VITAL and HEALTH STATISTICS

DATA FROM THE NATIONAL HEALTH SURVEY

Chronic Illness Among Residents of Nursing and Personal Care Homes

United States - May - June 1964

Statistics on number of chronic conditions and impairments, mobility status, time interval since resident last saw doctor, length of stay, primary type of service, nurse or nurse's aide on duty, supervisory nurse, and level of patient care in nursing and personal care homes Based on data collected from institutions during the period May-June 1964.

Washington, D. C. March 1967

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COOPERATION OF THE BUREAU OF THE CENSUS

Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the National Center for Health Statistics, the Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

CONTENTS

IN THIS REPORT residents of nursing and personal care homes are described in terms of their health and the health services provided to them. The principal health characteristics are number of chronic conditions and impairments and mobility status; measures of health services include time interval since resident last saw doctor, primary type of service provided by the home, nurse or nurse's aide on duty, supervisory nurse, and level of patient care.

At the time of the survey, an estimated 554,000 residents were being cared for in 17,400 nursing or personal care homes. Their median age was 80 years; more than 96 percent of the residents had one or more chronic conditions or impairments. Multiple chronic conditions occurred frequently; the average number for all residents was 3.1 conditions. This varied from 2.6 for residents under 65 years to 3.4 for those 85 and over.

Almost two-fifths of the residents were limited in mobility to their bed or room. As number of conditions increased, the resident's mobility decreased. The proportion of bed or room limited residents increased with age. The increase was greater for room limited residents than for bed limited ones. A higher proportion of females than males were room limited and, to a lesser extent, bed limited.

Number of conditions was related to the interval since the resident last saw a doctor while in the home. Bed limited residents had seen a doctor more recently than others. In this respect, bed limitation was a more significant factor than number of conditions in determining interval since doctor was last seen.

Type of service provided was related to number of conditions and mobility status. Nursing care homes provided service to a larger proportion of residents with multiple conditions than did other homes. Residents with five or more conditions constituted one-fourth of all residents in nursing care homes compared with one-eighth of those in personal-care-with-nursing homes and one-sixteenth in personal care homes.

Among homes having a nurse or nurse's aide on duty 24 hours, those with a registered nurse supervising nursing care had residents with more conditions than those without. Sixty percent of all residents received some level of nursing care during the week prior to the survey. Level of care was associated with number of conditions and impairments, but many residents with multiple conditions either received only minor nursing service or none at all.

SYMBOLS

Data not available------------------------ ---

Category not applicable-------------------- . . .

Quantity zero------------------------------ -

Quantity more than 0 but less than 0.05---- 0.0

Figure does not meet standards of
 reliability or precision------------------ *

CHRONIC ILLNESS AMONG RESIDENTS OF

NURSING AND PERSONAL CARE HOMES

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SELECTED FINDINGS

During the period May-June 1964, an estimated 554,000 persons were residents or patients in the Nation's 17,400 nursing and personal care homes. About 94 percent of the residents were in homes providing some nursing care (table A). Residents being cared for in nursing and personal care homes were for the most part aged or chronically ill. Their median age was 80 years, and about 96 percent of them were reported to have one or more chronic conditions or impairments.

More than two-thirds of the residents were in homes providing nursing care as their primary and predominant service. Another one-fourth were in homes providing some nursing care but less care than that provided in nursing care homes. These are referred to as personal-care-with-nursing homes. The balance of the residents (6 percent) were domiciled in places classified as personal care homes. A detailed description of the classification procedure is given in Appendix II.

A distinct characteristic of this population was the predominance of females. The ratio of

Table A. Selected data on nursing and personal care homes and their residents, by primary type of service: United States, May-June 1964

Primary type of service	Institutions	Residents	Males	Females	Ratio of females per 100 males
	Number		Median age in years		
All types-----------------	17,400	554,000	78	81	186
	Percent distribution				
Nursing care--------------------	54	68	78	81	193
Personal care with nursing------	30	26	77	81	182
Personal care-------------------	16	6	75	79	142

females to males was almost 2 to 1, although it varied by the type of service provided. However, even in personal care homes, where the ratio was lowest, there were 142 females for every 100 males.

Most residents, regardless of age, had several chronic conditions or impairments. The average for all residents was 3.1 conditions per person, ranging from 2.6 for persons under 65 years of age to 3.4 for those 85 and over. The relationship of number of conditions to advancing age is illustrated in the group of residents with five conditions or more, where the proportions range from about one-tenth for residents under 65 years to one-fourth for those 85 and over. This pattern holds true for both men and women.

Number of conditions per resident is used in this report as an index of the residents' health. Such an index is supported by at least two findings in the survey. As the number of conditions increased, there was a decrease in the resident's mobility and an increase in the number of physician visits. For example, only 1 percent of the residents with no reported conditions were bedridden compared with 29 percent of those with five conditions or more. About one-fifth of the residents with no conditions had seen a doctor while in the home within a month prior to the survey compared with one-third of the residents with one or two conditions; more than two-fifths of those with three conditions or more had seen a doctor within a month.

Although a few residents with multiple conditions were in personal care homes, most of the very ill residents were in homes providing skilled nursing care. About three-fourths of the residents with three or four conditions and four-fifths of those with five conditions or more were in nursing care homes. In contrast, only one-third of the residents with no reported conditions were in nursing care homes.

Almost all of the homes providing nursing care reported that round-the-clock nursing service was provided and that nursing care was supervised by either a registered nurse (RN) or a licensed practical nurse (LPN). As number of conditions increased, a higher proportion of residents were cared for in homes employing RN supervisors. This is illustrated by the fact that 70 percent of the residents with five conditions or more were in such homes in comparison

with one-half of the residents with no reported conditions.

The data on nursing and personal services provided during the week prior to the survey indicated that the majority of residents were receiving some level of nursing care, but for the most part, nursing services were limited to giving bed baths and routine care such as taking temperature and pulse and giving enemas. Of the 60 percent receiving nursing care, about 6 percent received intensive care, 46 percent were given full bed baths but not intensive care, 12 percent received less intensive care, and 36 percent were given routine care. (These nursing care classes are defined in Appendix II.) However, many of the residents with multiple conditions either received only minor nursing service or received none at all. The level of nursing care provided increased as the number of conditions or impairments increased.

SOURCE AND QUALIFICATIONS OF DATA

The data in this report are based on the findings of a sample survey of institutions in the United States which provide nursing or personal care to the aged and chronically ill. The survey, commonly referred to as Resident Places Survey-2 (RPS-2), was conducted during May and June 1964 by the Division of Health Records Statistics in cooperation with the U.S. Bureau of the Census.

The scope of RPS-2 included such institutional establishments as nursing homes, homes for the aged, and similar types of places, as well as geriatric hospitals. Two basic criteria for including an establishment in the survey were (1) it must routinely provide some level of nursing or personal care and (2) it must maintain three or more beds for residents or patients. Thus homes providing only room and board to aged people were not within scope of the survey.

RPS-2 was a multiple purpose survey, collecting statistics about establishments, the residents or patients domiciled in the establishments, and the employees in the establishments. Reports have been published on the number and types of employees and on their work experience, special training, and wages.[1,2] This report accounts for

the health of residents as reflected by the number of chronic conditions and impairments reported for them and by the health services provided by the establishments.

In order to interpret properly the statistics presented in this report, the reader should become familiar with the material in the appendixes. Appendix I gives a general description of the survey, the sampling frame used, the sample design, and the survey procedures. Also discussed are imputation procedures, estimation technique, and sampling variation. Tables and charts of standard errors are provided with illustrations of their use. Definitions of terms, the procedure for classifying establishments, and rules for diagnostic coding are shown in Appendix II.

It is important to note that classification of the establishments in the study is based on the type of service provided in the home and on the availability of nursing staff, rather than on what the home is called or how it is licensed by the State.

Facsimiles of questionnaires and forms used in the survey are shown in Appendix III. The study did not include an attempt to determine the prevalence of all types of chronic conditions and impairments; rather, it was directed toward those thought to have special significance for the aged population. These conditions are listed on Cards D and E in Appendix III. By the use of these flash cards, health data were obtained from nurses or other respondents who were said to be best acquainted with the health of residents. Also, available medical records were examined to determine if the patients had any other conditions not known or remembered by the respondent.

Since much of this report is based on the number of chronic conditions and impairments which residents had, the procedures followed in coding conditions are especially important. In general, the International Classification of Diseases [3] was used in coding conditions, supplemented by a special procedure for classifying impairments. The list of conditions and impairments and the rules used in the coding process appear in Appendix II.

As a part of the medical coding of each questionnaire, the number of conditions and impairments was counted and tabulated as the

figure for chronic illness for each resident in this report. The number of conditions could vary from one to whatever number of coded conditions the resident might have had. No attempt is made in this report to compare residents on the basis of the specific combination of chronic conditions and impairments they might have had, although the value of such a study is recognized.

HEALTH OF RESIDENTS

The objective of this portion of the analysis is to describe the degree of ill health of residents of nursing and personal care homes in terms of number of chronic conditions and impairments and mobility status. The analysis also describes the extent of medical and nursing care received by the residents while in the home on the basis of the time elapsed since they last saw a doctor and the types of nursing care they received. Finally, the analysis will correlate the different degrees of ill health of the residents with the levels of nursing care received.

Number of Chronic Conditions and Impairments

The data on chronic conditions and impairments presented in this report were obtained from proxy respondents such as nurses or other personnel who were considered to be the persons available in the homes best acquainted with the health of residents. Respondents reported conditions for each sample person on the basis of their personal knowledge supplemented by medical records. All conditions reported for a person were recorded on the questionnaire, and all such conditions were coded and tabulated for this analysis. It should be pointed out, however, that every chronic condition or impairment a person had may not have been reported, since only certain ones were specifically asked for. Those asked about, listed in Appendix III, were the ones thought to be most relevant to this population.

An estimated 96 percent of the residents had one or more chronic conditions or impairments as shown in table 1; the average (mean) was 3.1 conditions per person. Four-fifths of the residents had two conditions or more, while one-fifth of them had five conditions or more.

PERCENT DISTRIBUTION

Age group					
All ages	17.0	23.0	21.4	14.9	20.0
Under 65 years	26.6	25.8	19.7	13.7	11.5
65-74 years	18.9	25.2	20.4	15.2	16.8
75-84 years	15.2	22.3	22.7	15.2	20.2
85 years and over	14.4	21.2	21.1	14.6	25.5

Number of conditions
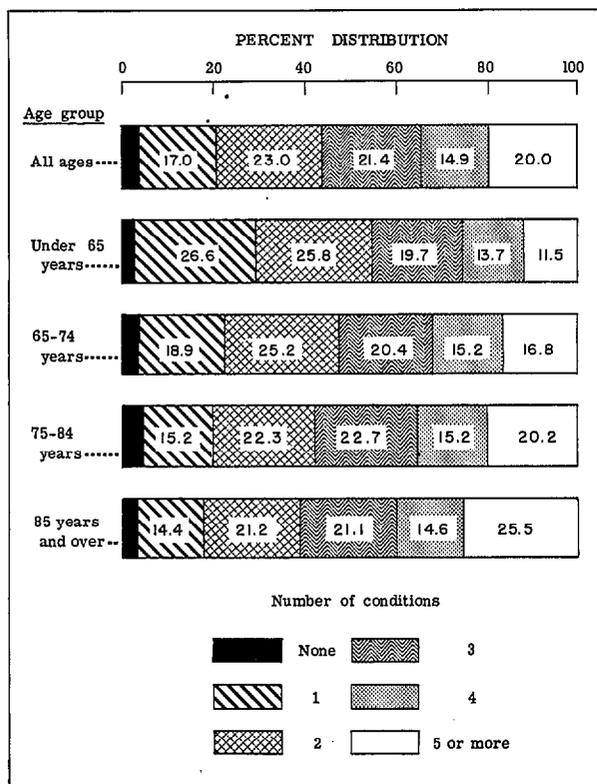
None   3

1   4

2   5 or more

Figure 1. Percent distribution of residents in nursing and personal care homes, by number of chronic conditions and impairments according to age.

This large number of conditions per person prevailed regardless of age; the average ranged from 2.6 conditions per person for residents under 65 years to 3.4 conditions for those 85 and over. For those in the intermediate age groups, 65-74 and 75-84, the means were about the same, 3.0 and 3.1 conditions per person, respectively. This relationship of increasing number of conditions with advancing age is also evident from figure 1, especially when residents with five conditions or more are compared by age. Only 12 percent of the residents under 65 years of age had five conditions or more, compared with 26 percent of those 85 and over.

The data also indicate that the average number of chronic conditions and impairments was similar for both men and women (a mean of 3.1 conditions per person for each) and that there was little variation by sex when age was considered.

Mobility Status

The number of chronic conditions furnishes a general indication of the health of residents. Some of the implications of the health levels are to be found in the resident's ability to get out of bed, to walk, and to leave the premises.

The respondent was asked the following questions about the resident: "Does he stay in bed all or most of the day?" "Does he stay in his own room all or most of the day?" and "Does he go off the premises just to walk, shop, or visit with friends or relatives and so forth?" The residents for whom "yes" was checked for the question "Does he stay in bed all or most of the day" are defined in this report as being bed limited. Those for whom "yes" was checked for "Does he stay in his room all or most of the day" are defined as room limited. The remaining residents, for whom "yes" or "no" was checked for "Does he go off the premises just to walk, shop, or visit with friends or relatives and so forth," are defined as neither bed nor room limited. Residents who were routinely taken out of the room in a wheel chair for most of the day were considered neither bed nor room limited and thus were included as a part of this last group.

