

**VITAL and HEALTH STATISTICS**  
DATA FROM THE NATIONAL HEALTH SURVEY

# **Nursing and Personal Care Services**

## **Received by Residents of Nursing and Personal Care Homes**

**United States - May-June 1964**

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

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## COOPERATION OF THE BUREAU OF THE CENSUS

In accordance with specifications established by the National Health Survey, the Bureau of the Census, under a contractual agreement, participated in the design and selection of the sample, and carried out the first stage of the field interviewing and certain parts of the statistical processing.

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*IN THIS REPORT residents of nursing and personal care homes are described by level of care given to them in terms of their health and related characteristics, and certain health services which they received.*

*The Resident Places Survey (RPS-2) of the Nation's nursing and personal care homes determined which nursing or personal care services were being provided for the residents of these homes. These services were grouped into levels of care for the purpose of indicating the intensiveness of care a resident received.*

*A more intensive level of care was provided to groups of residents at the older ages, and women generally required a higher level of care than men.*

*As limitation of mobility increased, larger proportions of residents received some level of nursing care and conversely smaller proportions received personal care. The percents of groups of residents receiving some level of nursing care generally decreased as length of stay increased.*

*Fairly high levels of care were required for some specific chronic conditions such as cardiovascular conditions, rheumatism and arthritis, and advanced senility.*

*Over two-thirds of the residents received some level of nursing care in homes in which either a registered nurse (RN) or licensed practical nurse (LPN) was the supervisory nurse compared with about two-fifths of the residents in homes in which neither an RN nor an LPN was supervisor. Homes with 24-hour-a-day nursing service provided higher levels of nursing care than homes which provided fewer hours of nursing service.*

*According to geographic region, the South had the largest proportion of residents receiving nursing care (68 percent) and the West the lowest (52 percent). The South had the lowest proportions of residents receiving either personal care or none of the services.*

*The proportions of residents receiving a specific nursing or personal care service increased as the number of chronic conditions and impairments increased. This increase was generally found more often for the six personal care services than for the 13 nursing care services.*

*Of the 19 nursing or personal care services in which there were sex differentials, there was a preponderance of females over males at almost all age levels.*

#### 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-----	*

# NURSING AND PERSONAL CARE SERVICES

## RECEIVED BY RESIDENTS OF NURSING AND PERSONAL CARE HOMES

Roy Morgan, *Division of Health Resources Statistics*

### INTRODUCTION

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, referred to as Resident Places Survey-2, was conducted during May and June of 1964 by the Division of Health Records Statistics in cooperation with the U.S. Bureau of the Census. The survey estimated that 554,000 persons were residents or patients in the 17,400 nursing or personal care homes in the Nation during the period May-June 1964. At the time of the survey, these residents were receiving a variety of nursing and personal care services. The survey questionnaire asked which of the 13 nursing care services and six personal care services each resident was receiving (Card F, Appendix III). These 19 services were grouped into levels designed to indicate the intensiveness of care by a procedure described in Appendix II.

### SELECTED FINDINGS

Residents were fairly evenly distributed among the three major levels of care. Slightly more residents received the intensive level of care (31 percent) than the levels of other nursing care (29 percent) and personal care (27 percent). A greater proportion of females than males were given intensive nursing care, while larger proportions of males received other nursing care,

personal care, and neither nursing nor personal care. Age was directly related to the intensity of care with a more intensive level provided at the older ages.

There was a relationship between specific chronic conditions and level of care since some of the conditions—cardiovascular conditions, advanced senility, and arthritis and rheumatism—required fairly high levels of care.

As the degree of mobility limitation increased, the intensity of the level of care increased. Intensive nursing care was received by 73 percent of those residents who were limited to their beds, 37 percent who were room limited, and 18 percent who had no restriction of mobility.

The intensity of nursing care decreased with increasing length of stay. The proportions of residents under intensive nursing care and under other nursing care generally decreased as the length of stay increased. Similarly, proportions of residents receiving neither personal nor nursing care increased as their length of stay increased.

The higher the level of care, the more complete was the coverage of nursing service. Homes with 24-hour nursing service provided higher levels of nursing care than homes providing fewer hours of nursing service. The intensity of the level of care was related to the type of supervisory nurse. In homes with either an RN or an LPN as supervisor, over two-thirds of the residents were given some nursing care. Nursing care was given to two-fifths of the residents in

homes where neither an RN nor an LPN was supervisor.

There was a relationship between the type of care a resident received when he was admitted to a home and the level of care he was receiving when the survey was conducted. The predominant level of care given to residents in a home generally corresponded to the primary type of service of the home. One of the four levels of nursing care was received by 75 percent of residents in nursing care homes. In personal-care-with-nursing homes, 32 percent received some level of nursing care and 38 percent, personal care. Some 93 percent of the residents in personal care homes were given personal care or none of the services. The South Region had the largest proportion of residents receiving some level of nursing care (68 percent) and the West the lowest (52 percent). Percentage distributions by level of nursing care were similar for the Northeast and North Central Regions.

Although there was little sex and age difference in the proportions of males and females receiving the 19 selected nursing and personal care services, the services for which there was a difference showed a preponderance of females over males at almost all age levels.

As one might expect, the proportions of residents receiving a specific service increased with the number of chronic conditions and impairments. This was the case with the six personal care services and was true to a lesser extent of the 13 nursing care services.

When the residents were classified according to their mobility status, a higher proportion of the more restricted groups (bed and room limited) received more nursing and personal care services than those with no limitation.

## SOURCE AND QUALIFICATIONS OF DATA

The scope of the Resident Places Survey (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 the scope of the survey.

RPS-2 was a multiple purpose survey, collecting statistics about establishments, the residents or patients living in the establishments, and the employees of the establishments. Reports have been published on the number and types of employees;<sup>1</sup> on their work experience, special training, and wages;<sup>2</sup> and on chronic illness of residents as reflected by the number of chronic conditions and impairments.<sup>3,4</sup> This report describes the relationship of nursing and personal care services to characteristics of residents, to aspects of the health of the residents, and to classification of establishment variables.

In order to properly interpret the statistics presented in this report, one 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 procedure. Imputation procedures, estimation technique, and sampling variation are also discussed. Tables and charts of standard errors are provided with illustrations of their use. Definitions of terms, the procedure for classifying establishments, rules for diagnostic coding, and the list of diagnostic categories are shown in Appendix II. Facsimiles of questionnaires and forms used in the survey are shown in Appendix III.

It is important to note that classification of the establishments 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.

The principal variables in this report are related to two questions on the resident questionnaire in Appendix III. These questions asked about the nursing and personal care services which a resident had received during the previous 7 days and at the time he was admitted to the home. These nursing and personal care services are listed in detail in item 17 of the questionnaire and Card F of Appendix III. To aid in analysis, these nursing and personal care services have been grouped into levels of nursing care and personal care. This procedure is described in Appendix II.

The data on chronic conditions and impairments were obtained from proxy respondents

such as nurses or other personnel available in the homes who were considered to be the persons best acquainted with the health of the 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 the question contained only certain ones that were specifically requested. Those asked about, listed in Appendix III, were the ones thought to be most relevant to this population.

In general, the International Classification of Diseases<sup>5</sup> 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. This report does not attempt to compare residents on the basis of the specific combination of chronic conditions and impairments they might have had. Conditions are treated separately, and individual conditions are related to other characteristics of the individual.

## LEVEL OF NURSING AND PERSONAL CARE

### Age and Sex of Resident

A higher level of care (intensive care and other nursing care) was required at older ages (fig. 1). A direct relationship was seen between age and intensive nursing care, increasing from 25 percent of the residents under 65 years to 37 percent of the residents over age 85. About one-fourth of the residents under age 65 received other nursing care services while somewhat higher proportions of the older age groups received this level of care. Of those residents receiving personal care, there were generally smaller proportions in the older age groups. However, this does not mean that older people did not receive personal care services because these categories are mutually exclusive and residents are classified according to the highest level of care received. Therefore many of the older residents who are classified as receiving

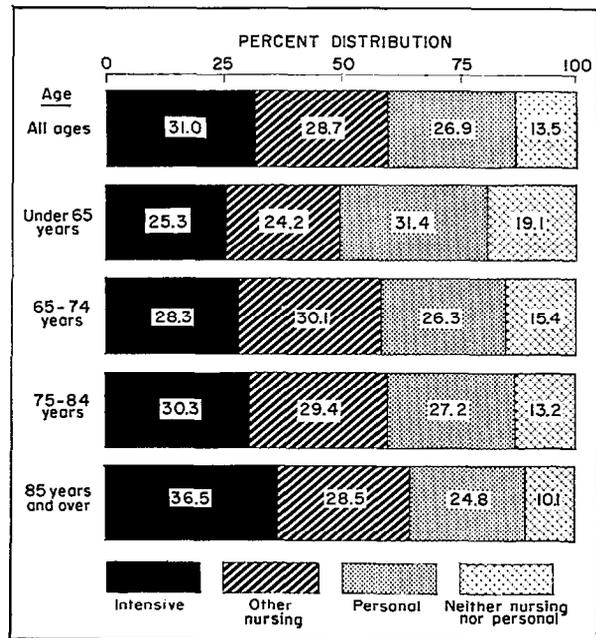


Figure 1. Percent distribution of residents of nursing and personal care homes, by level of patient care according to age.

nursing care are probably also receiving personal care services. Just as the older age groups received higher levels of care, there was an inverse relationship between increasing age and the proportions of age groups receiving none of these levels of care.

Men generally required less intensive levels of care than women; there were higher proportions of men receiving other nursing care, personal care, and none of the levels of care (table A and fig. 2). About one-fourth of male residents required intensive nursing care while over one-third of female residents were given such care. Not only was there a greater proportion of females than of males receiving intensive nursing care, but the excess of females over males was found in all age groups. Data by age and sex are presented in table 1 by more detailed levels of care.

