	9.3	1.9	0
Without insurance	100.0	33.5	24.5	14.2	8.9	13.3	3.3	2.3	100.0	31.4	27.7	15.3	2.9	10.9	8.8	2.9
	Percentage distribution of hospital days															
Total	100.0	5.5	12.7	11.7	10.7	27.4	12.5	19.6	100.0	6.1	11.3	13.6	10.2	18.4	14.4	26.0
With insurance	100.0	5.4	13.5	11.9	10.6	26.7	14.8	17.1	100.0	11.0	16.7	22.4	15.2	25.3	9.4	0
Without insurance	100.0	5.6	12.3	11.6	10.7	27.7	11.4	20.6	100.0	4.6	9.6	10.9	8.6	16.2	15.9	34.2
Men	100.0	5.0	11.9	11.5	10.6	27.7	11.9	21.4	100.0	6.2	9.9	13.8	13.8	17.6	7.4	31.3
With insurance	100.0	5.3	11.9	12.8	10.7	28.1	15.4	15.8	100.0	11.7	17.3	22.3	13.2	26.2	9.3	0
Without insurance	100.0	4.9	11.9	11.0	10.5	27.6	10.7	23.4	100.0	4.1	7.1	10.5	14.0	14.3	6.7	43.4
Women	100.0	6.4	13.7	12.0	10.9	26.9	13.1	17.0	100.0	6.1	12.9	13.5	6.2	19.2	22.0	20.1
With insurance	100.0	5.5	15.5	10.9	10.5	24.9	14.1	18.7	100.0	10.0	15.9	22.4	18.1	23.9	9.7	0
Without insurance	100.0	6.7	13.0	12.5	11.1	27.8	12.7	16.2	100.0	5.1	12.2	11.3	3.2	18.1	25.0	25.1

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), tables 14, 40, and 41.

Table 11.—*Number of days of hospital care per 100 aged beneficiaries in short-term hospitals, survey year 1951, and per 100 in the aged noninstitutional population,* [1] *calendar year 1951, by age* [2] *and by sex and ownership of hospitalization insurance*

Age and employment status	Total			Men			Women		
	Total	With insurance	Without insurance	Total	With insurance	Without insurance	Total	With insurance	Without insurance
Aged beneficiaries, total	225	280	209	240	278	229	207	283	184
Under 70	196	228	184	204	260	205	189	255	164
70–74	233	263	225	247	233	251	217	301	193
75 and over	252	414	217	269	459	226	221	325	202
75–79	242	374	211	267	400	233	200	324	174
80 and over	280	589	235	274	689	210	292	(3)	287
Aged noninstitutional population, total	165	151	170	184	168	190	148	130	154
65–69	141	141	140	135	157	118	146	121	157
70–74	213	157	232	283	114	350	151	208	135
75 and over	153	168	150	158	298	132	149	54	165
In the labor force	81	102	64	85	108	66	61	70	55
Not in the labor force	190	181	193	252	258	250	156	139	160

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), table 53.

[2] For old-age and survivors insurance beneficiaries, age at end of survey year; for noninstitutional population, age in March 1952.

[3] Percentage not computed; base too small.

length of stay (table 10). Of the hospitalized beneficiaries, insured and not insured alike, 30 percent spent 1 week or less in the hospital. An identical proportion of the total aged population that was uninsured had equally short stays. Of the insured group, on the other hand, as many as 37 percent were in hospitals for a week or less—a reflection of the generally shorter stays of persons still in the labor force.

Hospital stays of as long as 2 months or more were also equally frequent among beneficiaries with insurance and beneficiaries without insurance (6 percent of those hospitalized). Of the total aged population that was hospitalized, however, only 2 percent of those with insurance but almost 10 percent of the uninsured spent 2 months or longer in the hospital. Persons with hospital care of 2 months or longer accounted for about one-third of all the hospital days for both the beneficiaries with insurance and those without, in contrast to less than one-tenth of the days for the total aged population with insurance and one-half of the days for the aged population without insurance.

Some of these differences are undoubtedly traceable to differences in definition of what constituted institutional care in the two surveys. The census counted care in a Veterans Administration general hospital as hospital care even if it lasted 365 days; the adjustments made in the beneficiary survey data classified care in Veterans Administration facilities as institutional care without distinguishing between domiciliary and general hospital facilities. While this difference would partially explain the variation between the two survey findings for men, it does not explain why there was a larger proportion of uninsured women in the total aged population with long stays; they accounted for a much larger proportion of days than did uninsured women beneficiaries. Some of the difference could lie in the beneficiary survey procedures that excluded from the beneficiary group a wife who was out of the home for all or practically all the survey year. A more probable explanation is found in the presence in the total aged population of a much higher proportion of women at the most advanced ages.

Days of hospital care per 100 beneficiaries.—When the days of hospital care are related to all beneficiaries rather than to those who were hospitalized, the resulting rates measure not only the length of time spent in the hospital but the differences in hospitalization rates. As a group the aged beneficiaries used during the survey year 225 days of general hospital care per 100 persons, or 2¼ times the national average for persons of all ages (100 days per 100 persons). Insured beneficiaries had 280 days of hospital care and uninsured 209. The number of days of care per 100 increased with advancing age, except for the uninsured men, whose high institutional rates may have kept down the hospital days for the oldest persons.

The old-age and survivors insurance beneficiaries used more days of hospital care in a year than did the aged noninstitutional population—225 per 100 persons compared with 165 per 100. The differences are less if the comparison is between the beneficiaries and those not in the labor force. The insured women in the two surveyed groups showed considerably different rates—283 days per 100 women for the old-age and survivors insurance beneficiaries and 139 days per 100 for the noninstitutional population not in the labor force. It is possible that this marked difference—which stems from the number hospitalized rather than the average stay—is the result of sampling variability between the two surveys; aged women with hospitalization insurance made up a relatively small part of each survey population.

Conclusion

Heretofore knowledge of the incapacity of the aged population has been largely in terms of hospitalized illness. The amount of hospital care used by older persons has been ascertained but without relation to the amount of incapacity in bed at home or in institutions. Other studies have shown that ownership of insurance against hospital costs affects the rate of admission and length of stay in general hospitals, but they have not permitted an examination of these differences against a background of nonhospitalized incapacity. Data from the 1951 national beneficiary survey presented here throw some additional light on these important interrelationships.