In this discussion it is recognized that bed limitation also entails room limitation and that comparison between the two is based on the degree of limitation. Characteristics of the resident such as age, sex, and number of chronic conditions are discussed in relation to the factor of mobility (table 1). Data collected in the first Resident Places Survey (RPS-1) have shown mobility to be closely associated with age of resident.[4] Differences were also observed in the mobility status of males and females. Another variable related to mobility is the health of the individual as indicated by the number of chronic conditions and impairments.

Almost two-fifths of the residents were limited either to bed or to room. As the number of conditions increased, bed and room limitation also increased. About one-fifth of the residents with three to four conditions were bed limited as opposed to almost three-tenths of the residents with five conditions or more. Of the residents with one or two conditions, 18 percent were room limited compared with 25 percent of those with three conditions or more.

Age and Sex of Resident

Residents of nursing and personal care homes were, for the most part, aged; the median age of all residents was about 80 years (table 2). Females were, on the average, older than males. Approximately three-fourths of the females were aged 75 years and over compared with three-fifths of the males.

Patient mobility decreased with age (fig. 2). However, only at age 85 or over was there a significantly higher proportion of bed limited persons than at lower ages, while the proportion of those who were room limited was significantly greater at each succeeding age group. There tended to be about the same proportion of bed and room limited residents at the lower age groups. For the oldest age groups a larger percent of residents were room limited than bed limited. Of residents under 65 years, 13 percent were bed limited; for those in age groups 65-74 and 75-84 this figure was 16 percent, and at 85 and over, one-fifth were limited to bed. The proportion of room limited residents was signif-
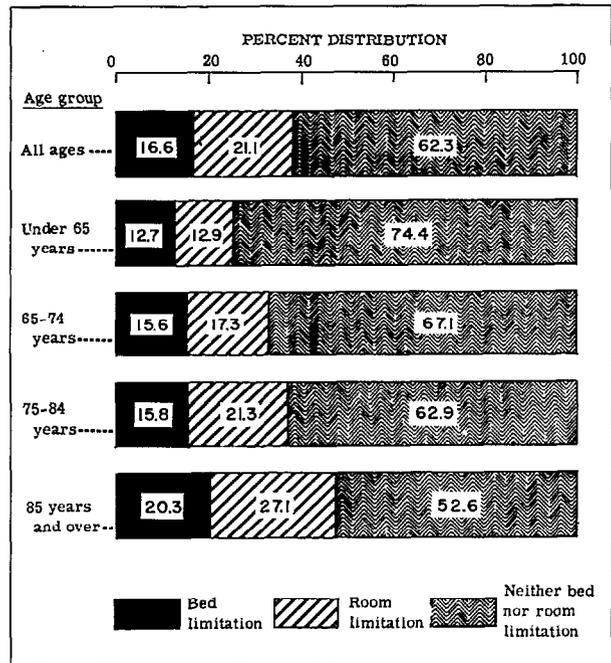
Figure 2. Percent distribution of residents in nursing and personal care homes, by mobility status according to age.
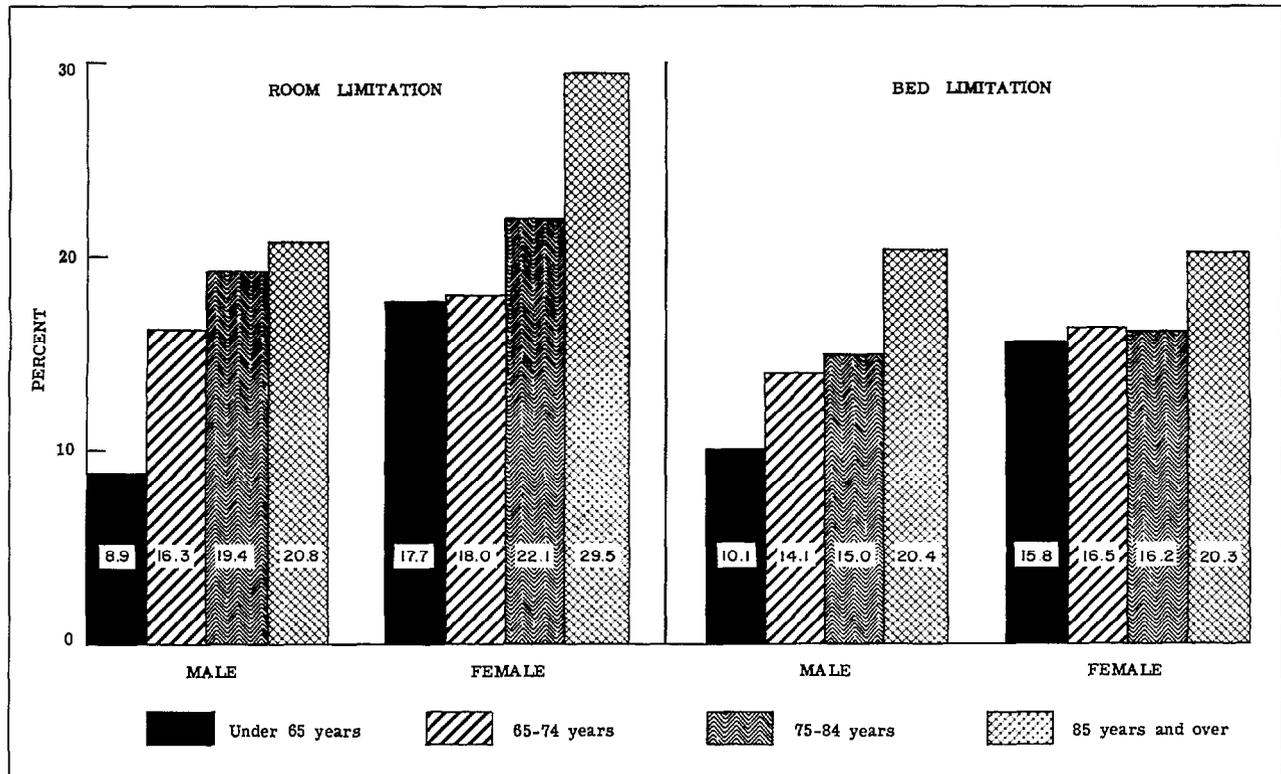
Figure 3. Percent of residents in nursing and personal care homes with mobility status, by sex and age.

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Table B. Percent distribution of residents, by mobility status according to number of chronic conditions and impairments and sex: United States, May–June 1964

Number of chronic conditions and sex	Number of residents	Mobility status			
		Total	Bed limitation	Room limitation	Neither limitation
All conditions		Percent distribution			
Both sexes	554,000	100	17	21	62
Male	193,800	100	15	17	68
Female	360,200	100	18	23	59
No conditions					
Both sexes	20,400	100	1	5	94
Male	6,800	100	-	4	96
Female	13,600	100	2	5	93
1-2 conditions					
Both sexes	221,700	100	9	18	73
Male	78,200	100	9	12	79
Female	143,500	100	10	21	69
3-4 conditions					
Both sexes	201,100	100	19	24	57
Male	69,400	100	17	21	62
Female	131,700	100	20	25	55
5 conditions or more					
Both sexes	110,700	100	29	26	45
Male	39,400	100	27	22	51
Female	71,400	100	31	28	41

icantly higher than the proportion of bed limited residents at ages 75-84 and 85 or over.

Mobility limitation was more closely associated with number of conditions than with age. The percent of bed limited residents within each condition level was with few exceptions about the same for each age group at that level. There were, however, significant differences in the proportion of bedridden residents among residents in different condition levels within the same age interval. For example, at age 85 or over, 3 percent of the residents with no conditions were bedridden, as were

one-eighth of those with one or two conditions, over one-fifth with three to four conditions, and one-third with five conditions or more.

For all condition levels a higher proportion of females than males were limited to room (table B). However, there were no significant differences in bed limitation for males and females, regardless of the number of conditions.

Sex differences by age held more consistently for room limitation than for bed limitation, as shown in figure 3. The proportion of females with bed limitation was significantly higher than

Table C. Percent distribution of residents, by time interval since last saw doctor while in home according to number of chronic conditions and impairments: United States, May-June 1964

Time interval since last saw doctor	Number of chronic conditions				
	All conditions	No conditions	1-2 conditions	3-4 conditions	5 conditions or more
Number of residents--	554,000	20,400	221,700	201,100	110,700
	Percent distribution				
All intervals--------	100	100	100	100	100
Under 1 month------------	39	20	35	42	45
1-2 months--------------	36	29	35	37	39
3-5 months--------------	11	12	12	10	9
6-11 months-------------	6	12	7	5	4
1 year or more----------	4	8	5	3	2
Not seen while in home---	4	19	6	3	1

the proportion of males at ages under 65 years. At 85 and over, the proportion of bed limited males and females was about equal. For room limitation there were differences by sex at each age level; however, the proportion of females who were room restricted most greatly exceeded that of males at ages under 65 and over 85.

RELATIONSHIPS BETWEEN HEALTH AND HEALTH SERVICES

Number of conditions as a measure of degrees of ill health and limitation of mobility are studied in this section against some of the variables of health services. Since both bed and room limitation were found to be associated with number of chronic conditions, it is useful to see how they are distributed against health services. Because the general burden of nursing care is closely related to patient mobility, the specific levels of mobility give helpful information as to where the principal burden of patient care existed.

The variables reflecting health services which will be studied in this portion of the report are as follows: time interval since the resident last saw a doctor while in the home, primary type

of service, whether a nurse or nurse's aide was on duty 24 hours a day, supervisory nurse, and level of patient care provided in the home during the week prior to the date of the survey. Tables 3-8 contain data relating to these distributions.

Time Interval Since Last Saw Doctor

Tables C and 3 show a pronounced difference between residents with chronic conditions and those with no conditions in regard to whether they had seen a doctor since entering the home. For persons free of chronic conditions, about four out of five had seen a doctor since entering the home; this is in comparison with 94 percent, 97 percent, and 99 percent for persons with one or two conditions, three or four conditions, and five conditions or more, respectively. Also, it is apparent that the greater the number of conditions that a person had, the shorter the interval since he had last seen a doctor. This is shown in table C by the higher proportions at each condition level for residents who had seen a doctor either during the last month or within 1 or 2 months. A small proportion of residents with chronic conditions had not seen a doctor in over a year.

Table D. Percent distribution of residents, by time interval since last saw doctor while in home according to length of stay in home: United States, May-June 1964

Time interval since last saw doctor	Length of stay in home						
	Total	Under 6 months	6-11 months	1-2 years	2-3 years	3-5 years	5 years or more
Number of residents--	554,000	106,500	77,700	113,000	76,100	82,400	98,200
	Percent distribution						
All intervals--------	100	100	100	100	100	100	100
Under 1 month-----------	39	49	40	35	37	33	36
1-2 months--------------	36	34	37	39	37	37	31
3-5 months-------------	11	6	10	11	12	14	14
6-11 months------------	6	-	8	7	7	8	9
1 year or more----------	4	-	-	5	5	6	8
Not seen while in home---	4	11	5	3	2	2	2

A larger proportion of residents with long lengths of stay could be expected to have seen a doctor than residents with short lengths of stay. This is borne out in tables D and 4 by the fact that about one-tenth of the residents with a stay of less than 6 months had not seen a doctor compared with smaller proportions of residents with longer lengths of stay. The extent to which the condition of a resident is related to his length of stay would have some influence on the time interval since he last saw a doctor. However, table 3 indicates that there are no important

Table E. Percent distribution of residents, by time interval since last saw doctor while in home according to mobility status: United States, May-June 1964

Time interval since last saw doctor	Mobility status			
	Total	Bed limitation	Room limitation	Neither limitation
Number of residents------------------------------	554,000	92,200	116,900	344,900
	Percent distribution			
All intervals-------------------------------------	100	100	100	100
Under 1 month-------------------------------------	39	49	38	36
1-2 months---------------------------------------	36	33	38	36
3-5 months--	11	10	12	11
6-11 months---------------------------------------	6	4	6	7
1 year or more------------------------------------	4	2	3	5
Not seen while in home----------------------------	4	2	3	5

Table F. Median time interval in months since resident last saw doctor while in home, by mobility status and number of chronic conditions and impairments: United States, May-June 1964

Number of chronic conditions	All residents	Mobility status		
		Bed limi- tation	Room limi- tation	Neither limi- tation
		Median time interval in months		
All conditions------------------------------------	1.5	1.0	1.6	1.6
No conditions--	2.4	*	*	2.4
1 condition--	1.8	1.0	1.7	1.9
2 conditions---	1.7	1.0	1.8	1.7
3 conditions---	1.4	1.0	1.5	1.4
4 conditions---	1.4	1.0	1.4	1.5
5 conditions or more-----------------------------------	1.3	1.0	1.4	1.3

differences in lengths of stay of residents with different numbers of chronic conditions.

In table E it is shown that bed limited residents saw a doctor more recently than either room limited persons or those not limited; almost one-half of the bed limited residents had seen a doctor within the past month as opposed to 38 percent of room limited residents and 36 percent of those not limited. The proportion of room limited residents who had seen a doctor 1 or 2 months previously was significantly higher than the proportion of those who were bed limited and was about the same for those who were not limited. A small percent in each group (2-5 percent) had not seen a doctor for more than a year.

The median time periods since the residents last saw a doctor, shown in table F, indicate a relationship with number of conditions and limitation of mobility. It is apparent either that being bedridden is the principal factor influencing recency of doctor visits, or, possibly, that having seen a doctor leads to a change in mobility status. The median time interval since last seeing a doctor for bed limited persons was constant at 1 month for all condition levels; the median was higher at each condition level for room limited persons and for those not limited. However, the differences were not statistically significant

throughout. Number of conditions apparently was not a factor in determining the time interval since the resident last saw a doctor for residents who were neither bed nor room limited. A comparatively long interval since the resident last saw a doctor (2.4 months) was evident for residents with no conditions who were neither bed nor room limited.