### Number of Chronic Conditions and Time Interval Since Last Saw Doctor

Figures for the average number of conditions by age are given in a previous report,<sup>3</sup> in which the relationship of increasing number of condi-

Table A. Number and percent distribution of residents of nursing and personal care homes, by level of patient care according to sex: United States, May-June 1964

Sex	Number of residents	All levels	Level of patient care			
			Intensive	Other nursing	Personal	Neither nursing nor personal
Both sexes-----	554,000	100.0	31.0	28.7	26.9	13.5
Male-----	193,800	100.0	25.2	30.1	28.7	15.9
Female-----	360,200	100.0	34.2	27.9	25.9	12.1

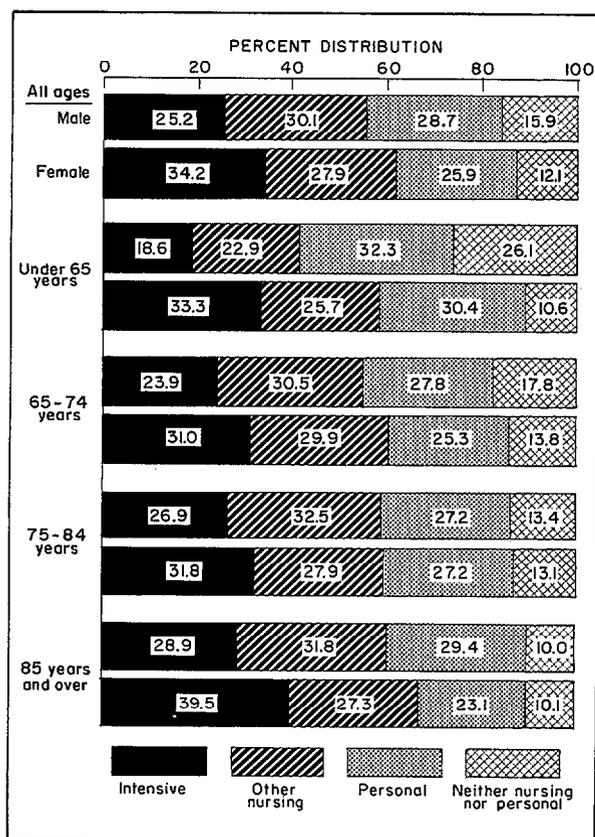


Figure 2. Percent distribution of residents of nursing and personal care homes, by age and sex according to level of patient care.

tions with advancing age and a concomitant relationship of an increase in the level of patient care with an increase in the number of chronic conditions and impairments are described.

The number of chronic conditions and the interval since the resident last saw a doctor are discussed in this section in order to show how they relate to the level of patient care. As the number of conditions increased, there was an increase in the frequency of doctor visits and the proportion of those patients who had seen a physician during the last 3 months versus those who had not (table B).

For each level of care, there were also increasing proportions of residents who had seen a doctor in the past 3 months as the number of conditions increased, except for less intensive care where the proportions remained relatively constant. Generally, when it had been more than 3 months since a resident had seen a doctor, the proportions of such residents in each level of care decreased as the number of conditions increased. This decrease also applies to the situation in which the resident had not seen a doctor. As might be expected, fewer residents receiving only personal care or no service had seen a doctor during the last 3 months than residents receiving some nursing care. However, the differences within nursing care levels were slight. This in general was also true for the various number-of-condition categories.

Table B. Percent distribution of residents of nursing and personal care homes, by number of chronic conditions and impairments and time interval since last saw doctor according to level of patient care: United States, May-June 1964

Number of chronic conditions and time interval since last saw doctor	All levels	Level of patient care					
		Intensive	Bed bath, excluding intensive	Less intensive	Routine	Personal	Neither nursing nor personal
		Percent distribution					
All conditions---	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 3 months-----	74.6	83.9	81.8	88.6	79.7	68.6	53.7
3 months or over-----	21.1	13.9	15.7	10.7	17.8	26.6	33.9
Doctor not seen-----	4.3	2.2	2.5	0.7	2.5	4.8	12.4
No conditions----	100.0	-	100.0	100.0	100.0	100.0	100.0
Under 3 months-----	49.1	-	54.4	100.0	70.5	62.6	41.4
3 months or over-----	32.2	-	36.7	-	19.3	25.7	36.0
Doctor not seen-----	18.7	-	8.9	-	10.2	11.7	22.6
1-2 conditions---	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 3 months-----	69.2	79.9	77.7	88.7	75.6	66.7	53.2
3 months or over-----	24.9	18.0	17.6	10.4	21.4	27.8	34.2
Doctor not seen-----	6.0	2.1	4.7	0.9	2.9	5.5	12.6
3-4 conditions---	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 3 months-----	78.2	82.7	82.5	88.8	81.0	70.6	61.8
3 months or over-----	19.0	13.5	15.6	10.6	16.1	25.4	34.0
Doctor not seen-----	2.8	3.8	1.9	0.6	2.9	4.0	4.2
5 conditions----	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 3 months-----	83.4	87.3	84.7	88.0	85.0	72.7	78.6
3 months or over-----	15.5	12.1	14.0	11.5	14.4	25.0	21.4
Doctor not seen-----	1.1	0.6	1.3	0.5	0.6	2.3	-

### Selected Chronic Conditions and Impairments

The data on chronic conditions and impairments which were collected through use of interview cards D and E shown in Appendix III were classified according to a scheme described in Section C of Appendix II. Table 2 presents data on 35 conditions by the level of care the patient was given. Nine of the 35 conditions and impairments are presented in table C. As can be seen, the rates for residents with certain conditions were lower for patients in each succeeding lower level

of care. This fact emphasizes the possibility that the more debilitating conditions generally require higher levels of care.

The two most prevalent conditions were vascular lesions affecting the central nervous system, with a rate of 340 per 1,000 residents, and diseases of the heart, with a rate of 283. As seen in table C, the rate of vascular lesions affecting the central nervous system was 516 for residents receiving intensive nursing care, 370 for other nursing care, 236 for personal care, and 75 for none of these services. Residents receiv-

ing intensive nursing care had diseases of the heart at a rate of 326 per 1,000 residents; the rate for those under other nursing care was 361. Diseases of the heart were reported for 224 per 1,000 residents under personal care and 133 per 1,000 residents receiving no nursing or personal care services.

The rate for arthritis and rheumatism for all residents was 221 per 1,000, ranging from 252 for residents under intensive nursing care to 172 for those receiving no nursing or personal care services. The overall rate of residents with advanced senility was 218, with a range from 314 per 1,000 residents under intensive nursing care to 28 per 1,000 residents receiving no services. This would indicate that advanced senility is one of those conditions requiring fairly high levels of care. A similar case appears for paralysis or palsy due to stroke, a condition which was reported for 120 of 1,000 residents; the range of rates reveals a high of 230 for residents under intensive nursing care and a low of 27

for residents receiving no services. The rate for visual impairments was 121 per 1,000 residents, with the highest rate (166) for those under intensive nursing care and the lowest rate (42) for those receiving no services.

Hearing impairments for all residents showed a rate of 188 per 1,000, but the range in rates by level of care was not as wide as that for most other conditions in table C. Residents under intensive nursing care had a rate of hearing impairments of 211 per 1,000 and this rate decreased as the level of care decreased to a rate of 147 per 1,000 for residents receiving none of the services. Malignant neoplasms was in the lower third by size of rate of the 35 selected chronic conditions and impairments presented in table 2. The rate was 33 per 1,000 for all residents. Malignant neoplasms was reported for 49 per 1,000 residents under intensive nursing care, decreasing by intensity of care to 16 per 1,000 residents receiving none of the services.

Table C. Number of residents and rate of specified chronic conditions and impairments per 1,000 residents of nursing and personal care homes, by level of patient care: United States, May-June 1964

Chronic conditions and impairments	All levels	Level of patient care			
		Intensive	Other nursing	Personal	Neither nursing nor personal
		Number of residents			
All residents-----	554,000	171,800	158,800	148,800	74,600
		Rate per 1,000 residents in specified level of care			
Malignant neoplasms-----	33.3	48.7	36.9	20.4	15.9
Advanced senility-----	218.4	313.6	233.5	187.9	27.7
Vascular lesions affecting central nervous system-----	339.5	515.5	370.4	235.8	75.4
Diseases of the heart-----	282.6	325.9	360.8	224.0	133.0
Arthritis and rheumatism-----	220.8	252.0	234.9	194.2	171.9
Visual impairments-----	120.5	165.7	114.0	114.5	42.2
Hearing impairments-----	187.6	210.6	196.2	172.2	147.0
Paralysis or palsy due to stroke----	120.3	229.5	101.4	61.3	26.5
Impairments of limbs, back, or trunk-	135.8	180.1	129.3	124.5	70.1

Table D. Number and percent distribution of residents of nursing and personal care homes, by level of patient care according to sex and mobility status: United States, May-June 1964

Sex and mobility status	Number of residents	All levels	Level of patient care			
			Intensive	Other nursing	Personal	Neither nursing nor personal
Percent distribution						
Both sexes-----	554,000	100.0	31.0	28.7	26.9	13.5
Bed limited-----	92,200	100.0	73.1	17.3	8.7	0.9
Room limited-----	116,900	100.0	37.4	33.2	24.8	4.6
Neither-----	344,900	100.0	17.6	30.1	32.4	19.8
Male-----	193,800	100.0	25.2	30.1	28.7	15.9
Bed limited-----	29,300	100.0	68.5	18.9	11.7	0.9
Room limited-----	33,100	100.0	29.8	40.8	25.1	4.3
Neither-----	131,400	100.0	14.4	30.0	33.5	22.2
Female-----	360,200	100.0	34.2	27.9	25.9	12.1
Bed limited-----	62,900	100.0	75.2	16.6	7.3	0.9
Room limited-----	83,800	100.0	40.4	30.2	24.6	4.8
Neither-----	213,400	100.0	19.6	30.3	31.8	18.3

### Mobility Status

Previous reports have shown that as age increases the resident's mobility decreases, and that as the number of chronic conditions increases, bed and room limitation increase.<sup>3,6</sup> The level of nursing care is also related to the degree of mobility limitation.

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 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 are defined as neither bed nor room limited if "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?" Residents who were routinely taken out of the room in a wheelchair for most of the day were considered neither bed nor room limited and thus were included in this last group.

Data on level of care by sex and mobility status are presented in table D. In this report persons classified as bed limited were not included in the group which was classified as room limited. The important aspect of comparison between the two groups is the degree of health as reflected by the degree of limitation.

A direct relationship between bed limitation and level of care is seen in table D. Among those residents who were bed limited, 73 percent received intensive nursing care; 17 percent, other nursing care; 9 percent, personal care; and 1 percent, none of these services. The same characteristic of increasing proportions of residents in each succeeding higher level of care occurred for residents who were room limited, although the relationship was not as strong as for bed-

limited residents. There was no particular pattern by level of care for residents who had neither bed nor room limitation. Their proportions were about the same for those receiving other nursing care and personal care, and for those receiving intensive care and none of the services.

### Length of Stay

In this report, length of stay refers to the interval of time between the date of admission to the home and the date of the survey. Length-of-stay statistics represent only the most recent stay for a resident with multiple admissions and do not represent the total length of stay in the homes.

Generally, the greater the length of stay, the smaller the proportion of residents receiving some level of nursing care, decreasing from 66 to 47 percent, and conversely the greater the proportion of residents receiving none of the services, increasing from 9 to 23 percent (fig. 3). Of residents who had been in a nursing or personal care home less than 1 year, 35 percent received intensive nursing care, while there was a decrease to 23 percent for those residents who had been in the home 5 years or more. For residents who had been in the home less than 2 years, there were increasing proportions of residents in each succeeding higher level of care. For lengths of stay of 2 or more years these increases were not consistent across all four levels of care.

Although it might appear that residents are neglected as their length of stay increases, data comparing the care the resident received at the time he was admitted to the home with the care he received at the time of the survey indicate that a resident continues to receive generally the same level of care which he received at admission (table E). Item 18 of the RPS-2 questionnaire asked what kind of care a resident received when admitted to the home—primarily nursing care, primarily personal care, or room and board only. These three types of care are defined in Appendix II. For the group which received primarily personal care at admission the largest portion was still receiving personal care at the time of the survey, and this proportion had no

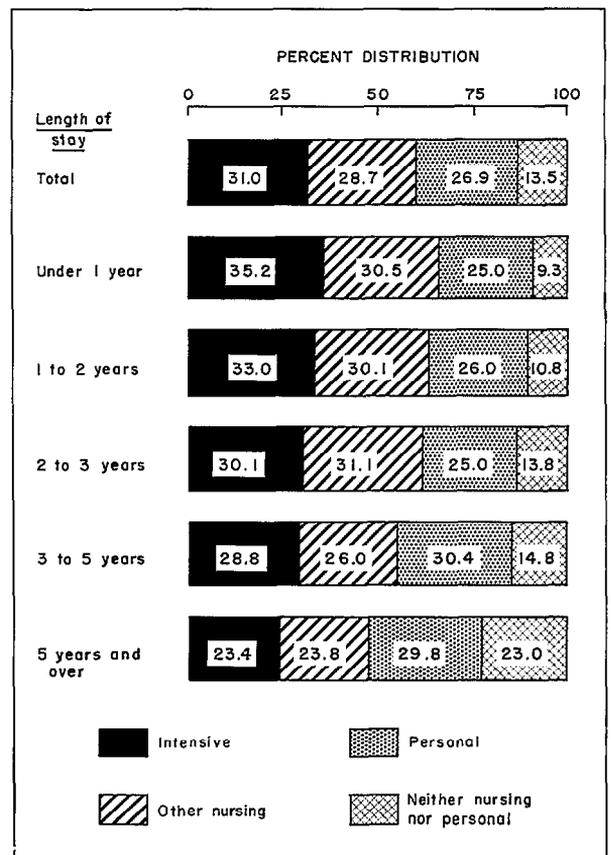


Figure 3. Percent distribution of residents of nursing and personal care homes, by level of patient care according to length of stay.

direct relationship with length of stay. The largest portion of residents who had received room and board at admission were not receiving any of the nursing or personal care services at the time of the survey, and again there was no direct relationship between the proportions and the length of stay. In the group which received primarily nursing care at admission there was little change in the proportions of residents by level of care as length of stay increased up to 3 years; for lengths of stay of 3 years or longer there was a slight shift of residents from the level of nursing care to that of personal care.

### Type of Nursing Supervision

As could be expected, there were differences by level of care according to whether there was

Table E. Number and percent distribution of residents of nursing and personal care homes, by level of patient care according to type of care received when admitted to home and length of stay: United States, May-June 1964

Type of care received when admitted and length of stay	Number of residents	All levels	Level of patient care		
			Nursing	Personal	Neither nursing nor personal
			Percent distribution		
Primarily nursing care-----	322,400	100.0	79.8	19.0	1.3
Under 1 year-----	123,000	100.0	81.6	17.6	0.8
1 to 2 years-----	71,300	100.0	81.6	17.7	0.7
2 to 3 years-----	44,100	100.0	80.3	18.3	1.4
3 to 5 years-----	44,000	100.0	77.6	20.9	1.5
5 years and over-----	40,100	100.0	72.8	23.9	3.4
Primarily personal care-----	97,600	100.0	42.9	46.9	10.1
Under 1 year-----	31,000	100.0	42.4	48.6	9.0
1 to 2 years-----	20,200	100.0	43.1	48.3	8.6
2 to 3 years-----	15,000	100.0	47.1	44.3	8.6
3 to 5 years-----	15,400	100.0	41.5	48.3	10.3
5 years and over-----	16,000	100.0	41.3	43.1	15.6
Room and board only-----	134,000	100.0	23.5	31.3	45.2
Under 1 year-----	30,200	100.0	25.0	30.8	44.2
1 to 2 years-----	21,500	100.0	20.8	32.7	46.5
2 to 3 years-----	17,100	100.0	24.1	25.6	50.3
3 to 5 years-----	23,100	100.0	20.4	36.5	43.1
5 years and over-----	42,100	100.0	25.2	30.3	44.4

a nurse or a nurses' aide on duty 24 hours a day in a home. In homes providing 24-hour nursing service, two-thirds of the residents required some level of nursing care (table F). In contrast, only one-third of the residents in homes providing nursing service less than 24 hours a day received some level of nursing care. The proportion of residents receiving personal care in homes with 24-hour nursing service was half that (24 percent) of the proportion in homes providing nursing service less than 24 hours a day (47 percent). In homes in which there was no nursing care the residents were almost equally distributed between personal care (49 percent) and none of the services (51 percent).

A slight relationship existed between level of care and the type of supervisory nurse. In homes in which a registered nurse was the supervisory nurse, about 66 percent of the residents received some level of nursing care with 24 percent receiving personal care and 11 percent receiving neither nursing nor personal care (fig. 4). Almost the same distribution of residents by level of care appeared in homes which had a licensed practical nurse as supervisor. Some 41 percent of the residents in homes with neither an RN nor an LPN as the supervisory nurse were receiving some level of nursing care, and an equal proportion were receiving personal care. Data by the detailed levels of care are in table 3.

### Primary Type of Service and Ownership

In the RPS-2, the nursing and personal care homes were classified as either nursing care homes, personal care homes with nursing care, or personal care homes, according to the primary type of service provided for residents. In all types of homes 60 percent of the residents received some level of nursing care. The distribution of residents receiving the more intensive levels of care varied by type of home. Forty percent of residents in nursing homes received intensive nursing care and 36 percent were under other nursing care (fig. 5). Some 21 percent of nursing home residents were on a personal care basis. Residents in personal care homes with nursing service were principally on a personal care basis (38 percent), with a sizable proportion receiving some level of nursing care (32 percent).

The level of care is fairly well indicated by the primary type of service. This was particularly evident for residents of personal care homes, 46 percent of whom were receiving personal care and only 7 percent of whom were receiving some level of nursing care. There was a marked distribution of residents who received no care which ranged from 4 percent in nursing care homes to 30 percent of those in personal care homes with nursing and 51 percent in personal care homes.

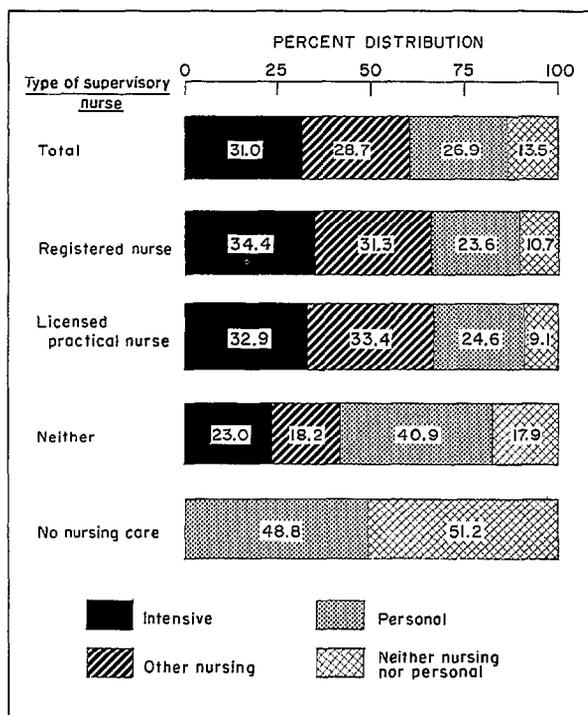


Figure 4. Percent distribution of residents of nursing and personal care homes, by level of patient care according to type of supervisory nurse.

Table F. Number and percent distribution of residents of nursing and personal care homes, by level of patient care according to 24-hour nursing service: United States, May-June 1964

24-hour nursing service	Number of residents	All levels	Level of patient care			
			Intensive	Other nursing	Personal	Neither nursing nor personal
All types-----	554,000	100.0	31.0	28.7	26.9	13.5
Nurse or nurse's aide on duty 24 hours-----	490,800	100.0	34.2	31.2	24.2	10.4
Nurse or nurse's aide on duty less than 24 hours--	30,200	100.0	13.3	18.6	46.5	21.6
No nursing care-----	32,900	100.0	...	...	48.8	51.2

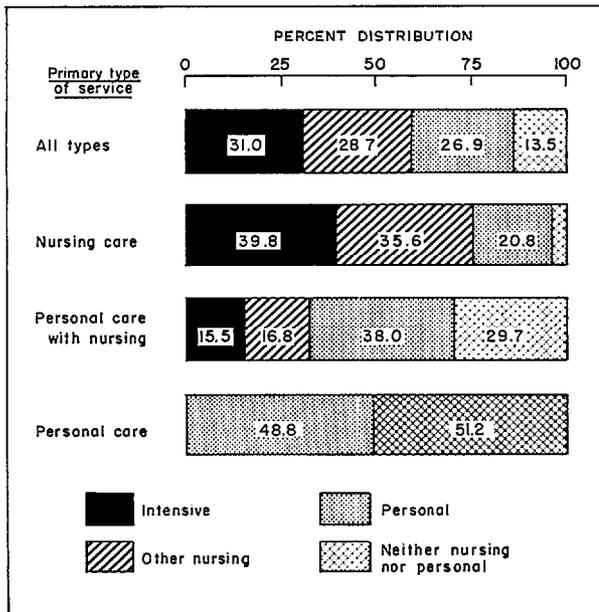


Figure 5. Percent distribution of residents of nursing and personal care homes, by level of patient care according to primary type of service.