Primary Type of Service

The primary function of nursing and personal care homes is to provide the type of care which is commensurate with the needs of the residents. Since these homes are classified according to the primary and predominant type of service provided for residents, their classification is a general indication of the type of service available in the home. Number of conditions is a rough measure of the residents' needs for health services. The resident is described in this section in terms of number of conditions and mobility status by primary type of service provided in the home. The data on which the discussions are based are contained in table 5.

Residents with multiple chronic conditions were found in varying proportions in homes, depending on how they were classified by type of

Table G. Percent distribution of residents, by primary type of service according to number of chronic conditions and impairments: United States, May-June 1964

Number of chronic conditions	Primary type of service			
	All types	Nursing care	Personal care with nursing	Personal care
Number of residents-----------------------	554,000	373,300	145,400	35,300
	Percent distribution			
All conditions-------------------------	100	100	100	100
No conditions--------------------------------	4	2	7	10
1-2 conditions-------------------------------	40	34	49	63
3-4 conditions-------------------------------	36	40	32	21
5 conditions or more-------------------------	20	24	12	6

service. As indicated in table G, the proportion of residents with multiple conditions was higher in homes providing different degrees of nursing care services than in homes not providing nursing care.

In nursing care homes almost one-fourth of the residents had five conditions or more; in personal-care-with-nursing homes about one-eighth had five conditions or more, and in personal care homes the proportion was 1 in 16 (table 5). A somewhat similar relationship existed for residents with three or four conditions; two out of five residents in nursing care homes had three or four conditions, as did slightly over three-tenths of the residents in personal-care-with-nursing homes and just over one-fifth of the residents in personal care homes. Conversely, the proportion of residents with no conditions was larger in homes providing personal care services only than in other types of homes. In personal care homes, almost one-tenth of the residents had no conditions compared with 7 percent in personal-care-with-nursing homes and 2 percent in nursing care homes.

The mobility status of residents corresponded generally with the primary type of service provided in the home. Figure 4 and table 5 show that one-fifth of the residents in nursing care homes were bed limited compared with one-

tenth of the residents in personal-care-with-nursing homes and less than 2 percent of those in personal care homes. The distribution of room limited residents was somewhat similar: about one-fourth of the residents in nursing care homes were room limited compared with one-sixth and one-tenth of the residents in personal-care-with-nursing and personal care homes, respectively.
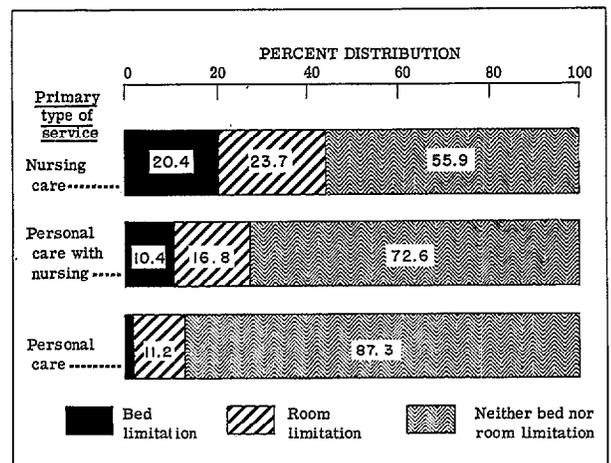
Figure 4. Percent distribution of residents of nursing and personal care homes, by mobility status according to primary type of service.

Nurse or Nurse's Aide on Duty and Supervisory Nurse

More specific information on the available nursing care services is provided by whether a home had a nurse or nurse's aide on duty 24 hours a day and by the type of supervisory nurse. This grouping is in addition to categorization by primary type of service. Personal care homes by definition do not provide nursing care. All three types of homes are included in the analysis which follows.

Almost nine-tenths of the residents were in homes which had a nurse or nurse's aide on duty 24 hours a day (table 6). Only 5 percent were in homes which had a nurse or nurse's aide on duty less than 24 hours per day. The balance of the residents, 6 percent, were in homes which did not provide nursing service.

In relation to all homes, in those where a nurse or nurse's aide was on duty 24 hours an RN provided supervision for 64 percent of all residents. As shown in figure 5 and table 6, residents with a greater number of chronic conditions were more commonly found in these homes. For example, approximately one-half of the residents with no conditions were in these homes, and this figure was greater at each condition level, reaching seven-tenths for residents with five conditions

Figure 5. Percent distribution of residents of nursing and personal care homes, by nurse or nurse's aide on duty and supervisory nurse according to number of chronic conditions and impairments.

Table H. Mean number of chronic conditions and impairments, by supervisory nurse and nurse or nurse's aide on duty: United States, May-June 1964

Supervisory nurse	All residents	Nurse or nurse's aide on duty		Nursing care not provided
		24 hours	Less than 24 hours	
	Mean number of chronic conditions and impairments			
Total	3.1	3.2	2.6	2.0
RN supervisor	3.2	3.2	2.8	...
LPN supervisor	3.2	3.2	2.8	...
Neither RN nor LPN	2.8	2.9	2.4	...

or more. As number of conditions increased, there were minor increases in the proportion of LPN's providing supervision, varying from 15 to 20 percent; the proportion having "other" nurse in charge gradually declined.

In homes having a nurse or nurse's aide on duty less than 24 hours there were no statistically significant differences within each category of type of nurse in charge by various condition levels.

Table H shows the mean number of conditions by type of supervisory nurse and by whether a nurse or nurse's aide was on duty 24 hours a day. The principal differences disclosed by this table were related to whether the home had a nurse on duty 24 hours a day. The mean number of conditions varied from an average of 3.2 conditions for homes with a nurse on duty 24 hours to 2.6 for those with a nurse on duty less than 24 hours and to 2.0 for those with no nurse or nurse's aide on duty. The differences in the table were statistically significant only between the categories for nurse on duty 24 hours and for nursing care not provided. This difference held consistently by type of supervisory nurse. The mean number of conditions was the same in
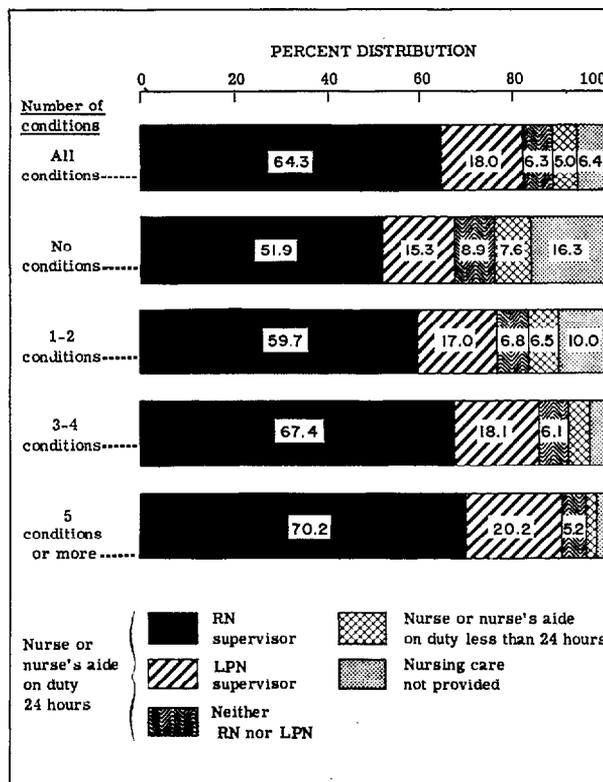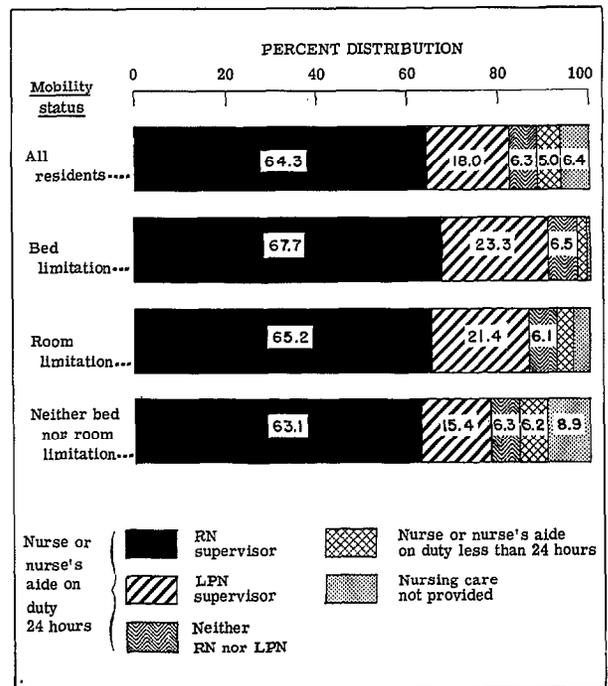

Figure 6. Percent distribution of residents in nursing and personal care homes, by nurse or nurse's aide on duty and supervisory nurse according to mobility status.

Table J. Percent distribution of residents, by time interval since last saw a doctor while in home according to nurse or nurse's aide on duty and supervisory nurse: United States, May–June 1964

Time interval since last saw doctor	Nurse or nurse's aide on duty						Nursing care not provided
	24 hours			Less than 24 hours			
	RN super-visor	LPN super-visor	Neither RN nor LPN	RN super-visor	LPN super-visor	Neither RN nor LPN	
Number of residents--	363,300	99,600	34,900	6,500	5,100	16,300	35,300
	Percent distribution						
All intervals --------	100	100	100	100	100	100	100
Under 1 month------------	43	34	33	22	32	31	24
1-2 months--------------	35	38	35	52	53	27	33
3-5 months--------------	10	13	17	9	3	9	10
6-11 months------------	6	7	6	4	2	15	9
1 year or more----------	3	3	4	5	8	8	9
Not seen while in home---	3	5	5	8	2	9	15

homes having an RN or LPN supervisor, but the average number of conditions was less in those having "other" nurse in charge.

As shown in figure 6, in homes with a nurse or nurse's aide on duty 24 hours (RN supervisor), the proportion of residents who were bed limited was significantly higher than the proportion not limited to room or bed and moderately higher than those who were room limited. A significantly larger proportion of bed or room limited residents than residents who were not limited were in homes with an LPN supervisor. In homes where nursing care was not provided, a small proportion of persons were limited to bed (under 1 percent), an increasing proportion were limited to room (3 percent), and a considerably larger proportion were not limited to room or bed (9 percent).

Whether a person had seen a doctor recently had important implications from the viewpoint of the nurse or nurse's aide on duty and the supervisory nurse. In homes having a nurse or nurse's aide on duty 24 hours, a doctor was seen more recently in the homes where an RN was supervisor than in other homes (tables J and 7). Likewise, the proportion of residents who had not seen a doctor was lower in homes having an RN supervisor than in those with an LPN or "other" nurse as supervisor. The differences were statistically significant only between RN supervisor and LPN supervisor.

The proportion of residents who had not seen a doctor since entering the home was generally higher in homes where nursing care was not provided than in the other homes.

The median number of months since the resident last saw a doctor, by type of supervisory nurse and by whether a nurse or nurse's aide was on duty 24 hours, is shown in table K. This table reveals an increasing time period since last saw a doctor as the availability of a nurse in the home declined. The relationship maintained for homes with an RN supervisor and "other" nurse in charge, but not for LPN supervisor. For homes having a nurse on duty 24 hours, the median number of months increased as level of nursing supervision declined. For RN or LPN supervisor as compared with "other" nurse in charge, the same pattern was apparent in homes with a nurse on duty less than 24 hours.

Table K. Median time period since resident last saw a doctor while in home, by nurse or nurse's aide on duty and supervisory nurse: United States, May-June 1964

| Supervisory nurse | Nurse or nurse's aide on duty | | Nursing care not provided |
	24 hours	Less than 24 hours	
	Median time period in months		
Total------	1.4	1.9	2.1
RN supervisor----	1.3	1.9	...
LPN supervisor---	1.7	1.6	...
Neither RN nor LPN--------	1.8	2.2	...

Levels of Patient Care

The respondent was asked, "During the past 7 days which of these services did this resident (patient) receive?" A list of nursing and personal care services as contained in Card F, Appendix III, was then shown to the respondent. Each service mentioned by the respondent was checked on the questionnaire. The services varied from intensive nursing care services to personal care services. Based on an appraisal of the intensiveness of care and possible condition of the resident, these services have been grouped according to the procedure described in Appendix II. The levels of services have been related to the number of conditions to see if the services rendered were somewhat commensurate with the resident's health condition.

Figure 7 shows that of the total residents, three-fifths received one or more nursing care services during the week preceding the survey. Over one-fourth received personal care services only, and 13 percent received none of the services listed. The nursing care services were for the

Figure 7. Percent distribution of residents of nursing and personal care homes, by level of patient care according to number of chronic conditions and impairments.

most part limited to giving bed baths and routine care including taking pulse and giving enemas.

Only 4 percent of all residents received intensive care; 27 percent, full bed baths but not intensive care; 7 percent, less intensive care; and 22 percent, routine nursing care.

The level of patient care provided was associated with the number of conditions or impairments (table 8). The proportion of residents receiving intensive care services increased with each increase in number of conditions. However, the differences were not statistically significant throughout. In contrast, the proportion of residents receiving full bed bath, excluding intensive nursing services, increased considerably with each increase in number of conditions. The differences were statistically significant between each condition level. Likewise, there were general increases in the proportion of residents who received less intensive services, but the differences were irregular. For residents

who received routine services, only minor differences were noted for persons who had two conditions or more, but the differences were statistically significant between no conditions and one or two conditions.