Level of care was somewhat related to the type of ownership. Figure 6 shows that in homes operated by a proprietor the proportion of residents under intensive nursing care (40 percent) was over twice that in nonprofit homes (15 percent) and was considerably greater than in homes under other ownership (22 percent). Thirty percent of residents in proprietary homes received other nursing care, as did residents in homes under ownership other than proprietary or nonprofit. In nonprofit homes, 23 percent of the residents were under other nursing care.

In nonprofit homes and in homes under "other" ownership, three-tenths of the residents received personal care, while the proportion of residents under this care in proprietary homes was one-fourth. Nonprofit homes had the largest proportion of residents (three-tenths) receiving none of the levels of care, while almost one-fifth were in homes under ownership other than proprietary or nonprofit.

## Geographic Region

Two-thirds of all residents of nursing and personal care homes were in the Northeast and North Central Regions (table 4). These two regions were similarly distributed according to the proportions of residents receiving the four levels of care, and the distributions were very close to the distribution for all regions (table G). The South Region is notable in its high proportion of residents receiving some level of nursing care (68 percent) compared with the proportions for the Northeast and North Central Regions (about 60 percent) and that of the West (52 percent). The South had the lowest proportion of residents under personal care (22 percent) and receiving none of the services (11 percent). The West had the highest proportion of those receiving personal care (30 percent) and none of the services (18 percent).

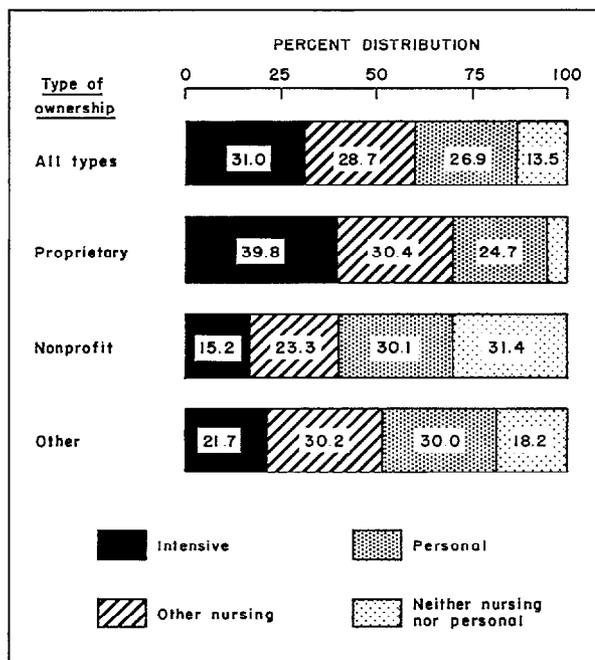


Figure 6. Percent distribution of residents of nursing and personal care homes, by level of patient care according to type of ownership.

Table G. Number and percent distribution of residents of nursing and personal care homes, by level of patient care according to geographic region: United States, May-June 1964

Geographic region	Number of residents	All levels	Level of patient care			
			Intensive	Other nursing	Personal	Neither nursing nor personal
All regions-----	554,000	100.0	31.0	28.7	26.9	13.5
Northeast-----	158,300	100.0	33.6	25.9	27.9	12.5
North Central-----	203,000	100.0	30.6	28.7	27.1	13.6
South-----	100,400	100.0	33.5	34.3	21.7	10.5
West-----	92,300	100.0	24.7	27.1	30.2	18.0

## SPECIFIC TYPES OF NURSING AND PERSONAL CARE SERVICES

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 ranged from intensive nursing care services to personal care services. The preceding part of this report described these services as grouped into broad levels of care. For the convenience of description, only selected nursing and personal care services are described in this section; detailed percent distributions for all 19 of the services are found in tables 5, 6, and 7.

Table 5 indicates that the proportions of all residents receiving a specific personal care service ranged from a low of 21 percent who received help with eating to a high of 70 percent for those who were administered medications or treatments. Similarly, for all residents receiving nursing care services, there was a wide range, from a low of less than 1 percent each for oxygen therapy, intravenous injection, and nasal

feeding to a high of 37 percent for temperature, pulse, and respiration readings.

### Age and Sex of Resident

Generally, for most of the nursing and personal care services, the proportions of males who received these services did not differ greatly from the proportions of females.

The seven services with the greatest differences by sex are shown in table H. Four of the services were in the nursing care category, and three were personal care; there was also a no-service-received category. At all age levels more females than males required the services listed in table H with the possible exception of the administration of medications and hypodermic injection. About seven-tenths of females at all age levels received medications, while there was a direct relationship between the proportion of males receiving this service and age. The proportion increased with age from 58 percent for those under 65 years to 72 percent for those 85 years and over. Similarly, the difference between the proportion of males and females receiving hypodermic injections was not as outstanding as other services.

Among males under age 65, 14 percent received help with eating; there was some increase with age to about 19 percent for the males who were over 75 years of age. About 20 percent of the females under 85 required this service, with a higher proportion (26 percent) found for those 85 years and over. About one-fifth of the males received a special diet compared with one-fourth of the females. There was no direct relationship between this service and increasing age. Of those residents in the 65-74 age group, slightly higher proportions were given a special diet than those in other age groups for both males and females.

A higher proportion of residents in the age groups 75 years and over received enemas than those in the age groups under 75, and for each age group there were somewhat higher proportions of females than males receiving this service.

The greatest difference in proportions by sex and age occurred in the rub and massage service. Some 48 percent of the females received this service, while the corresponding proportion of males was 38 percent. As age increased, so did the proportions of males given the rub and

massage service, increasing from 26 percent for those under 65 to 44 percent for those over 85 years. This direct relationship was not so dramatic in the female residents by age level, since approximately 45 percent of females in the three lower age groups received the rub and massage service as compared with 54 percent of those females 85 years and over.

A full bed bath was given to males in proportions increasing with age, from 16 percent of those under 65 to 24 percent of those residents 85 years and over. About 28 percent of females in each of the three lower age groups had full bed baths, while the proportion of females 85 and over was 36 percent.

Over one-fourth of the male residents under 65 received none of the nursing and personal care services. This proportion decreased with increasing age to one-tenth of those 85 years and over. Proportions of females not receiving any of the services were not directly related to age. About 10 percent of the females in the age groups under 65 years and 85 years and over received no services; the proportion of those in the two intermediate age groups was 13 percent.

Table H. Number and percent of residents of nursing and personal care homes, by age, sex, and selected nursing and personal care services: United States, May-June 1965

Selected nursing and personal care services	All ages		Under 65 years		65-74 years		75-84 years		85+ years	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Number of residents										
All residents	193,800	360,200	36,200	33,000	40,400	64,000	74,100	156,800	43,100	109,300
Percent of residents										
Help with eating	17.8	22.1	13.9	22.1	17.2	19.4	19.4	20.8	18.9	25.5
Rub and massage	38.0	47.7	26.4	46.2	33.8	44.0	41.3	44.9	44.0	54.3
Administration of medication	47.5	71.5	57.5	71.4	65.3	70.3	70.9	70.6	72.1	73.4
Special diet	20.0	24.5	15.3	24.6	22.7	27.3	21.3	23.8	19.1	23.0
Full bed bath	21.0	30.5	15.7	28.5	20.3	27.2	22.4	28.1	21.8	36.4
Enemas	12.9	17.1	9.0	15.4	10.2	15.9	15.7	17.1	13.7	18.2
Epidermic injections	4.7	6.2	4.3	6.2	3.7	5.9	4.9	6.3	5.4	6.0
None of above	15.9	12.1	26.1	16.6	17.8	13.3	17.2	13.1	10.0	10.1

NOTE: Because residents may receive more than one service, the columns of percents do not add to 100 percent.

## Mobility Status

There was a general correlation between mobility status and the proportion of residents receiving the 19 nursing and personal care services. As limitation of mobility increased from neither bed nor room limitation to room and finally bed limitation, the proportion of residents receiving each of the 19 services increased, except for help with tub bath or shower (table 6). This relationship held for males and for females, with the proportions for both, by mobility status, about the same for most services. Where there was a difference, the percentages were higher for females.

The proportions of residents who were given medication or treatment were higher by limitation of mobility than for any of the other services (table 6). The range was from 63 percent for those residents with neither bed nor room limitation to 87 percent for those who were bed limited (fig. 7). Help with dressing was another personal care service in which there were large proportions of residents, ranging from 47 percent of those with no limitation of mobility to 86 percent of those who were bed limited. More room-limited residents (65 percent) required help with tub bath or shower than those with neither room nor bed limitation (59 percent). The fact that only two-fifths of those who were bed limited required this service could be accounted for by the likelihood that they generally received full bed baths.

Readings for temperature, pulse, and respiration were received by more residents than any other nursing care service, ranging from 30 percent of those with neither bed nor room limitation to 59 percent of those who were bed limited (fig. 7). The nursing service of blood pressure readings was administered to 24 percent of those residents with no mobility limitation and to 31 percent and 42 percent, respectively, of those who were room and bed limited. Of those residents who were bed limited, only 1 percent received none of the services, and 5 percent of those who were room limited received none of the services. Twenty percent of the residents who were neither bed nor room limited received none of the nursing or personal care services.

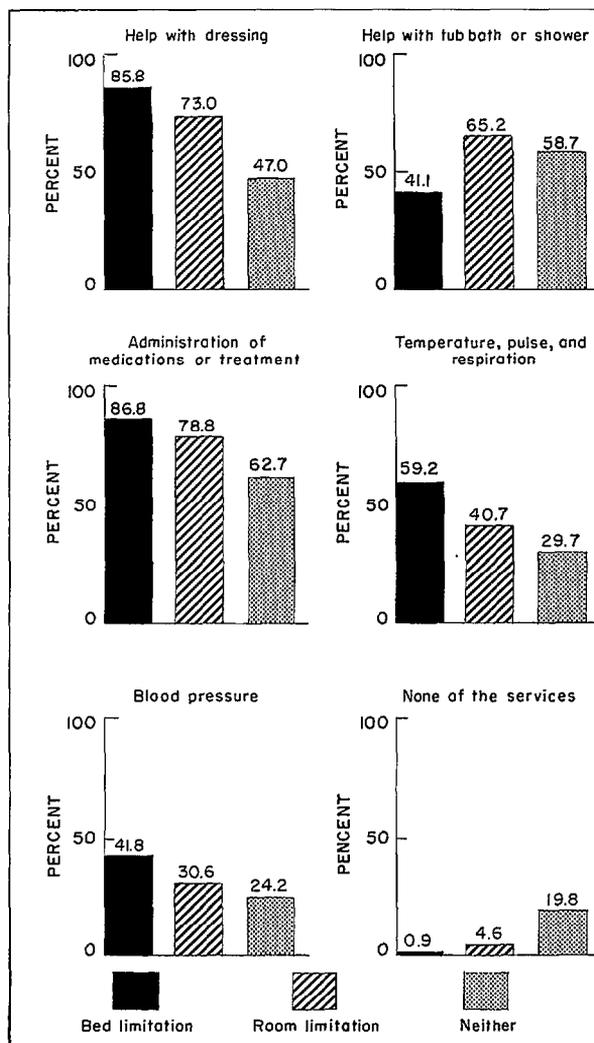


Figure 7. Percent of residents of nursing and personal care homes, by selected nursing and personal care services and mobility status.

## Number of Chronic Conditions and Impairments

As the specified number of chronic conditions increased from none to five and over, there was a concomitant increase in proportions of residents receiving a specific service. This was particularly true of the six personal care services and was generally true of most of the 13

nursing care services (table 7). Five services are analyzed in this section (fig. 8).

The most dramatic increase as conditions increased was in the personal care services; administration of medications especially showed such an increase. Of the residents with no conditions, about one-tenth received this service. Almost six-tenths of those with one or two conditions were administered medications or treatment; these proportions increased to eight-tenths of those with three or four conditions and almost nine-tenths of those with five or more conditions.

Residents who had help with dressing, shaving, or care of hair had a similar sharp increasing relationship of proportions. Nine percent of those with no conditions received this service compared with 46 percent of those with one or two conditions. The percents of those residents with three or four conditions and five or more conditions were 67 and 79 percent, respectively.

The nursing care service of temperature-pulse-respiration readings was received by 8 percent of the residents with no conditions, 28 percent with one or two conditions, 41 percent with three or four conditions, and 53 percent with five or more conditions. Similar distributions were seen for blood pressure readings, varying in increasing proportions from 4 percent of those with no conditions to 43 percent of those with five or more conditions.

The proportion of residents receiving bowel and bladder retraining was somewhat lower than in other services; there was an increase from 3 percent for those with one or two conditions to 15 percent of those with five or more conditions. Of the residents with no reported conditions, none of the sample cases received bowel or bladder retraining.

Some 67 percent of residents with no conditions received none of the nursing and personal care services. The figure for those with one or two conditions was 20 percent; for those with three or four conditions and five or more conditions, the proportions were 7 and 3 percent, respectively.

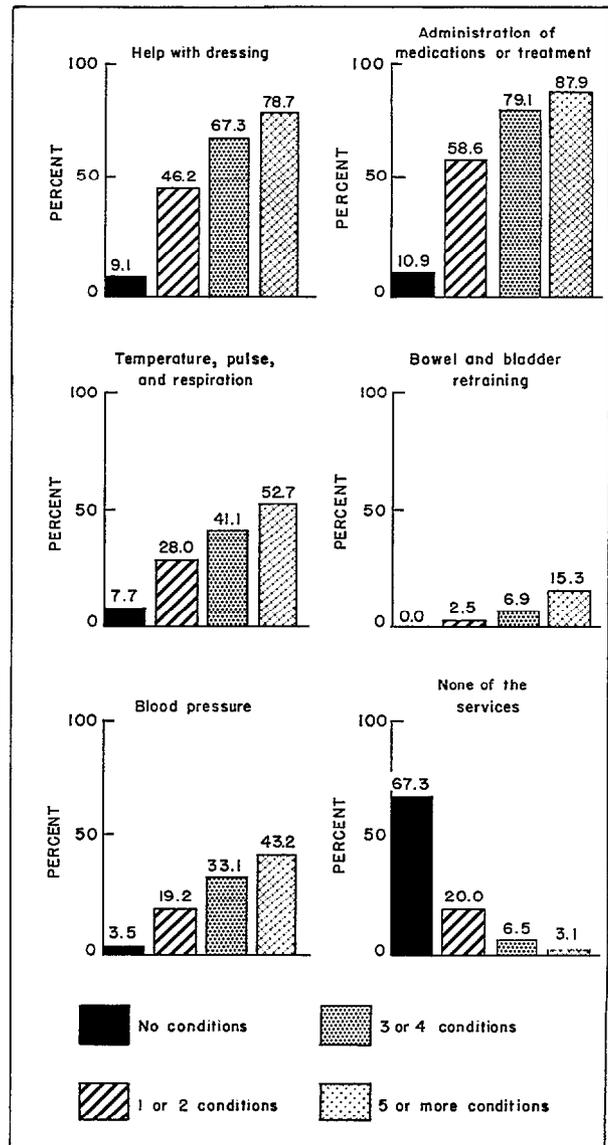


Figure 8. Percent of residents of nursing and personal care homes, by selected nursing and personal care services and specified number of chronic conditions and impairments.

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Table 1. Number and percent distribution of residents of nursing and personal care homes, by level of patient care according to sex and age: United States, May-June 1964

Sex and age	Number of residents	All levels	Level of patient care					
			Intensive	Bed bath, excluding intensive	Less intensive	Routine	Personal	Neither nursing nor personal
<u>Both sexes</u>		Percent distribution						
All ages-	554,000	100.0	3.8	27.2	7.0	21.7	26.9	13.5
Under 65 years-	66,200	100.0	3.7	21.5	5.9	18.4	31.4	19.1
65-74 years----	104,500	100.0	3.6	24.6	8.0	22.2	26.3	15.4
75-84 years----	230,900	100.0	4.0	26.3	7.7	21.7	27.2	13.2
85+ years-----	152,400	100.0	3.7	32.8	5.7	22.9	24.8	10.1
<u>Male</u>								
All ages-	193,800	100.0	4.1	21.0	6.8	23.3	28.7	15.9
Under 65 years-	36,200	100.0	2.9	15.7	5.9	17.0	32.3	26.1
65-74 years----	40,400	100.0	3.4	20.5	7.8	22.7	27.8	17.8
75-84 years----	74,100	100.0	4.6	22.4	7.8	24.7	27.2	13.4
85+ years-----	43,100	100.0	5.1	23.8	4.9	26.8	29.4	10.0
<u>Female</u>								
All ages-	360,200	100.0	3.6	30.5	7.0	20.8	25.9	12.1
Under 65 years-	30,000	100.0	4.7	28.5	5.7	20.0	30.4	10.6
65-74 years----	64,000	100.0	3.8	27.2	8.1	21.8	25.3	13.8
75-84 years----	156,800	100.0	3.7	28.1	7.6	20.2	27.2	13.1
85+ years-----	109,300	100.0	3.2	36.4	6.0	21.3	23.1	10.1

Table 2. Number of residents and rate of selected chronic conditions and impairments per 1,000 residents in nursing and personal care homes, by level of patient care: United States, May-June 1964

Chronic conditions and impairments	All levels	Level of patient care					
		Intensive	Bed bath, excluding intensive	Less intensive	Routine	Personal	Neither nursing nor personal
		Number of residents					
All residents-----	554,000	21,100	150,700	38,600	120,200	148,800	74,600
		Rate per 1,000 residents in specified level of care					
Malignant neoplasms-----	33.3	38.0	50.2	60.5	29.4	20.4	15.9
Benign and unspecified neoplasms-----	12.3	16.3	13.6	24.7	11.6	10.6	6.8
Asthma-----	29.7	55.0	29.9	35.0	37.0	23.9	19.5
Diabetes mellitus-----	80.0	105.3	86.9	216.4	68.1	73.9	19.6
Advanced senility-----	218.4	351.3	308.3	190.2	247.4	187.9	27.7
Senility, not psychotic--	49.5	68.7	47.5	52.5	50.3	61.7	21.4
Other mental disorders--	181.9	154.7	146.9	172.7	201.0	202.7	192.6
Vascular lesions affect- ing central nervous system-----	339.5	497.1	518.0	325.0	384.9	235.8	75.4
Parkinson's disease-----	22.6	31.2	37.5	14.3	18.8	19.8	6.2
Epilepsy-----	21.1	31.1	20.1	16.9	17.8	29.3	11.8
Chronic diseases of the eye-----	62.5	60.0	57.2	98.8	57.6	68.7	50.5
Diseases of the heart---	282.6	348.9	322.7	387.1	352.4	224.0	133.0
Hypertension, without mention of heart-----	63.3	50.5	37.5	74.6	81.4	62.2	86.2
General arteriosclerosis-	78.5	57.0	75.5	82.1	80.3	85.4	72.4
Varicose veins-----	32.0	68.2	30.0	90.8	35.1	16.3	22.0
Hemorrhoids-----	38.2	77.4	43.9	62.2	45.4	24.2	19.3
Bronchitis and emphysema-	40.2	75.3	38.2	60.0	47.3	30.1	32.9
Sinus and other respiratory conditions--	19.4	38.8	14.8	23.7	26.3	14.3	20.5
Ulcer of stomach and duodenum-----	17.6	21.1	14.1	26.2	24.4	13.1	17.5
Hernia of abdominal cavity-----	35.5	66.7	28.2	55.1	41.2	30.1	32.5
Other chronic conditions of the digestive system-	124.4	220.6	158.2	170.8	137.6	85.6	60.7
Diseases of urinary system-----	58.2	149.6	95.5	54.9	50.4	32.9	21.8
Diseases of prostate and other male genital organs-----	30.0	85.5	32.1	42.1	32.2	21.1	18.2
Arthritis and rheumatism-	220.8	273.2	249.1	273.5	222.4	194.2	171.9
Fracture femur (old)---	31.1	59.6	51.2	21.0	29.1	22.7	7.6
All other chronic conditions-----	148.7	277.6	168.6	257.8	121.4	124.2	108.0
Visual impairment: inability to read news- paper with glasses-----	120.5	166.5	165.6	125.8	110.3	114.5	42.2
Other visual impairments-	60.2	45.8	48.1	113.0	65.0	56.1	62.0
Hearing impairments-----	187.6	222.0	209.0	201.2	194.6	172.2	147.0
Speech impairments, all types-----	98.6	166.0	166.4	81.7	89.4	68.8	25.3
Paralysis or palsy due to stroke-----	120.3	157.9	239.6	81.8	107.7	61.3	26.5
Paralysis or palsy due to other causes-----	46.9	59.2	76.9	46.8	37.3	36.3	19.3
Absence, major extremities-----	20.9	9.3	29.8	28.9	19.7	18.3	8.8
Impairments of limbs, back, or trunk-----	135.8	167.5	181.9	128.9	129.4	124.5	70.1
All other impairments----	13.7	14.3	12.6	29.9	14.5	12.4	8.5