Looking at the data from the opposite viewpoint, almost one-fourth of the residents with two or more conditions were receiving only routine nursing services. A large proportion of residents with multiple conditions were receiving personal care services only, and some were receiving neither nursing nor personal care service. This proportion varied from 15 percent of those with two conditions to 3 percent of those with five conditions or more. The proportion of those receiving personal care varied from one-third of the residents with one or two conditions down to 14 percent of those with five conditions or more.

The distribution of services among residents with no conditions lends consistency to the value

of using number of conditions as a measure of health. More than two-thirds of these residents received no type of service, and more than one-fifth received personal care only. As to the nursing services, 7 percent received routine service only, and the remaining 4 percent received either full bed bath excluding intensive care or less intensive services.

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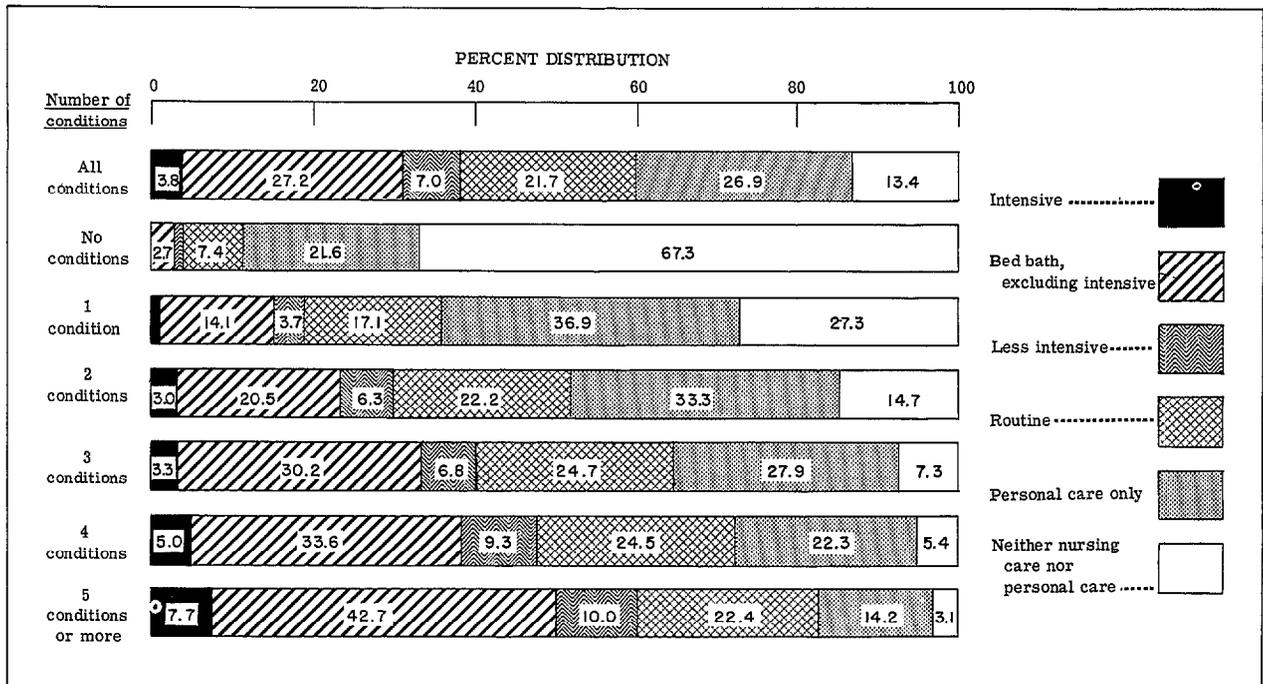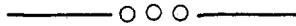
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DETAILED TABLES

Table 1. Number and percent distribution of residents of nursing and personal care homes, by sex and mobility status according to number of chronic conditions and impairments and age: United States, May-June 1964

Number of chronic conditions, impairments, and age	Both sexes				
	Number of residents	Mobility status			
		Total	Bed limitation	Room limitation	Neither limitation
All conditions	Percent distribution				
All ages--------------------------------------	554,000	100.0	16.6	21.1	62.3
Under 65 years--------------------------------	66,200	100.0	12.7	12.9	74.4
65-74 years-----------------------------------	104,500	100.0	15.6	17.3	67.1
75-84 years-----------------------------------	230,900	100.0	15.8	21.3	62.9
85 years and over-----------------------------	152,400	100.0	20.3	27.1	52.6
No conditions					
All ages--------------------------------------	20,400	100.0	1.3	4.5	94.2
Under 65 years--------------------------------	1,800	100.0	-	3.0	97.0
65-74 years-----------------------------------	3,700	100.0	1.4	4.3	94.3
75-84 years-----------------------------------	10,100	100.0	0.5	4.0	95.6
85 years and over-----------------------------	4,900	100.0	3.2	6.4	90.4
1-2 conditions					
All ages--------------------------------------	221,700	100.0	9.5	17.9	72.6
Under 65 years--------------------------------	34,700	100.0	9.4	9.9	80.7
65-74 years-----------------------------------	46,100	100.0	8.2	14.3	77.5
75-84 years-----------------------------------	86,600	100.0	8.5	19.0	72.5
85 years and over-----------------------------	54,300	100.0	12:1	24.6	63.2
3-4 conditions					
All ages--------------------------------------	201,100	100.0	19.2	23.4	57.3
Under 65 years--------------------------------	22,100	100.0	15.9	14.9	69.2
65-74 years-----------------------------------	37,200	100.0	19.0	20.2	60.8
75-84 years-----------------------------------	87,500	100.0	19.1	23.8	57.2
85 years and over-----------------------------	54,300	100.0	21.0	28.7	50.3
5 conditions or more					
All ages--------------------------------------	110,700	100.0	29.1	26.2	44.7
Under 65 years--------------------------------	7,600	100.0	21.2	23.1	55.7
65-74 years-----------------------------------	17,500	100.0	30.9	21.8	47.2
75-84 years-----------------------------------	46,700	100.0	26.6	24.6	48.8
85 years and over-----------------------------	39,000	100.0	32.9	30.7	36.4

Table 1. Number and percent distribution of residents of nursing and personal care homes, by sex and mobility status according to number of chronic conditions and impairments and age: United States, May–June 1964—Con.

	Male					Female			
		Mobility status					Mobility status		
Number of residents	Total	Bed limitation	Room limitation	Neither limitation	Number of residents	Total	Bed limitation	Room limitation	Neither limitation
	Percent distribution					Percent distribution			
193,800	100.0	15.1	17.1	67.8	360,200	100.0	17.5	23.3	59.3
36,200	100.0	10.1	8.9	81.0	30,000	100.0	15.8	17.7	66.5
40,400	100.0	14.1	16.3	69.6	64,000	100.0	16.5	18.0	65.5
74,100	100.0	15.0	19.4	65.6	156,800	100.0	16.2	22.1	61.7
43,100	100.0	20.4	20.8	58.8	109,300	100.0	20.3	29.5	50.2
6,800	100.0	-	3.9	96.1	13,600	100.0	1.9	4.8	93.3
1,200	100.0	-	4.3	95.7	600	100.0	-	-	100.0
900	100.0	-	5.6	94.4	2,700	100.0	1.9	3.9	94.2
2,900	100.0	-	3.5	96.5	7,100	100.0	0.7	4.1	95.2
1,700	100.0	-	3.3	96.7	3,200	100.0	4.9	8.1	87.1
78,200	100.0	9.2	12.1	78.8	143,500	100.0	9.6	21.2	69.2
19,500	100.0	8.2	5.1	86.6	15,100	100.0	11.0	16.0	73.0
18,200	100.0	6.2	10.2	83.6	28,000	100.0	9.5	16.9	73.6
25,400	100.0	8.5	16.3	75.2	61,200	100.0	8.5	20.1	71.4
15,100	100.0	14.9	16.2	68.8	39,200	100.0	11.0	27.9	61.1
69,400	100.0	16.6	21.0	62.4	131,700	100.0	20.6	24.7	54.6
11,400	100.0	11.4	12.0	76.6	10,700	100.0	20.7	17.9	61.4
14,200	100.0	18.2	22.3	59.6	22,900	100.0	19.5	18.9	61.6
28,600	100.0	16.7	22.6	60.7	58,800	100.0	20.2	24.3	55.5
15,100	100.0	18.8	23.6	57.6	39,200	100.0	21.9	30.6	47.5
39,400	100.0	26.9	22.3	50.7	71,400	100.0	30.3	28.3	41.3
4,000	100.0	18.6	19.4	61.9	3,600	100.0	24.2	27.2	48.7
7,100	100.0	28.2	21.0	50.7	10,400	100.0	32.8	22.4	44.9
17,100	100.0	24.4	21.3	54.3	29,600	100.0	27.9	26.5	45.6
11,200	100.0	33.1	25.8	41.1	27,800	100.0	32.8	32.7	34.5

Table 2. Number and percent distribution of residents of nursing and personal care homes, by sex and age according to primary type of service: United States, May-June 1964

Sex and age	Number of residents	Primary type of service			
		All types	Nursing care	Personal care with nursing	Personal care
Both sexes		Percent distribution			
All ages------------------------------------	554,000	100.0	100.0	100.0	100.0
Under 65 years-----------------------------------	66,200	11.9	10.9	12.7	20.4
65-74 years-----------------------------------	104,500	18.9	19.2	18.0	18.8
75-84 years-----------------------------------	230,900	41.7	41.5	42.6	39.8
85 years and over-----------------------------	152,400	27.5	28.4	26.8	21.1
Male					
All ages------------------------------------	193,800	100.0	100.0	100.0	100.0
Under 65 years-----------------------------------	36,200	18.7	15.8	22.1	32.1
65-74 years-----------------------------------	40,400	20.9	20.8	21.7	18.3
75-84 years-----------------------------------	74,100	38.2	40.2	34.9	32.9
85 years and over-----------------------------	43,100	22.2	23.3	21.3	16.7
Female					
All ages------------------------------------	360,200	100.0	100.0	100.0	100.0
Under 65 years-----------------------------------	30,000	8.3	8.3	7.5	12.2
65-74 years-----------------------------------	64,000	17.8	18.4	15.9	19.1
75-84 years-----------------------------------	156,800	43.5	42.2	46.8	44.6
85 years and over-----------------------------	109,300	30.4	31.1	29.8	24.1

Table 3. Number and percent distribution of residents of nursing and personal care homes, by time interval since last saw doctor according to number of chronic conditions and impairments and length of stay: United States, May-June 1964

Number of chronic conditions and length of stay	Number of resi- dents	Time interval since last saw doctor						
		All intervals	Under 1 month	1-2 months	3-5 months	6-11 months	1 year or more	Not seen while in home
All conditions		Percent distribution						
Total---------------	554,000	100.0	38.7	35.9	11.1	6.1	3.9	4.3
Under 6 months-------------	106,500	100.0	49.4	33.9	6.3	-	-	10.4
6-11 months---------------	77,700	100.0	40.0	37.2	10.5	7.7	-	4.6
1-2 years-----------------	113,000	100.0	35.3	38.9	11.1	6.7	4.6	3.3
2-3 years-----------------	76,100	100.0	36.9	36.7	11.7	6.8	5.5	2.4
3-5 years-----------------	82,400	100.0	32.6	37.5	13.9	8.0	5.8	2.2
5 years or more-----------	98,200	100.0	36.4	31.5	13.7	8.6	7.8	1.9
No conditions								
Total---------------	20,400	100.0	20.2	28.9	12.4	11.7	8.1	18.7
Under 6 months------------	3,800	100.0	19.8	29.3	9.6	-	-	41.3
6-11 months---------------	1,900	100.0	16.1	30.1	8.3	29.9	-	15.7
1-2 years-----------------	3,600	100.0	16.8	30.8	11.7	13.9	8.3	18.4
2-3 years-----------------	2,900	100.0	26.8	23.3	17.5	12.6	11.1	8.7
3-5 years-----------------	3,600	100.0	22.4	32.5	12.1	5.7	7.3	20.1
5 years or more-----------	4,600	100.0	18.8	27.4	14.1	16.3	16.7	6.6
1-2 conditions								
Total---------------	221,700	100.0	34.6	34.6	12.4	7.2	5.2	6.0
Under 6 months------------	45,400	100.0	45.3	33.5	7.9	-	-	13.3
6-11 months---------------	30,600	100.0	38.0	34.0	11.2	10.5	-	6.3
1-2 years-----------------	45,400	100.0	31.1	36.6	13.9	8.4	5.8	4.3
2-3 years-----------------	28,400	100.0	29.7	37.8	11.7	7.9	8.7	4.2
3-5 years-----------------	30,500	100.0	28.7	37.5	15.1	9.2	7.2	2.3
5 years or more-----------	41,400	100.0	31.9	29.6	15.0	9.6	10.5	3.4
3-4 conditions								
Total---------------	201,100	100.0	41.8	36.4	10.5	5.4	3.0	2.8
Under 6 months------------	38,600	100.0	53.8	33.4	5.6	-	-	7.2
6-11 months---------------	30,200	100.0	41.2	40.4	10.2	4.7	-	3.6
1-2 years-----------------	41,800	100.0	38.3	40.1	9.3	5.5	4.1	2.6
2-3 years-----------------	27,300	100.0	40.4	35.8	13.4	6.0	3.6	0.7
3-5 years-----------------	30,400	100.0	36.5	35.0	13.2	9.3	5.0	1.0
5 years or more-----------	32,700	100.0	38.7	33.5	13.4	8.1	5.7	0.6
5 conditions or more								
Total---------------	110,700	100.0	44.6	38.8	9.1	4.2	2.2	1.1
Under 6 months------------	18,700	100.0	56.2	36.8	3.5	-	-	3.6
6-11 months---------------	15,000	100.0	44.8	38.3	9.8	5.4	-	1.7
1-2 years-----------------	22,200	100.0	41.0	42.9	8.8	4.3	2.6	0.5
2-3 years-----------------	17,500	100.0	44.7	38.7	8.1	5.3	2.3	0.9
3-5 years-----------------	17,800	100.0	34.8	42.5	13.3	4.5	4.5	0.3
5 years or more-----------	19,500	100.0	46.3	33.1	11.5	5.7	3.5	-