Table 3. Number and percent distribution of residents of nursing and personal care homes, by level of patient care according to type of supervisory nurse and 24-hour nursing coverage: United States, May-June 1964

Type of supervisory nurse and 24-hour nursing coverage	Number of residents	All levels	Level of patient care					
			Intensive	Bed bath, excluding intensive	Less intensive	Routine	Personal	Neither nursing nor personal
			Percent distribution					
All types-----	554,000	100.0	3.8	27.2	7.0	21.7	26.9	13.5
Nursing 24 hours-----	490,800	100.0	4.3	29.9	7.5	23.7	24.2	10.4
Nursing under 24 hours-----	30,200	100.0	0.7	12.6	5.3	13.4	46.5	21.6
No nursing care-----	32,900	100.0	...	...	...	...	48.8	51.2
Registered nurse--	362,800	100.0	4.9	29.5	8.2	23.1	23.6	10.7
Nursing 24 hours-----	356,300	100.0	5.0	29.7	8.3	23.4	23.2	10.5
Nursing under 24 hours-----	6,500	100.0	0.8	21.3	6.8	7.0	44.4	19.8
Licensed practical nurse-----	107,000	100.0	2.5	30.4	6.5	26.9	24.6	9.1
Nursing 24 hours-----	99,600	100.0	2.6	31.4	6.2	27.6	23.3	9.0
Nursing under 24 hours-----	7,500	100.0	1.4	17.9	10.6	18.2	41.9	10.0
Neither registered nurse nor licensed practical nurse--	51,200	100.0	1.5	21.5	3.5	14.7	40.9	17.9
Nursing 24 hours-----	34,900	100.0	2.0	28.4	4.1	15.2	37.0	13.4
Nursing under 24 hours-----	16,300	100.0	0.4	6.7	2.2	13.7	49.4	27.7
No nursing care---	32,900	100.0	...	...	...	...	48.8	51.2

Table 4. Number and percent distribution of residents of nursing and personal care homes, by level of patient care according to geographic region and primary type of service: United States, May-June 1964

Geographic region and primary type of service	Number of residents	All levels	Level of patient care					
			Intensive	Bed bath, excluding intensive	Less intensive	Routine	Personal	Neither nursing nor personal
Percent distribution								
All regions----	554,000	100.0	3.8	27.2	7.0	21.7	26.9	13.5
Nursing care-----	373,300	100.0	5.0	34.8	8.2	27.4	20.8	3.9
Personal care with nursing-----	145,400	100.0	1.7	14.1	5.5	12.1	37.4	29.2
Personal care-----	35,300	100.0	...	...	...	...	48.8	51.2
Northeast-----	158,300	100.0	2.2	31.4	7.7	18.2	27.9	12.5
Nursing care-----	117,600	100.0	2.7	39.2	8.4	21.9	24.0	3.8
Personal care with nursing-----	29,700	100.0	1.3	11.7	7.5	9.9	38.1	31.6
Personal care-----	11,000	100.0	...	...	...	...	42.2	57.8
North Central--	203,000	100.0	4.4	26.2	7.7	21.0	27.1	13.6
Nursing care-----	127,800	100.0	5.9	32.3	9.8	27.8	20.4	3.7
Personal care with nursing-----	61,500	100.0	2.0	19.3	5.1	11.4	36.5	25.6
Personal care-----	13,700	100.0	...	...	...	...	47.4	52.6
South-----	100,400	100.0	2.3	31.1	4.7	29.6	21.7	10.5
Nursing care-----	73,200	100.0	2.6	37.6	5.6	34.2	16.6	3.5
Personal care with nursing-----	23,600	100.0	1.9	15.8	2.6	19.8	33.5	26.5
Personal care-----	3,600	100.0	...	...	...	...	51.0	49.0
West-----	92,300	100.0	6.9	17.8	6.4	20.6	30.2	18.0
Nursing care-----	54,800	100.0	11.0	27.2	7.3	29.2	20.3	5.0
Personal care with nursing-----	30,500	100.0	1.2	5.0	6.2	9.9	41.4	36.2
Personal care-----	7,000	100.0	...	...	...	...	60.0	40.0

Table 5. Number and percent of residents of nursing and personal care homes, by specific nursing and personal care services, sex, and age: United States, May-June 1964

Nursing and personal care services	All ages	Under 65 years	65-74 years	75-84 years	85 years and over
<u>Both sexes</u>					
Number of residents					
All residents-----	554,000	66,200	104,500	230,900	152,400
<u>Personal care services</u>					
Percent of residents					
Help with dressing, shaving, or care of hair-----	59.0	50.9	54.7	58.3	66.5
Help with tub bath or shower-----	57.1	50.0	56.3	58.4	59.0
Help with eating-----	20.6	17.6	18.5	20.4	23.6
Rub and massage-----	44.3	35.4	40.9	43.7	51.4
Administration of medications or treatment-----	70.1	63.8	68.4	70.7	73.2
Special diet-----	22.9	19.6	25.6	23.0	22.4
<u>Nursing care services</u>					
Application of special dressings or bandages-----	5.7	6.9	6.3	5.6	5.1
Temperature, pulse, and respiration-----	36.9	30.5	35.6	36.7	41.0
Full bed bath-----	27.2	21.5	24.6	26.3	32.8
Enema-----	15.6	11.9	13.7	16.6	17.0
Catheterization-----	4.1	3.8	4.1	4.2	4.1
Bowel and bladder retraining-----	6.6	5.3	6.2	6.3	7.8
Blood pressure-----	28.5	22.5	28.8	29.2	29.9
Irrigation-----	3.1	3.5	2.8	3.1	3.2
Oxygen therapy-----	0.6	0.5	0.6	0.6	0.5
Hypodermic injection-----	5.7	5.2	5.1	6.0	5.8
Intravenous injection-----	0.3	0.2	0.3	0.3	0.2
Intramuscular injection-----	6.0	4.5	6.4	6.1	6.1
Nasal feeding-----	0.2	0.5	0.3	0.1	0.1
None of above-----	13.5	19.1	15.4	13.2	10.1
<u>Male</u>					
Number of residents					
All residents-----	193,800	36,200	40,400	74,100	43,100
<u>Personal care services</u>					
Percent of residents					
Help with dressing, shaving, or care of hair-----	57.8	45.2	55.0	61.1	65.5
Help with tub bath or shower-----	57.4	45.6	53.5	61.9	63.4
Help with eating-----	17.8	13.9	17.2	19.4	18.9
Rub and massage-----	38.0	26.4	35.8	41.3	44.0
Administration of medications or treatment-----	67.5	57.5	65.3	70.9	72.1
Special diet-----	20.0	15.3	22.7	21.3	19.3

See note at end of table.

Table 5. Number and percent of residents of nursing and personal care homes, by specific nursing and personal care services, sex, and age: United States, May-June 1964—Con.

Nursing and personal care services	All ages	Under 65 years	65-74 years	75-84 years	85 years and over
<u>Male—Con.</u>					
<u>Nursing care services</u>		Percent of residents			
Application of special dressings or bandages-----	5.9	6.7	5.9	6.4	4.5
Temperature, pulse, and respiration-----	36.0	26.8	35.1	38.9	39.4
Full bed bath-----	21.0	15.7	20.5	22.4	23.8
Enema-----	12.9	9.0	10.2	15.7	13.7
Catheterization-----	3.9	3.0	3.5	4.3	4.2
Bowel and bladder retraining-----	5.9	3.9	4.9	6.3	8.0
Blood pressure-----	27.3	20.8	28.9	29.4	27.6
Irrigation-----	3.3	3.2	3.1	3.0	4.0
Oxygen therapy-----	0.9	0.8	0.7	1.2	0.8
Hypodermic injection-----	4.7	4.3	3.7	4.9	5.4
Intravenous injection-----	0.4	0.3	0.5	0.3	0.4
Intramuscular injection-----	4.8	4.1	4.9	4.9	5.0
Nasal feeding-----	0.2	0.6	0.4	-	0.1
None of above-----	15.9	26.1	17.8	13.4	10.0
<u>Female</u>		Number of residents			
All residents-----	360,200	30,000	64,000	156,800	109,300
<u>Personal care services</u>		Percent of residents			
Help with dressing, shaving, or care of hair-----	59.6	57.8	54.5	57.0	66.8
Help with tub bath or shower-----	57.0	55.2	58.1	56.7	57.3
Help with eating-----	22.1	22.1	19.4	20.8	25.5
Rub and massage-----	47.7	46.2	44.0	44.9	54.3
Administration of medications or treatment-----	71.5	71.4	70.3	70.6	73.6
Special diet-----	24.5	24.6	27.5	23.8	23.6
<u>Nursing care services</u>		Percent of residents			
Application of special dressings or bandages-----	5.6	7.0	6.5	5.2	5.3
Temperature, pulse, and respiration-----	37.5	35.0	35.9	35.7	41.6
Full bed bath-----	30.5	28.5	27.2	28.1	36.4
Enema-----	17.1	15.4	15.9	17.1	18.2
Catheterization-----	4.3	4.8	4.6	4.2	4.1
Bowel and bladder retraining-----	6.9	7.1	7.0	6.4	7.7
Blood pressure-----	29.1	24.6	28.8	29.0	30.8
Irrigation-----	3.0	3.9	2.6	3.1	2.9
Oxygen therapy-----	0.4	0.2	0.5	0.4	0.4
Hypodermic injection-----	6.2	6.2	5.9	6.5	6.0
Intravenous injection-----	0.2	-	0.2	0.3	0.2
Intramuscular injection-----	6.6	5.1	7.3	6.7	6.5
Nasal feeding-----	0.2	0.5	0.2	0.2	0.1
None of above-----	12.1	10.6	13.8	13.1	10.1

NOTE: Because residents may receive more than one service, the columns of percents do not add to 100 percent.

Table 6. Number and percent of residents of nursing and personal care homes, by specific nursing and personal care services, sex, and mobility status: United States, May-June 1964

Nursing and personal care services	All levels of mobility	Bed limitation	Room limitation	Neither
<u>Both sexes</u>				
Number of residents				
All residents-----	554,000	92,200	116,900	344,900
<u>Personal care services</u>				
Percent of residents				
Help with dressing, shaving, or care of hair-----	59.0	85.8	73.0	47.0
Help with tub bath or shower-----	57.1	41.1	65.2	58.7
Help with eating-----	20.6	55.6	25.1	9.7
Rub and massage-----	44.3	77.4	52.7	32.6
Administration of medications or treatment-----	70.1	86.8	78.8	62.7
Special diet-----	22.9	37.8	25.8	17.9
<u>Nursing care services</u>				
Application of special dressings or bandages-----	5.7	12.2	6.6	3.7
Temperature, pulse, and respiration-----	36.9	59.2	40.7	29.7
Full bed bath-----	27.2	69.4	32.2	14.2
Enema-----	15.6	37.6	16.4	9.5
Catheterization-----	4.1	14.5	3.2	1.7
Bowel and bladder retraining-----	6.6	12.8	8.2	4.4
Blood pressure-----	28.5	41.8	30.6	24.2
Irrigation-----	3.1	10.1	2.8	1.3
Oxygen therapy-----	0.6	1.5	0.6	0.3
Hypodermic injection-----	5.7	10.8	5.6	4.3
Intravenous injection-----	0.3	1.1	0.1	0.1
Intramuscular injection-----	6.0	10.6	6.5	4.5
Nasal feeding-----	0.2	0.9	0.2	0.0
None of above-----	13.5	0.9	4.6	19.8
<u>Male</u>				
Number of residents				
All residents-----	193,800	29,300	33,100	131,400
<u>Personal care services</u>				
Percent of residents				
Help with dressing, shaving, or care of hair-----	57.8	90.8	74.8	46.2
Help with tub bath or shower-----	57.4	45.3	71.0	56.7
Help with eating-----	17.8	54.0	24.2	8.1
Rub and massage-----	38.0	72.1	48.2	27.8
Administration of medications or treatment-----	67.5	86.4	77.9	60.6
Special diet-----	20.0	35.8	24.7	15.3

See note at end of table.

Table 6. Number and percent of residents of nursing and personal care homes, by specific nursing and personal care services, sex, and mobility status: United States, May-June 1964—Con.

Nursing and personal care services	All levels of mobility	Bed limitation	Room limitation	Neither
<u>Male—Con.</u>				
<u>Nursing care services</u>		Percent of residents		
Application of special dressings or bandages-----	5.9	10.7	9.3	4.0
Temperature, pulse, and respiration-----	36.0	63.2	42.1	28.3
Full bed bath-----	21.0	64.0	24.2	10.7
Enema-----	12.9	32.9	14.8	7.9
Catheterization-----	3.9	15.5	2.4	1.6
Bowel and bladder retraining-----	5.9	11.2	7.5	4.4
Blood pressure-----	27.3	43.4	32.5	22.4
Irrigation-----	3.3	13.0	3.0	1.1
Oxygen therapy-----	0.9	2.1	0.7	0.7
Hypodermic injection-----	4.7	8.4	4.9	3.8
Intravenous injection-----	0.4	1.9	-	0.1
Intramuscular injection-----	4.8	9.1	6.1	3.5
Nasal feeding-----	0.2	1.2	0.1	-
None of above-----	15.9	0.9	4.3	22.2
<u>Female</u>		Number of residents		
All residents-----	360,200	62,900	83,800	213,400
<u>Personal care services</u>		Percent of residents		
Help with dressing, shaving, or care of hair-----	59.6	83.5	72.3	47.6
Help with tub bath or shower-----	57.0	39.1	62.8	60.0
Help with eating-----	22.1	56.4	25.5	10.6
Rub and massage-----	47.7	79.8	54.5	35.5
Administration of medications or treatment-----	71.5	87.0	79.2	64.0
Special diet-----	24.5	38.8	26.2	19.5
<u>Nursing care services</u>		Percent of residents		
Application of special dressings or bandages-----	5.6	12.9	5.6	3.5
Temperature, pulse, and respiration-----	37.5	57.4	40.1	30.5
Full bed bath-----	30.5	71.8	35.3	16.4
Enema-----	17.1	39.8	17.0	10.4
Catheterization-----	4.3	13.9	3.5	1.7
Bowel and bladder retraining-----	6.9	13.5	8.5	4.4
Blood pressure-----	29.1	41.1	29.8	25.4
Irrigation-----	3.0	8.8	2.7	1.5
Oxygen therapy-----	0.4	1.2	0.5	0.1
Hypodermic injection-----	6.2	11.9	5.9	4.6
Intravenous injection-----	0.2	0.7	0.1	0.1
Intramuscular injection-----	6.6	11.3	6.6	5.2
Nasal feeding-----	0.2	0.8	0.2	0.0
None of above-----	12.1	0.9	4.8	18.3

NOTE: Because residents may receive more than one service, the columns of percents do not add to 100 percent.

Table 7. Number and percent of residents of nursing and personal care homes, by specific nursing and personal care services and specified number of chronic conditions and impairments: United States, May-June 1964

Nursing and personal care services	All conditions	No conditions	1-2 conditions	3-4 conditions	5 or more conditions
	Number of residents				
All residents-----	554,000	20,400	221,700	201,100	110,700
	Percent of residents				
<u>Personal care services</u>					
Help with dressing, shaving, or care of hair-----	59.0	9.1	46.2	67.3	78.7
Help with tub bath or shower-----	57.1	20.9	53.6	62.2	61.7
Help with eating-----	20.6	0.7	11.5	24.5	35.2
Rub and massage-----	44.3	7.4	31.4	51.4	64.0
Administration of medications or treatment-----	70.1	10.9	58.6	79.1	87.9
Special diet-----	22.9	2.3	12.9	26.9	39.7
<u>Nursing care services</u>					
Application of special dressings or bandages-----	5.7	0.5	3.2	6.9	9.7
Temperature, pulse, and respiration-----	36.9	7.7	28.0	41.1	52.7
Full bed bath-----	27.2	2.7	17.8	31.6	42.7
Enema-----	15.6	-	8.2	18.1	28.8
Catheterization-----	4.1	-	2.1	4.6	8.2
Bowel and bladder retraining-----	6.6	-	2.5	6.9	15.3
Blood pressure-----	28.5	3.5	19.2	33.1	43.2
Irrigation-----	3.1	-	1.4	3.9	5.7
Oxygen therapy-----	0.6	-	0.4	0.6	1.0
Hypodermic injection-----	5.7	-	3.1	6.2	10.9
Intravenous injection-----	0.3	-	0.1	0.4	0.5
Intramuscular injection-----	6.0	0.7	3.6	6.5	10.7
Nasal feeding-----	0.2	-	0.2	0.2	0.2
None of above-----	13.5	67.3	20.0	6.5	3.1

NOTE: Because residents may receive more than one service, the columns of percents do not add to 100 percent.

## 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 residents, chronic conditions, employees, and services.

*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.<sup>7</sup>

The Complement Survey is based on an area probability design, using the sample design of the Health Interview Survey.<sup>8</sup> 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 address. Group I was then sorted into three type-of-service strata: nursing care homes, including geriatric hospitals; personal care homes with nursing; 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

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 <sup>1</sup>	Number of homes in the sample			
		Total homes <sup>1</sup>	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 <sup>2</sup> -----	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 <sup>3</sup> -----	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

<sup>1</sup>The universe for the RPS-2 sample consisted of the MFI and the Complement Survey. Included in the RPS-2 sample were four homes from the Complement Survey.

<sup>2</sup>Included geriatric hospitals.

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

numbers of predetermined sample lines for each home (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 I). 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 4.6 percent for 24-hour nursing service.