Table 4. Number and percent distribution of residents of nursing and personal care homes, by time interval since last saw doctor in home according to number of chronic conditions and impairments and mobility status: United States, May-June 1964

Number of chronic conditions and mobility status	Number of resi- dents	Time interval since last saw doctor						
		All intervals	Under 1 month	1-2 months	3-5 months	6-11 months	1 year or more	Not seen while in home
All conditions		Percent distribution						
Total------------------	554,000	100.0	38.7	35.9	11.1	6.1	3.9	4.3
Bed limitation--------------	92,200	100.0	49.0	32.8	10.0	4.0	1.9	2.3
Room limitation------------	116,900	100.0	38.0	38.1	11.9	5.7	3.3	3.0
Neither bed nor room limitation----------------	344,900	100.0	36.1	35.9	11.1	6.8	4.7	5.3
No conditions								
Total------------------	20,400	100.0	20.2	28.9	12.4	11.7	8.1	18.7
Bed limitation-------------	*	*	*	*	*	*	*	*
Room limitation------------	900	100.0	11.7	28.1	5.2	11.7	16.4	26.9
Neither bed nor room limitation----------------	19,200	100.0	20.8	28.6	12.6	11.6	7.8	18.6
1-2 conditions								
Total------------------	221,700	100.0	34.6	34.6	12.4	7.2	5.2	6.0
Bed limitation-------------	21,000	100.0	47.0	28.8	11.3	4.9	2.4	5.5
Room limitation------------	39,800	100.0	33.8	37.5	12.9	7.6	4.8	3.5
Neither bed nor room limitation----------------	160,900	100.0	33.2	34.6	12.4	7.4	5.7	6.6
3-4 conditions								
Total------------------	201,100	100.0	41.8	36.4	10.5	5.4	3.0	2.8
Bed limitation-------------	38,700	100.0	51.2	31.6	10.4	3.1	2.0	1.7
Room limitation------------	47,200	100.0	39.9	37.4	11.8	5.0	2.6	3.4
Neither bed nor room limitation----------------	115,300	100.0	39.4	37.7	10.1	6.3	3.6	3.0
5 conditions or more								
Total------------------	110,700	100.0	44.6	38.8	9.1	4.2	2.2	1.1
Bed limitation-------------	32,300	100.0	48.2	36.7	8.5	4.1	1.4	1.0
Room limitation------------	29,000	100.0	41.6	40.5	11.0	4.1	2.0	0.9
Neither bed nor room limitation----------------	49,500	100.0	44.0	39.1	8.4	'4.2	2.9	1.3

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Table 5. Number and percent distribution of residents of nursing and personal care homes, by primary type of service and mobility status according to number of chronic conditions and impairments and age: United States, May-June 1964

Number of chronic conditions and age	All residents	Nursing care					
		Number of residents	Mobility status				
			Total	Bed limitation	Room limitation	Neither limitation	
All conditions			Percent distribution				
All ages----------------------	554,000	373,300	100.0	20.4	23.7	55.9	
Under 65 years---------------------	66,200	40,600	100.0	16.6	15.2	68.2	
65-74 years-----------------------	104,500	71,700	100.0	19.5	19.2	61.3	
75-84 years-----------------------	230,900	154,900	100.0	19.7	24.0	56.2	
85 years and over------------------	152,400	106,100	100.0	23.4	29.7	46.9	
No conditions							
All ages----------------------	20,400	6,700	100.0	1.5	5.9	92.6	
Under 65 years---------------------	1,800	800	100.0	-	-	100.0	
65-74 years-----------------------	3,700	1,100	100.0	-	4.7	95.3	
75-84 years-----------------------	10,100	3,200	100.0	1.5	9.2	89.3	
85 years and over------------------	4,900	1,500	100.0	3.3	3.1	93.6	
1-2 conditions							
All ages----------------------	221,700	128,000	100.0	12.8	21.0	66.2	
Under 65 years---------------------	34,700	17,800	100.0	13.7	12.6	73.7	
65-74 years-----------------------	46,100	27,800	100.0	12.1	16.7	71.1	
75-84 years-----------------------	86,600	49,700	100.0	11.1	21.1	67.8	
85 years and over------------------	54,300	32,700	100.0	15.5	28.9	55.6	
3-4 conditions							
All ages----------------------	201,100	147,400	100.0	21.3	25.4	53.4	
Under 65 years---------------------	22,100	15,300	100.0	18.8	14.9	66.4	
65-74 years-----------------------	37,200	28,200	100.0	21.1	20.9	58.0	
75-84 years-----------------------	87,500	63,900	100.0	22.0	26.4	51.6	
85 years and over------------------	54,300	40,000	100.0	21.2	30.8	48.0	
5 conditions or more							
All ages----------------------	110,700	91,200	100.0	31.0	26.3	42.7	
Under 65 years---------------------	7,600	6,600	100.0	21.3	25.0	53.8	
65-74 years-----------------------	17,500	14,600	100.0	32.1	21.5	46.4	
75-84 years-----------------------	46,700	38,100	100.0	28.8	25.0	46.1	
85 years and over------------------	39,000	31,900	100.0	35.2	30.2	34.6	

Table 5. Number and percent distribution of residents of nursing and personal care homes, by primary type of service and mobility status according to number of chronic conditions and impairments and age: United States, May-June 1964—Con.

Personal care with nursing					Personal care				
Number of residents	Mobility status				Number of residents	Mobility status			
	Total	Bed limitation	Room limitation	Neither limitation		Total	Bed limitation	Room limitation	Neither limitation
	Percent distribution					Percent distribution			
145,400	100.0	10.7	16.8	72.6	35,300	100.0	1.4	11.2	87.3
18,400	100.0	8.8	9.5	81.7	7,200	100.0	0.8	8.3	90.9
26,100	100.0	8.5	13.8	77.7	6,600	100.0	0.8	11.1	88.1
61,900	100.0	9.3	16.8	73.9	14,000	100.0	1.2	10.3	88.5
38,900	100.0	15.2	22.1	62.7	7,400	100.0	3.0	16.0	81.0
10,400	100.0	1.5	3.5	95.0	3,300	100.0	-	5.0	95.0
700	100.0	-	8.3	91.7	*	*	*	*	*
1,900	100.0	2.7	2.7	94.7	600	100.0	-	9.2	90.8
5,400	100.0	-	2.0	98.0	1,500	100.0	-	-	100.0
2,400	100.0	4.3	6.3	89.4	900	100.0	-	12.4	87.6
71,500	100.0	5.9	15.4	78.7	22,200	100.0	1.5	9.0	89.5
11,100	100.0	6.9	7.2	85.9	5,700	100.0	1.0	6.7	92.3
13,800	100.0	2.5	11.0	86.4	4,500	100.0	1.2	9.1	89.6
29,500	100.0	6.0	17.8	76.2	7,400	100.0	0.7	9.0	90.3
17,100	100.0	7.9	19.9	72.2	4,600	100.0	3.6	11.8	84.6
46,200	100.0	15.7	18.1	66.2	7,500	100.0	1.5	18.7	79.8
5,800	100.0	11.2	13.7	75.1	1,000	100.0	-	21.1	78.9
7,700	100.0	14.5	18.3	67.3	1,300	100.0	-	16.3	83.7
19,600	100.0	13.2	16.4	70.4	3,900	100.0	1.5	17.1	81.5
13,000	100.0	22.2	22.5	55.4	1,300	100.0	4.5	24.1	71.5
17,300	100.0	22.6	27.0	50.5	2,200	100.0	2.6	17.6	79.8
800	100.0	24.8	11.9	63.3	*	*	*	*	*
2,600	100.0	26.8	23.3	49.9	*	*	*	*	*
7,400	100.0	19.1	24.7	56.2	1,200	100.0	4.8	9.3	85.9
6,400	100.0	24.6	33.0	42.4	700	100.0	-	34.3	65.7

Table 6. Number and percent distribution of residents of nursing and personal care homes, by nurse or nurse's aide on duty and supervisory nurse according to number of chronic conditions and impairments and mobility status: United States, May-June 1964

Number of chronic conditions and mobility status	Number of residents	Total	Nurse or nurse's aide on duty					Nursing care not provided
			24 hours			Less than 24 hours		
			RN supervisor	LPN supervisor	Neither RN nor LPN	RN or LPN supervisor	Neither RN nor LPN	
All conditions			Percent distribution					
Total------------	554,000	100.0	64.3	18.0	6.3	2.1	2.9	6.4
Bed limitation----------	92,200	100.0	67.7	23.3	6.5	1.0	0.9	0.5
Room limitation---------	116,900	100.0	65.2	21.4	6.1	1.8	2.1	3.4
Neither bed nor room limitation------------	344,900	100.0	63.1	15.4	6.3	2.5	3.8	8.9
No conditions								
Total------------	20,400	100.0	51.9	15.3	8.9	4.2	3.4	16.3
Bed limitation----------	*	*	*	*	*	*	*	*
Room limitation---------	900	100.0	44.4	26.8	10.8	-	-	18.0
Neither bed nor room limitation------------	19,200	100.0	52.7	14.1	8.7	6.9	3.6	16.5
1-2 conditions								
Total------------	221,700	100.0	59.7	17.0	6.8	2.4	4.1	10.0
Bed limitation----------	21,000	100.0	67.4	21.3	7.6	1.1	1.0	1.6
Room limitation---------	39,800	100.0	63.3	20.2	6.8	2.1	2.5	5.0
Neither bed nor room limitation------------	160,900	100.0	57.8	15.6	6.7	2.6	4.9	12.3
3-4 conditions								
Total------------	201,100	100.0	67.4	18.1	6.1	1.9	2.7	3.7
Bed limitation----------	38,700	100.0	70.3	21.2	6.0	0.9	1.3	0.3
Room limitation---------	47,200	100.0	63.0	22.7	6.6	2.4	2.3	3.0
Neither bed nor room limitation------------	115,300	100.0	68.3	15.2	5.9	2.1	3.3	5.2
5 conditions or more								
Total------------	110,700	100.0	70.2	20.2	5.2	1.4	1.0	2.0
Bed limitation----------	32,300	100.0	65.2	26.9	6.2	1.0	0.4	0.2
Room limitation---------	29,000	100.0	72.1	20.8	4.3	0.5	1.0	1.4
Neither bed nor room limitation------------	49,500	100.0	72.4	15.2	5.1	2.2	1.3	3.6

Table 7. Number and percent distribution of residents of nursing and personal care homes, by nurse or nurse's aide on duty and supervisory nurse according to number of chronic conditions and impairments and time interval since last saw doctor while in home: United States, May-June 1964

Number of chronic conditions and time interval since last saw doctor	Number of residents	Total	Nurse or nurse's aide on duty					Nursing care not provided
			24 hours			Less than 24 hours		
			RN supervisor	LPN supervisor	Neither RN nor LPN	RN or LPN supervisor	Neither RN nor LPN	
All conditions		Percent distribution						
All intervals-----	554,000	100.0	64.3	18.0	6.3	2.1	2.9	6.4
Under 1 month----------	214,300	100.0	71.0	16.0	5.4	1.4	2.4	3.9
1-2 months--------------	198,900	100.0	63.6	19.0	6.2	3.0	2.2	5.9
3-5 months--------------	61,300	100.0	59.4	21.7	9.3	1.2	2.5	5.9
6-11 months-------------	33,900	100.0	57.4	18.9	6.1	1.0	7.3	9.2
1 year or more----------	21,800	100.0	56.2	14.0	6.6	3.4	5.9	14.0
Not seen while in home--	23,900	100.0	40.7	19.9	7.8	2.7	6.2	22.7
No conditions								
All intervals-----	20,400	100.0	51.9	15.3	8.9	4.2	3.4	16.3
Under 1 month----------	4,100	100.0	72.6	8.5	7.3	1.3	-	10.2
1-2 months--------------	5,900	100.0	41.6	25.5	7.7	6.4	2.7	16.1
3-5 months--------------	2,500	100.0	63.3	16.1	11.9	2.4	4.1	2.1
6-11 months-------------	2,400	100.0	53.3	6.6	12.5	-	9.1	18.5
1 year or more----------	1,600	100.0	45.9	6.3	9.0	5.8	-	33.0
Not seen while in home--	3,800	100.0	39.8	15.4	8.3	6.7	5.5	24.2
1-2 conditions								
All intervals-----	221,700	100.0	59.7	17.0	6.8	2.4	4.1	10.0
Under 1 month----------	76,700	100.0	67.4	15.9	5.0	1.1	3.9	6.6
1-2 months--------------	76,700	100.0	60.3	16.5	7.3	3.7	3.1	9.1
3-5 months--------------	27,500	100.0	53.6	21.6	11.4	1.8	3.3	8.3
6-11 months-------------	16,000	100.0	51.7	19.6	5.6	1.5	7.5	14.1
1 year or more----------	11,600	100.0	53.3	13.6	5.8	4.7	7.4	15.2
Not seen while in home--	13,200	100.0	39.5	15.7	7.5	2.1	6.0	29.1
3-4 conditions								
All intervals-----	201,100	100.0	67.4	18.1	6.1	1.9	2.7	3.7
Under 1 month----------	84,100	100.0	73.3	14.8	5.5	1.8	2.1	2.5
1-2 months--------------	73,300	100.0	65.6	19.4	6.1	2.6	2.2	4.2
3-5 months--------------	21,200	100.0	62.5	22.9	7.9	0.9	2.0	3.8
6-11 months-------------	10,800	100.0	63.0	19.1	6.1	1.0	7.6	3.4
1 year or more----------	6,100	100.0	58.9	17.4	6.5	1.7	5;9	9.7
Not seen while in home--	5,600	100.0	40.1	33.4	7.2	0.9	7.5	11.0
5 conditions or more								
All intervals-----	110,700	100.0	70.2	20.2	5.2	1.4	1.0	2.0
Under 1 month----------	49,400	100.0	72.5	18.7	5.6	1.2	0.6	1.4
1-2 months--------------	42,900	100.0	68.9	22.0	4.2	2.2	0.8	1.9
3-5 months--------------	10,100	100.0	67.9	20.5	6.1	-	1.0	4.5
6-11 months-------------	4,600	100.0	66.2	22.6	4.6	-	5.3	1.2
1 year or more----------	2,500	100.0	69.9	12.5	8.9	-	2.2	6.5
Not seen while in home--	1,200	100.0	58.8	16.6	12.5	4.0	3.9	4.2

Table 8. Number and percent distribution of residents of nursing and personal care homes, by level of patient care according to number of chronic conditions and impairments: United States, May-June 1964

Number of chronic conditions	Number of residents	Total	Level of patient care				Personal care only	Neither nursing care nor personal care
			Intensive	Bed bath, excluding intensive	Less intensive	Routine		
			Percent distribution					
All conditions--	554,000	100.0	3.8	27.2	7.0	21.7	26.9	13.4
No conditions-------	20,400	100.0	-	2.7	1.0	7.4	21.6	67.3
1 condition---------	94,400	100.0	0.9	14.1	3.7	17.1	36.9	27.3
2 conditions--------	127,400	100.0	3.0	20.5	6.3	22.2	33.3	14.7
3 conditions--------	118,800	100.0	3.3	30.2	6.8	24.7	27.9	7.3
4 conditions--------	82,300	100.0	5.0	33.6	9.3	24.5	22.3	5.4
5 conditions or more--------------	110,700	100.0	7.7	42.7	10.0	22.4	14.2	3.1

Table 9. Civilian resident population aged 21 years and over used in obtaining rates shown in this publication, by sex and age: United States, July 1, 1964[1]

Age	Both sexes	Male	Female
	Population in thousands		
All ages-21 years and over---	113,673	54,824	58,849
21-64 years---	95,812	46,976	48,837
65-74 years---	11,409	5,149	6,259
75-84 years---	5,414	2,304	3,111
85 years and over---	1,037	395	642

[1]U.S. Bureau of Census: Estimates of the population of the United States, by age and sex: July 1, 1964. Current Population Reports, Series P-25, No. 293, Washington, D.C., Oct. 1964.

APPENDIX I

A. TECHNICAL NOTES ON SURVEY DESIGN

General.—The Resident Places Survey-2 (RPS-2) was conducted during May and June 1964 by the Division of Health Records Statistics in cooperation with the U.S. Bureau of the Census. It was a survey of resident institutions in the United States which provide nursing or personal care to the aged and chronically ill, of their patients or residents, and of their employees. The institutions within the scope of the survey included such places as nursing homes, convalescent homes, rest homes, homes for the aged, other related facilities, and geriatric hospitals. To be eligible for the survey an establishment must have maintained three or more beds and must have provided some level of nursing or personal care. The procedure for classifying establishments for the RPS-2 universe is described in Appendix II-B.

This appendix presents a brief description of the survey design, general qualifications of the data, and the reliability of estimates presented in this report. Succeeding appendixes are concerned with classification procedures, definitions, and questionnaires used in the survey for collecting information about employees.

Sampling frame.— A "multiframe" technique was used in establishing the sampling universe for RPS-2. The principal frame was the Master Facility Inventory (MFI), which contained the names, addresses, and descriptive information for about 90-95 percent of the nursing and personal care homes in the United States. Establishments not listed in the MFI were, theoretically, on another list referred to as the Complement Survey list. A description of the MFI and the Complement Survey has been published.[5]

The Complement Survey is based on an area probability design, using the sample design of the Health Interview Survey.[6] In the Health Interview Survey, interviewers make visits each week to households located in probability samples of small segments of the United States. In addition to collecting information about the health of the household members, the interviewers are instructed to record the names and addresses of hospitals and institutions located wholly or partially within the specified areas. The Complement Survey list is composed of the establishments identified in these sample areas between January 1959 and July 1963 which were not listed in the MFI and which were in business

as of July 1, 1962. The Complement Survey sample for RPS-2 included four establishments representing an estimated total of about 800 such facilities in the United States.

Sample design.—The sample design was a stratified, two-stage probability design. The first stage was a selection of establishments from the MFI and the Complement Survey; the second stage, a selection of employees and residents from registers of the sample establishments. In preparation for the first-stage sample selection, the MFI was divided into two groups on the basis of whether current information was available about the establishment. Group I was composed of establishments which had returned a questionnaire in a previous MFI survey. Group II contained places which were possibly within the scope of RPS-2 but were not confirmed in the MFI survey, e.g., nonresponses and questionnaires not delivered by the post office because of insufficient addresses. Group I was then sorted into three type-of-service strata: nursing care homes, including geriatric hospitals; personal-care-with-nursing homes; and personal care homes. Group II was treated as a fourth type-of-service stratum. Each of these four strata was further sorted into four bed-size groups, producing 16 primary strata, as shown in table I. Within each primary stratum the listing of establishments was ordered by type of ownership, State, and county. The sample of establishments was then selected systematically after a random start within each of the primary strata.

Table I shows the distribution by primary strata of establishments in the MFI and in the sample and shows the final disposition of the sample places with regard to their response and in-scope status. Of the 1,201 homes originally selected, 1,085 were found to be in business and within the scope of the survey.

The second-stage sample selection of residents was carried out by Bureau of the Census interviewers in accordance with specific instructions given for each sample establishment as contained in the Resident Questionnaire (HRS-3c, Appendix III). All the residents on the register of the establishment on the day of the survey were listed on the Establishment Questionnaire (HRS-3a). The interviewers were furnished with the numbers of predetermined sample lines for each home

Table I. Distribution of institutions for the aged in the Master Facility Inventory and in the RPS-2 sample, by response status to the RPS-2 and by primary strata (type of service and size of institution): United States

Type of service and size of institution	Number of homes in the MFI[1]	Number of homes in the sample			
		Total homes[1]	Out of scope or out of business	In-scope and in business	
				Nonresponding homes	Responding homes
All types--------------------------------	19,520	1,201	116	12	1,073
Nursing care[2]--------------------------	8,155	634	37	8	589
Under 30 beds---------------------------	4,400	179	21	5	153
30-99 beds------------------------------	3,247	260	11	3	246
100-299 beds----------------------------	448	135	3	-	132
300 beds or more------------------------	60	60	2	-	58
Personal care with nursing------------	4,972	381	12	2	367
Under 30 beds---------------------------	3,168	128	10	1	117
30-99 beds------------------------------	1,423	114	1	1	112
100-299 beds----------------------------	345	103	1	-	102
300 beds or more------------------------	36	36	-	-	36
Personal care--------------------------	3,621	113	13	2	98
Under 30 beds---------------------------	3,187	64	11	-	53
30-99 beds------------------------------	402	32	-	1	31
100-299 beds----------------------------	29	14	2	1	11
300 beds or more------------------------	3	3	-	-	3
Group II[3]-----------------------------	2,772	73	54	-	19
Under 25 beds---------------------------	2,578	52	37	-	15
25-99 beds------------------------------	185	15	12	-	3
100-299 beds----------------------------	6	3	3	-	-
300 beds or more------------------------	3	3	2	-	1

[1] The universe for the RPS-2 sample consisted of the MFI and the Complement Survey. Included in the RPS-2 sample were 4 homes from the Complement Survey.

[2] Included geriatric hospitals.

[3] Group II consists of those institutions assumed to be in scope of the RPS-2 survey but for which current data were not available.

(e.g., every seventh line). The first three sample designations were entered on the questionnaire worksheet, and the interviewer entered the remaining predetermined numbers until the last selected number exceeded the total number now on the register. The name of the sample resident (patient) was entered opposite the sample designation number. For each sample resident a questionnaire was completed by the interviewer from information furnished by the respondent. The total sample selected from establishments cooperating in the survey consisted of 10,560 residents.

Survey procedure.—The Bureau of the Census employed about 140 of their regular interviewers for the survey. All were experienced in the continuing surveys conducted by the Bureau of the Census; about half were employed in the Health Interview Survey, one of the major programs of the National Center for Health Statistics, and about half in other surveys. Since the interviewers were well trained in general survey methodology, it was relatively easy to train them in the specific methods used in RPS-2. Briefly, their training consisted of home study materials and observation by the Census Regional Supervisor on the first interview assignment.

The initial contact with an establishment was a letter signed by the Director of the Bureau of the Census. The letter (HRS-3f, Appendix III) notified each administrator about the survey, requested his cooperation, and stated that a representative would contact him for an appointment. The interviewer's telephone call usually followed within 3 or 4 days.

During the course of the interview, the interviewer collected data on the establishment, the resident, and the employees. The establishment and resident information was obtained by personal interview, and the staff information was collected by personal interview and by means of a self-enumeration questionnaire. The respondent for the Resident (Patient) Questionnaire (HRS-3c) was a member of the staff who had close contact with the resident, thus having firsthand knowledge of the resident's health condition. This was usually a nurse who was responsible for the individual sample resident. One nurse might have completed questionnaires for all residents in a small home, or shared the responsibility in a large home. The interviewer was instructed to encourage maximum use of records by the respondent. For data on chronic conditions and impairments, medical records, if available, were routinely used to supplement the information provided by the respondent.

The Census regional offices also performed certain checks during the course of the survey to insure that the interviewers were conducting the survey according to specified procedures. They reviewed all questionnaires for completeness prior to transmittal to the Washington office and made inquiries as necessary to obtain the missing information.

The completed questionnaires were edited and coded by the National Center for Health Statistics, and the data were processed on an electronic computer. This processing included assignment of weights, ratio adjustments, and other related procedures necessary to produce national estimates from the sample data. It also included matching with basic identifying information contained in the Master Facility Inventory, as well as carrying out internal edits and consistency checks to eliminate "impossible" response and errors in editing, coding, or processing.

B. GENERAL QUALIFICATIONS

Nonresponse and imputation of missing data.—The survey was conducted in 1,073 homes, or about 89 percent of the original sample. About 7 percent of the sample places were found to be out of business, and an additional 3 percent were found to be out of scope of the survey, that is, they either did not provide nursing or personal care to their residents or maintained fewer than three beds. Only 12 homes, or about 1 percent of the sample, refused to cooperate in the survey (table 1). The response rate for the in-scope sample was 98.9 percent.

Statistics in this report were adjusted for the failure of a home to respond by use of a separate nonresponse adjustment factor for each service-size stratum further stratified by three major ownership groups. This factor was the ratio of all in-scope sample homes in a stratum to the responding in-scope sample homes in the stratum.

Data were also adjusted for nonresponse of sample residents within an establishment by a procedure which imputed to residents for whom data were not obtained the characteristics of residents of the same age and in the same type of home. For item nonresponse on age, the adjustment was restricted to characteristics of residents in the same type of home. Adjustment for nonresponse in resident data for responding homes ranged from 0.7 percent for age to 3.5 percent for date last saw doctor.

Rounding of numbers.— Estimates relating to residents have been rounded to the nearest hundred, and homes to the nearest ten. For this reason detailed figures within the tables do not always add to totals. Percents were calculated using the original unrounded figures and will not necessarily agree with percents which might be calculated from rounded data.

Estimation procedure. — Statistics reported in this publication are the result of two stages of ratio adjustments, one at each stage of selection. The purpose of ratio estimation is to take into account all relevant information in the estimation process, thereby reducing the variability of the estimate. The first-stage ratio adjustment was included in the estimation of establishment and resident data for all primary service-size strata from which a sample of homes was drawn. This factor was a ratio, calculated for each stratum. The numerator was the total beds according to the Master Facility Inventory for all homes in the stratum. The denominator was the estimate of the total beds obtained through a simple inflation of the Master Facility Inventory data for the sample homes in the stratum. The effect of the first-stage ratio adjustment was to bring the sample in closer agreement with the known universe of beds. The second-stage ratio adjustment was included in the estimation of resident data for all primary strata. For resident data, the second-stage ratio adjustment is the product of two fractions: the first is the ratio of the total number of residents in the establishment to the number of residents for whom questionnaires were completed within the home; the second is the sampling fraction for residents upon which the selection is based.

Reliability of estimates. — Since statistics presented in this report are based on a sample, they will differ somewhat from figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and procedures.

As in any survey, the results are also subject to reporting and processing errors and errors due to nonresponse. To the extent possible, these types of errors were kept to a minimum by methods built into survey procedures.

The sampling error (or standard error) of a statistic is inversely proportional to the square root of the number of observations in the sample. Thus, as the sample size increases, the standard error decreases. The standard error is primarily a measure of the variability that occurs by chance because only a sample, rather than the entire universe, is surveyed. As calculated for this report, the standard error also reflects part of the measurement error, but it does not measure

Figure I. Approximate relative standard errors of estimated numbers of residents, conditions, or establishments shown in this report.
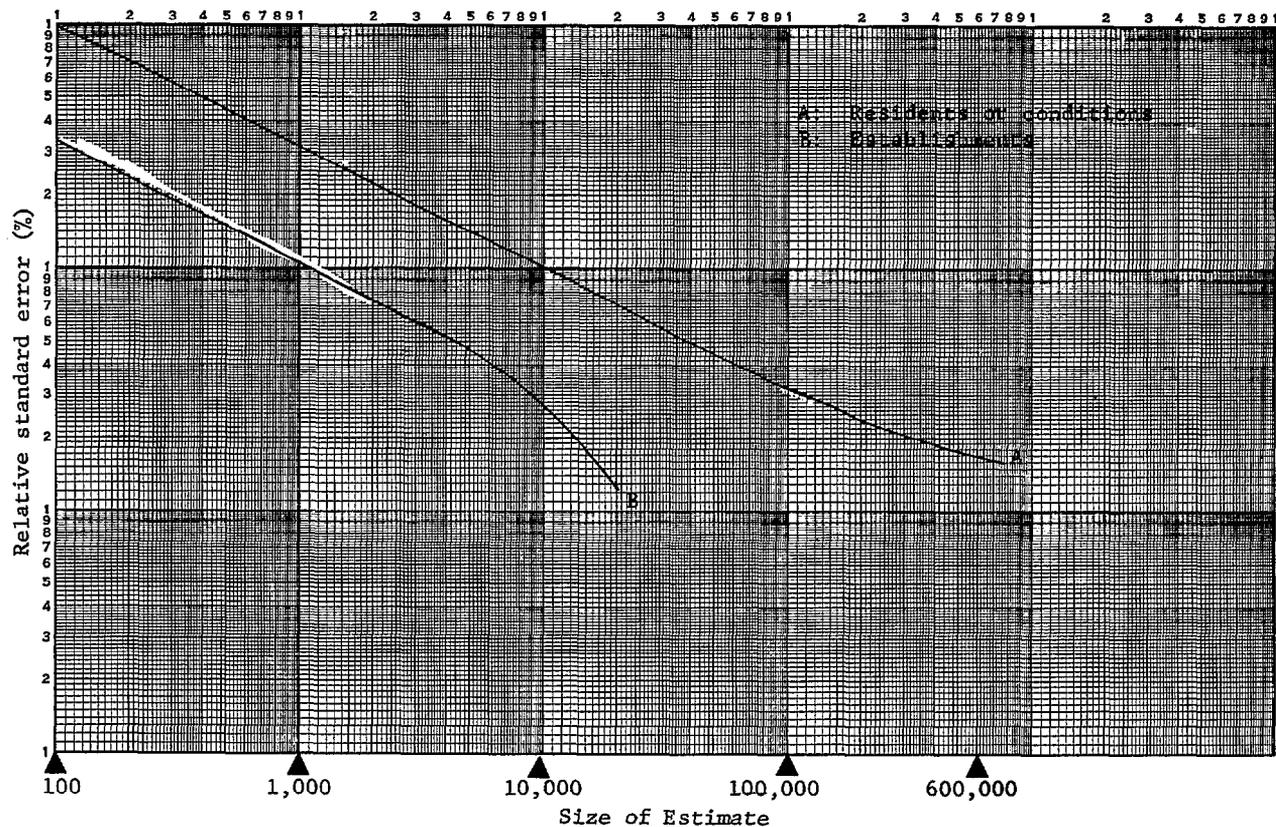
Example of use of figure I: An estimate of 100,000 total residents has a relative standard error of 3.3 percent (read from scale at left side of figure). The estimate has a standard error of 3,300 (3.3 percent of 100,000).

Table II. Approximate standard errors of percentages for residents

Base of percent (number of residents)	Estimated percent				
	2 or 98	5 or 95	10 or 90	25 or 75	50
	Standard error expressed in percentage points				
1,000--	4.4	6.9	9.5	13.6	15.8
2,500--	2.8	4.4	6.0	8.6	10.0
5,000--	2.0	3.1	4.2	6.1	7.1
10,000---	1.4	2.2	3.0	4.3	5.0
20,000---	1.0	1.5	2.1	3.0	3.5
30,000---	0.8	1.3	1.7	2.5	2.9
40,000---	0.7	1.1	1.5	2.1	2.5
50,000---	0.6	1.0	1.3	1.6	2.2
80,000---	0.5	0.8	1.1	1.5	1.8
100,000--	0.4	0.7	0.9	1.0	1.6
200,000--	0.3	0.5	0.7	0.8	1.1
500,000--	0.2	0.3	0.4	0.5	0.7

any systematic biases in the data. The chances are about two out of three that an estimate from the sample differs from the value which would be obtained from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error and about 99 out of 100 that it is less than 2½ times as large.

Relative standard errors of aggregates shown in this report can be determined from figure I. The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percent of the estimate. An example of how to convert the relative error into a standard error is given with figure I. Standard errors of estimated percentages are shown in table II.

To determine the standard error of a mean value, of a median value, or of the difference between two statistics, the following rules may be used.

Standard error of mean number of conditions per person.— From figure I, obtain the relative standard error of the estimated number of conditions and of the estimated number of persons. The square root of the sum of the squares of these two relative standard errors provides an approximation for the relative standard error of the desired mean. The standard error of the mean may be obtained by multiplying the relative standard error by the mean value.

Example: For a mean of three conditions per person based on a denominator of 50,000 residents, the standard error may be obtained as follows:

1. The relative standard error of 150,000 conditions is about 2.7 percent, or .027 (curve A).
2. The relative standard error of 50,000 residents is about 4.6 percent, or .046 (curve A).
3. The relative standard error of the mean 3 conditions per person is $\sqrt{(.027)^2 + (.046)^2} = .169$
4. The standard error is .169 x 3 = .507 conditions per person.

Standard error of a median.— The medians shown in this report were calculated from grouped data. Approximate confidence intervals for these estimated medians can be computed as follows:

(a) Determine the standard error of a 50-percent characteristic whose denominator is equal to the estimated number of persons in the frequency distribution on which the median is based. For example, the median age of males is 77.7 years. The estimated number of males is 193,784 (table 2). The standard error of a 50-percent characteristic whose base is 193,784 is shown in table II, by interpolation, to be 1.13 percentage points.

(b) Apply this standard error to the cumulative frequency distribution to obtain a confidence interval around the median. The steps are as follows: For the above example, using the 95-percent level of confidence, determine the points on the cumulative frequency distribution corresponding to the 47.74 percent (50 percent minus two standard errors) and 52.26 percent (50 percent plus two standard errors). The points are 92,512 (47.74 x 193,784) and 101,272 (52.26 x 193,784). From table 2, determine the ages that correspond to these points. They are 77.1 and 78.3 years, respectively. Therefore, the confidence limit for the estimated median age of 77.7 years is 77.1-78.3 years at the 95-percent level of confidence.

It is possible to investigate whether the observed differences between two estimated medians can be attributed to sampling error alone by obtaining the upper 68-percent confidence limit, U_1', of the smaller median, M_1' and the lower 68-percent confidence limit, L_2, of the larger median, M_2'. These limits may be found by using the method outlined above, but using one standard error instead of two. The square root of the sum of the squared differences between M_1' and U_1' and M_2' and L_2 is the standard error of the difference between M_1' and M_2'; that is,

$$S_{(M_1' - M_2')} = \sqrt{(M_1' - U_1)^2 + (M_2' - L_2')^2}$$

For the purpose of this report, any difference between M_1' and M_2' greater than $2\,S_{(M_1' - M_2')}$ has been considered a significant difference.

Standard error of a difference between two estimates.— The standard error of a difference is approximately the square root of the sum of the squares of each standard error considered separately. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics, although it is only a rough approximation in most other cases.

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APPENDIX II

A. DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

Resident:

A resident is defined as a person who has been formally admitted to an establishment but not discharged. All such persons were included in the survey even though they were not physically present.

Chronic conditions and impairments:

These are defined as the conditions and impairments contained in Cards D and E of Appendix III. This list was expanded, based on the further query "Does he have any other chronic conditions listed in his record you have not told me about?" and additional questions about specified conditions. The expanded list is contained in Appendix II-C as a basic list of diagnostic categories used for coding purposes.

Condition:

This term is used synonomously with the term "chronic conditions and impairments" since no distinction has been made between the two groups in this report.

Limitation of mobility:

Restriction in mobility is defined in this report as being limited to bed or room. All other residents, including those who were routinely taken out of the room in a wheel chair for most of the day, were considered neither bed nor room limited.

Length of stay:

Length of stay refers to the current period of stay in the institution. The period of stay starts with the date of last admission to the institution and ends with the date of the survey.

Time interval since last saw doctor:

This refers to the period of time from the date the resident last saw a doctor in the institution during his current stay to the date of the survey.

Supervisory nurse:

This is defined as the person in charge of the daily nursing activities provided in the home, such as the head nurse.

Nurse or nurse's aid on duty 24 hours a day:

Nursing service is routinely provided at all hours of the day or night by either a nurse or a nurse's aide. A person is not "on duty" if she is available to provide care only upon call or in emergencies.

Levels of nursing or personal care:

These levels are defined in terms of the implied intensiveness of care or the condition of the resident. Based on these criteria, nursing and personal care services are grouped as follows, each succeeding level being exclusive of the previous levels:

<u>Intensive care</u>
  Catheterization
  Bowel and bladder retraining
  Oxygen therapy
  Intravenous injection
  Nasal feeding

<u>Full bed bath</u>

<u>Less intensive care</u>
  Application of sterile dressings or bandages
  Irrigation
  Hypodermic injection
  Intramuscular injection

<u>Routine nursing care</u>
  Temperature-pulse
  Enema
  Blood pressure

<u>Personal care</u>
  Help with dressing, shaving, or care of hair
  Help with tub bath or shower
  Help with eating (feeding of resident)
  Rub and massage
  Administrations of medications or treatment
  Special diet

<u>Nursing or personal care not provided</u>

B. CLASSIFICATION OF HOMES BY TYPE OF SERVICE

For purposes of stratification of the universe prior to the selection of the sample, the homes in the MFI were classified as either nursing care, personal-care-with-nursing, personal care, or domiciliary care homes. The latter two classes were combined and designated as personal care homes. Details of the classification procedure in the MFI have been published.

Due to the interval between the MFI survey and the RPS-2 survey it was felt that for producing statistics by type of service for the RPS-2 survey, the homes should be reclassified on the basis of the current data collected in the survey. This classification procedure is essentially the same as the MFI scheme. The three types of service classes delineated by RPS-2 are defined as follows:

1. A *nursing care home* is defined as one in which 50 percent or more of the residents received nursing care during the week prior to the survey

in the home, with an RN or LPN employed 15 hours or more per week. In this report, geriatric hospitals are included with nursing care homes.

2. A *personal-care-with-nursing home* is defined as one in which either (a) over 50 percent of the residents received nursing care during the week prior to the survey, but there were no RN's or LPN's on the staff; or (b) some, but less than 50 percent, of the residents received nursing care during the week prior to the survey, regardless of the presence of RN's or LPN's on the staff.

3. A *personal care home* is defined as one in which residents routinely received personal care, but no residents received nursing care during the week prior to the survey.

C. RULES FOR CODING CHRONIC CONDITIONS AND IMPAIRMENTS

The list of diagnostic categories which was used for coding chronic conditions and impairments is shown below. This list represents an expansion of the two lists (Cards D and E) furnished to the interviewers. The classification scheme was based on the International Classification of Diseases with some modifications. Certain medical coding principles developed by the Health Interview Survey (HIS), from which statistics on the institutional population of the United States are derived,[7] were used in coding the data for RPS-2. The medical coding consisted of assigning a code to each codable chronic condition and impairment reported for a resident. All codable conditions which were not specified as chronic but which could be acute or chronic (i.e., sinusitis, bronchitis, gastritis, or a hearing or visual disturbance) were assumed to be chronic.

The medical coding principles developed by the HIS were adapted to the coding of chronic diseases and impairments as follows: Impairments were coded in the same general manner as for the HIS, but in less detail.

Symptoms, and conditions said to be due to other conditions, were coded for the most part as for HIS. Heart, hypertensive, and arteriosclerotic conditions were combined as for HIS.

The coding rules allow for the assignment of one or more chronic conditions and impairments for each resident, with some loss of detail due to the restricted number of diagnostic categories. Some restriction exists for the assignment of impairments which are a result of the chronic condition. Some chronic conditions are not reported separately, but are combined with other categories under coding rules.

Special coding procedures were followed in coding categories related to senility and mental conditions. Injuries and traumatic origin of chronic conditions were not identified as such except in cases of fracture of the hip. Also, specific coding procedures for other individual chronic conditions and impairments were followed.

D. BASIC LIST OF DIAGNOSTIC CATEGORIES REPORTED FOR RESIDENTS IN NURSING AND PERSONAL CARE HOMES

Condition Group	*International Classification of Diseases Code Numbers, 1955 Revision*
Malignant neoplasms, without mention of surgery-----	140-205
Malignant neoplasms, with mention of surgery--------	140-205
Benign and unspecified neoplasms-------------------	210-239
Asthma ---	241
Diseases of thyroid gland--------------------------	250-254
Diabetes mellitus ---------------------------------	260
Avitaminoses and other nutritional weight problems---	280-283,285,286[1]
Mental retardation without mention of senility[1]	
Mental retardation with mention of senile psychosis[1]	
Mental retardation with senility not specified as psychotic[1]	
Senile psychosis with or without other mental condition-	304
Senility without mention of psychosis---------------	794
Specified mental disorders-------------------------	300-303, 305-324
Vascular lesions affecting central nervous system----	330-334
Multiple sclerosis---------------------------------	345
Parkinson's disease (paralysis agitans)-------------	350
Epilepsy --	353
Other nervous system disorders--------------------	340-343, 354-357, 361-369
Cataract --	385
Glaucoma ---	387
Other diseases of the eye--------------------------	370-379, 380-384,386,388
Diseases of the ear-------------------------------	390-396
Diseases of the heart-----------------------------	410-443, 782.1, 782.2, 782.4
Hypertension without mention of heart--------------	444-447
General arteriosclerosis---------------------------	450
Varicose veins------------------------------------	460,462
Hemorrhoids --------------------------------------	461
Other conditions of circulatory system-------------	400-403, 451-456, 463-468, 782.0, 782.3, 782.5-782.9
Chronic sinusitis----------------------------------	513
Bronchitis, with emphysema-----------------------	502.0
Bronchitis, without emphysema--------------------	502.1
Emphysema without mention of bronchitis-----------	527.1
Other chronic respiratory conditions---------------	510.0, 512, 514-526, 527.0, 527.2, 783
Ulcer of stomach and duodenum--------------------	540-542
Hernia of abdominal cavity------------------------	560, 561
Diseases of gallbladder and bile ducts--------------	584-586
Other chronic conditions of the digestive system------	530-539, 543-545, 552, 553, 570, 572-574, 577, 578, 580-583, 587, 784
Incontinence (urine or feces)----------------------	785.7, 786.2
Diseases of urinary system------------------------	591-594, 600-609, 786.0, 786.1, 786.3-786.5, 789
Diseases of male genital organs-------------------	610-617, 786.6
Diseases of breast and female genital organs--------	620,621,623,625, 626, 630-637, 786.7
Diseases of skin and other subcutaneous tissue-------	700-716
Arthritis --	720-725
Rheumatism ---------------------------------------	726.0, 726.1, 726.3, 727

Other specified diseases of bones and organs of move-
ment -- 730.1, 730.3, 731-733, 735, 738, 740-744
Fracture, femur (old)----------------------------- N820.9, N821.9

All other chronic conditions, excluding impairments--- Residual
Visual impairment: inability to read newspaper with
  glasses[1]
Other visual impairments[1]
Hearing impairments[1]
Speech impairments due to stroke[1]
Speech impairments due to other or unspecified
  causes[1]
Paralysis, palsy due to stroke[1]
Paralysis, palsy due to other unspecified causes[1]
Absence, fingers and/or toes[1]
Absence, major extremities[1]
Impairment, limbs, back, trunk[1]
All other impairments[1]

---

[1]Selected conditions and all impairments are classified by means of a special supplementary code developed for the Household Interview Survey. The details of this classification are contained in the Medical Coding Manual and Short Index, NHS-HIS-1000, 1965.

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APPENDIX III

RESIDENT QUESTIONNAIRE AND OTHER SURVEY FORMS

OFFICE OF
THE DIRECTOR

FORM HRS-3f
(4-2-64)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON, D.C. 20233

Dear Administrator:

The Bureau of the Census, acting as the collecting agent for the
United States Public Health Service, is conducting a nationwide survey
of nursing homes, homes for the aged, and other establishments providing
nursing, personal, and domiciliary care to the aged and infirm. The
purpose of this survey is to collect much needed statistical information
on the health of residents and on the types of employees in these homes.
This survey is part of the National Health Survey program authorized by
Congress because of the urgent need for up-to-date statistics on the
health of our people.

The purpose of this letter is to request your cooperation and to inform
you that a representative of the Bureau of the Census will visit your
establishment within the next week or so, to conduct the survey. Prior
to his visit, the Census representative will call you to arrange for a
convenient appointment time.

All the information given to the Census representative will be kept
strictly confidential by the Public Health Service and the Bureau of
the Census, and will be used for statistical purposes only.

Your cooperation in this important survey will be very much appreciated.

Sincerely yours,
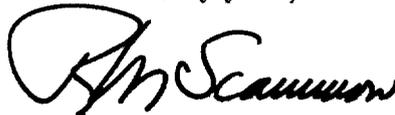
Richard M. Scammon
Director
Bureau of the Census

USCOMM-DC 24451 P-64

CONFIDENTIAL — This information is collected for the U.S. Public Health Service under authority of Public Law 652 of the 84th Congress (70 Stat. 489; 42 U.S.C. 305). All information which would permit identification of the individual will be held strictly confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to others for any other purposes (22 FR 1687).

FORM HRS-3a
(4-1-64)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE

U.S. NATIONAL HEALTH SURVEY
ESTABLISHMENT QUESTIONNAIRE

(Verify name and address and make any necessary corrections)

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4. **Is the person who supervises NURSING CARE a registered professional nurse, a licensed practical nurse, or someone else?**

1 ☐ Registered professional nurse   2 ☐ Licensed practical nurse   3 ☐ Someone else

---

5. **Does she work full-time or part-time?** By full-time we mean 40 or more hours a week.

1 ☐ Full-time   2 ☐ Part-time

---

6. **Is there a nurse or nurse's aide ON DUTY 24 hours a day?**

1 ☐ Yes   2 ☐ No

Establishment number	Resident's (patient's) line No.

1. What is the month and year of this resident's (patient's) birth?

Month	Year

2. Sex   1 ☐ Male *(Ask question 3)*   2 ☐ Female *(Go to question 4)*

3a. Has he served in the Armed Forces of the United States?   1 ☐ Yes *(Ask Q. 3b)*   2 ☐ No *(Go to Q 4)*   3 ☐ Unknown

3c. NOTE TO INTERVIEWER: *Source of veteran status information*

b. Did he serve in World War I?   1 ☐ Yes   2 ☐ No   3 ☐ Unknown

1 ☐ Record   2 ☐ Sample person   3 ☐ Respondent

4. Is this resident (patient) married, widowed, divorced, separated, or never married?
1 ☐ Married   3 ☐ Divorced   5 ☐ Never married
2 ☐ Widowed   4 ☐ Separated

5. In what month and year was he (last) admitted to this home?

Month	Year

6. With whom did he live at the time of his admission?
(Check the FIRST box that applies)

1 ☐ Spouse only
2 ☐ Children only
3 ☐ Spouse and children
4 ☐ Relatives other than spouse or children
5 ☐ Lived in apartment or own home — alone or with unrelated persons
6 ☐ In boarding home
7 ☐ In another nursing home or related facility
8 ☐ In mental hospital
9 ☐ In a long-term specialty hospital (except mental)
10 ☐ In a general or short-stay hospital
11 ☐ Other place *(Specify)*

7. How often do friends or relatives visit him?
(Check the FIRST box that applies)
1 ☐ At least once a week
2 ☐ Less often than once a week but at least once a month
3 ☐ Less than once a month
4 ☐ Never

8a. Does he stay in bed all or most of the day?   1 ☐ Yes *(Go to question 9)*   2 ☐ No *(Ask question 8b)*

b. Does he stay in his own room all or most of the day?   1 ☐ Yes   2 ☐ No *(Ask question 8c)*

c. Does he go off the premises just to walk, shop, or visit with friends or relatives and so forth?   1 ☐ Yes   2 ☐ No

9. Which of these special aids does this resident (patient) use? *(Show card C)*   *(Check all that apply)*

1 ☐ Hearing aid   4 ☐ Braces   7 ☐ Eye glasses
2 ☐ Walker   5 ☐ Wheel chair   **OR**
3 ☐ Crutches   6 ☐ Artificial limb(s)   8 ☐ None of these aids used

10. During his stay here when did he last see a doctor for treatment, medication, or for an examination by the doctor?

Month	Year	☐ Never saw doctor while here

11a. During his stay here, has he seen a dentist?   1 ☐ Yes *(Ask question 11b)*   2 ☐ No *(Go to question 12)*

b. When was the last time he saw a dentist?

Month	Year

12a. Has he lost ALL of his teeth?   1 ☐ Yes *(Ask question 12b)*   2 ☐ No *(Go to question 13)*

b. Does he wear full upper and lower dentures?   3 ☐ Yes   4 ☐ No

13. Does this resident (patient) have any of these conditions?
(Show card D. Record in Table 1 each condition which the patient has)   1 ☐ Yes   2 ☐ No

14. Does he have any of these conditions?
(Show card E. Record in Table 1 each condition which the patient has)   1 ☐ Yes   2 ☐ No

15a. Does he have any other CHRONIC conditions listed in his record that you have not told me about?   1 ☐ Yes   2 ☐ No
If "Yes," ask:
b. What are they?
(Record in Table 1 each chronic condition mentioned)

FORM HRS-3C (3-23-64)

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Table 1		
Enter conditions from questions 13, 14 or 15	For the following conditions ask these questions	
Enter the words used by the respondent to describe the condition. (a)	ILL EFFECTS OF STROKE . . . . . What are the present ill effects? SPEECH DEFECT . . . . What caused the speech defect? PARALYSIS, PERMANENT STIFFNESS . . . . What part of the body is affected? TUMOR, CYST, OR GROWTH . . . . What part of the body is affected? Is it malignant or benign? DEAFNESS, HEARING TROUBLE, OR ANY EYE CONDITION. . . . . . Is one or both ears (eyes) (Include glaucoma and cataracts) affected? (b)	Do not write in this column (c)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

16. If any eye conditions have been recorded in Table 1, ask: ☐ No eye condition reported *(Go to question 17)*

You told me about this resident's (patient's) eye condition.
Can he see well enough to read ordinary newspaper print with glasses? 1 ☐ Yes 2 ☐ No

17. During the past 7 days which of these services did this resident (patient) receive?

(Show card F and check each one mentioned)

1 ☐ Help with dressing, shaving, or care of hair
2 ☐ Help with tub bath or shower
3 ☐ Help with eating (feeding the resident (patient))
4 ☐ Rub and massage
5 ☐ Administration of medications or treatment
6 ☐ Special diet
7 ☐ Application of sterile dressings or bandages

8 ☐ Temperature—pulse—respiration
9 ☐ Full-bed bath
10 ☐ Enema
11 ☐ Catheterization
12 ☐ Bowel and bladder retraining
13 ☐ Blood pressure
14 ☐ Irrigation
15 ☐ Oxygen therapy
16 ☐ Hypodermic injection

17 ☐ Intravenous injection
18 ☐ Intramuscular injection
19 ☐ Nasal feeding

OR

20 ☐ None of the above services received

18. At the time this resident (patient) was admitted to this home, what kind of care did he receive—primarily nursing care, primarily personal care, or room and board only? *(Check one box only)* 1 ☐ Primarily nursing care 2 ☐ Primarily personal care 3 ☐ Room and board only

19. What was the TOTAL charge for this resident's (patient's) care last month? Amount $

20a. What is the PRIMARY source of payment for his care?
(Check ONE box only)
1 ☐ Own income or family support *(Include private plans, retirement funds, social security, etc.)*
2 ☐ Church support
3 ☐ Veterans benefits
4 ☐ Public assistance or welfare
5 ☐ Initial payment — life care
6 ☐ Other *(Please describe)*

20b. Are there any additional sources of payment?
(Check ALL boxes that apply)
1 ☐ Own income or family support *(Include private plans, retirement funds, social security, etc.)*
2 ☐ Church support
3 ☐ Veterans benefits
4 ☐ Public assistance or welfare
5 ☐ Initial payment — life care
6 ☐ Other *(Please describe)*

OR
7 ☐ No additional sources

Card D

LIST OF CHRONIC CONDITIONS

Does this resident have any of these conditions?

1. Asthma
2. CHRONIC bronchitis
3. REPEATED attacks of sinus trouble
4. Hardening of the arteries
5. High blood pressure
6. Heart trouble
7. Ill effects of a stroke
8. TROUBLE with varicose veins
9. Hemorrhoids or piles
10. Tumor, cyst or growth
11. CHRONIC gall bladder or liver trouble
12. Stomach ulcer
13. Any other CHRONIC stomach trouble
14. Bowel or lower intestinal disorders
15. Kidney stones or CHRONIC kidney trouble
16. Mental illness
17. CHRONIC nervous trouble
18. Mental retardation
19. Arthritis or rheumatism
20. Diabetes
21. Thyroid trouble or goiter
22. Epilepsy
23. Hernia or rupture
24. Prostate trouble
25. ADVANCED senility

Card E

LIST OF SELECTED CONDITIONS

Does this resident have any of these conditions?

1. Deafness or SERIOUS trouble hearing with one or both ears
2. SERIOUS trouble seeing with one or both eyes even when wearing glasses
3. Any speech defect
4. Missing fingers, hand, or arm--toes, foot, or leg
5. Palsy
6. Paralysis of any kind
7. Any CHRONIC trouble with back or spine
8. PERMANENT stiffness or any deformity of the foot, leg, fingers, arm, or back

Card F

LIST OF SERVICES

1. Help with dressing, shaving, or care of hair
2. Help with tub bath or shower
3. Help with eating (feeding the patient)
4. Rub and massage
5. Administration of medications or treatment
6. Special diet
7. Application of sterile dressings or bandages
8. Temperature - pulse - respiration
9. Full bed bath
10. Enema
11. Catheterization
12. Bowel and bladder retraining
13. Blood pressure
14. Irrigation
15. Oxygen therapy
16. Hypodermic injection
17. Intravenous injection
18. Intramuscular injection
19. Nasal feeding

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