*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 reduc-

ing 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

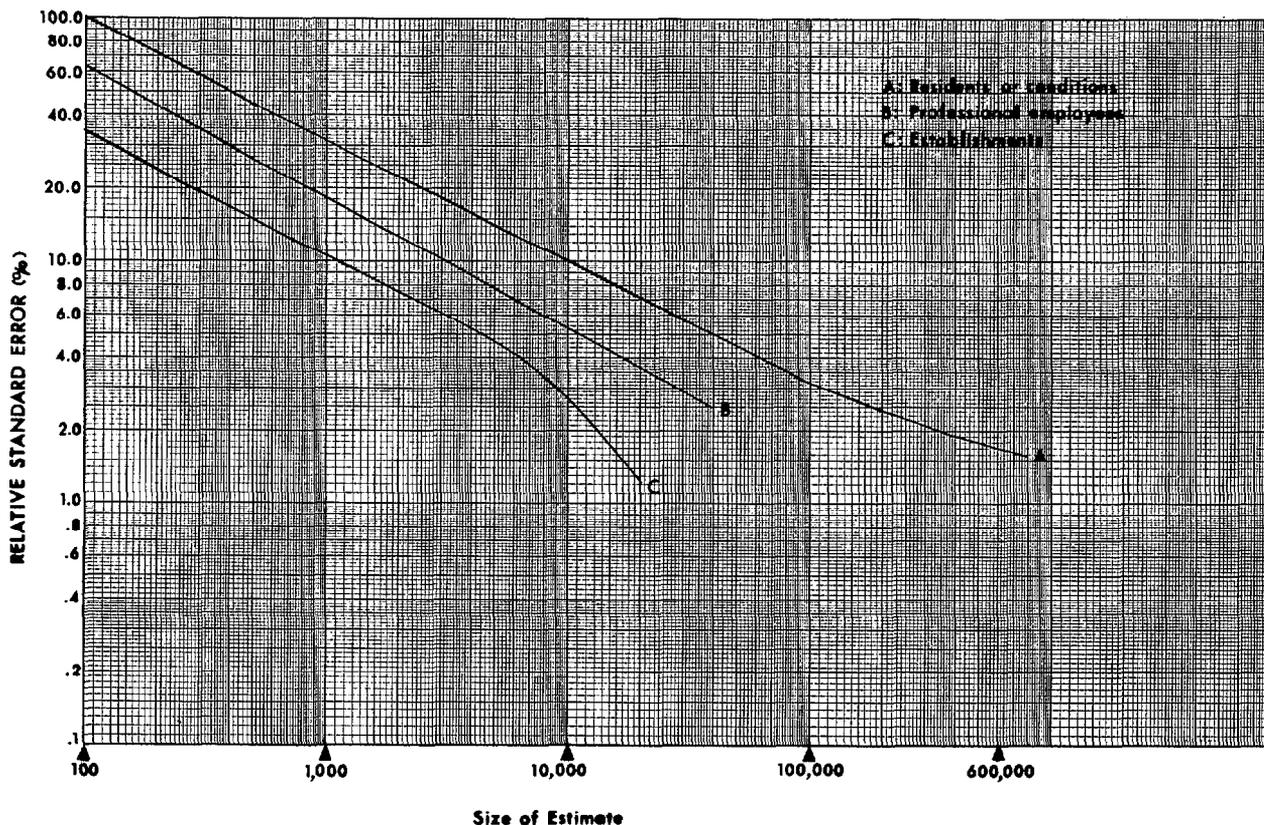
questionnaires were completed within the home; the second is the sampling fraction for residents on which the selection is based.

*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

Figure 1. Approximate relative standard errors of estimated numbers of residents, conditions, employees, or establishments shown in this report.



Example of use of figure 1. 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 percent 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

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 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 three

$$\text{conditions per person is } \sqrt{(.027)^2 + (.046)^2} = .169.$$

4. The standard error is  $.169 \times 3 = .507$  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 193,800 (table 1). The standard error of a 50-percent characteristic whose base is 193,800 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 92,500 ( $47.74 \times 193,800$ ) and 101,300 ( $52.26 \times 193,800$ ). From table 1, 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.

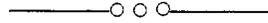
It is possible to investigate whether the observed differences between two estimated medians can be attributed to sampling error alone by obtaining the upper 68-percent confidence limit,  $U_1^1$ , of the smaller median,  $M_1^1$ , and the lower 68-percent confidence limit,  $L_2^1$ , of the larger median,  $M_2^1$ . 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  $M_1^1$  and  $U_1^1$  and  $M_2^1$  and  $L_2^1$  is the

standard error of the difference between  $M_1^i$  and  $M_2^i$ ; that is,

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

For the purpose of this report, any difference between  $M_1^i$  and  $M_2^i$  greater than  $2S_{(M_1^i - M_2^i)}$  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.



## 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-D as a basic list of diagnostic categories used for coding purposes.

*Condition:*

This term is used synonymously 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 wheelchair 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.

*Registered nurse:*

This is defined as a registered professional nurse or graduate nurse.

*Licensed practical nurse:*

This is defined as a licensed practical nurse or licensed vocational nurse.

*Nurse or nurse's aide 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. The level of care is defined by the services performed, not by the type of person who performed the service. Based on these criteria, nursing and personal care services are grouped as follows, each succeeding level being exclusive of the previous levels:

Intensive nursing care

- Catheterization
- Bowel and bladder retraining
- Oxygen therapy
- Intravenous injection
- Nasal feeding

Full bed bath

Less intensive nursing care

- Application of sterile dressings or bandages
- Irrigation
- Hypodermic injection
- Intramuscular injection

Routine nursing care

- Temperature-pulse-respiration
- Enema
- Blood pressure

Personal care

- Help with dressing, shaving, or care of hair
- Help with tub bath or shower
- Help with eating (feeding of resident)
- Rub and massage
- Administration of medications or treatment
- Special diet

### Nursing or personal care not provided

In sections of this report the levels of intensive nursing care and full bed bath are combined and referred to as intensive nursing care. The levels of less intensive nursing care and routine nursing care are combined under "other nursing care."

#### *Type of care received when admitted:*

The three types of care a resident received when admitted to the home were determined by questions 17 and 18 of the resident questionnaire in Appendix III.

Primarily nursing care. If a resident received mainly the nursing care items 7-19 in question 17, he was classified as receiving "primarily nursing care" in question 18.

Primarily personal care. If a resident received mainly the personal care items 1-5 in question 17, he was classified as having "primarily personal care" in question 18.

Room and board only. This refers to a resident who received food and lodging only, with no provision of personal or nursing care.

## 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.<sup>7</sup>

Due to the time 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 in the home during the week prior to the survey, 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 home with nursing* 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 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,<sup>9</sup> 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 HIS were adapted to the coding of chronic diseases and impairments as follows: Impairments were coded in the same general manner as for 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

<i>Condition Group</i>	<i>International Classification of Diseases Code Numbers, 1955 Revision</i>
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 <sup>1</sup>
Mental retardation without mention of senility <sup>1</sup>	
Mental retardation with mention of senile psychosis <sup>1</sup>	
Mental retardation with senility not specified as psy- chotic <sup>1</sup>	
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 movement -----	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 <sup>1</sup>	
Other visual impairments <sup>1</sup>	
Hearing impairments <sup>1</sup>	
Speech impairments due to stroke <sup>1</sup>	
Speech impairments due to other or unspecified causes <sup>1</sup>	
Paralysis, palsy due to stroke <sup>1</sup>	
Paralysis, palsy due to other unspecified causes <sup>1</sup>	
Absence, fingers and/or toes <sup>1</sup>	
Absence, major extremities <sup>1</sup>	
Impairment, limbs, back, trunk <sup>1</sup>	
All other impairments <sup>1</sup>	

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<sup>1</sup>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 the Short Index*, NHS-HIS-1000, 1965.



## APPENDIX III

### RESIDENT QUESTIONNAIRE AND OTHER SURVEY FORMS

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

Dear Administrator:

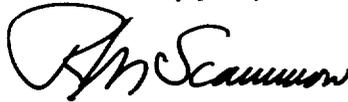
The Bureau of the Census, acting as the collecting agent for the United States Public Health Service, is conducting a nationwide survey of nursing homes, homes for the aged, and other establishments providing nursing, personal, and domiciliary care to the aged and infirm. The purpose of this survey is 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

**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 HR5-3a  
(4-1-64)

(Verify name and address and make any necessary corrections)

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

**U.S. NATIONAL HEALTH SURVEY  
ESTABLISHMENT QUESTIONNAIRE**

<p>4. Is the person who supervises <b>NURSING CARE</b> a registered professional nurse, a licensed practical nurse, or someone else?</p>	<p>1 <input type="checkbox"/> Registered professional nurse</p>	<p>2 <input type="checkbox"/> Licensed practical nurse</p>	<p>3 <input type="checkbox"/> Someone else</p>
<p>5. Does she work full-time or part-time? By full-time we mean 40 or more hours a week.</p>	<p>1 <input type="checkbox"/> Full-time</p>	<p>2 <input type="checkbox"/> Part-time</p>	
<p>6. Is there a nurse or nurse's aide <b>ON DUTY</b> 24 hours a day?</p>	<p>1 <input type="checkbox"/> Yes</p>	<p>2 <input type="checkbox"/> No</p>	

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 <input type="checkbox"/> Male (Ask question 3)      2 <input type="checkbox"/> Female (Go to question 4)	
3a. Has he served in the Armed Forces of the United States?		1 <input type="checkbox"/> Yes (Ask Q. 3b)    2 <input type="checkbox"/> No (Go to Q. 4)    3 <input type="checkbox"/> Unknown	
b. Did he serve in World War I?		1 <input type="checkbox"/> Yes      2 <input type="checkbox"/> No      3 <input type="checkbox"/> Unknown	
4. Is this resident (patient) married, widowed, divorced, separated, or never married?		1 <input type="checkbox"/> Married      2 <input type="checkbox"/> Widowed      3 <input type="checkbox"/> Divorced      4 <input type="checkbox"/> Separated      5 <input type="checkbox"/> Never married	
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 <input type="checkbox"/> Spouse only      2 <input type="checkbox"/> Children only      3 <input type="checkbox"/> Spouse and children      4 <input type="checkbox"/> Relatives other than spouse or children      5 <input type="checkbox"/> Lived in apartment or own home—alone or with unrelated persons      6 <input type="checkbox"/> In boarding home      7 <input type="checkbox"/> In another nursing home or related facility      8 <input type="checkbox"/> In mental hospital      9 <input type="checkbox"/> In a long-term specialty hospital (except mental)      10 <input type="checkbox"/> In a general or short-stay hospital      11 <input type="checkbox"/> Other place (Specify)	
7. How often do friends or relatives visit him? (Check the FIRST box that applies)		1 <input type="checkbox"/> At least once a week      2 <input type="checkbox"/> Less often than once a week but at least once a month      3 <input type="checkbox"/> Less than once a month      4 <input type="checkbox"/> Never	
8a. Does he stay in bed all or most of the day?		1 <input type="checkbox"/> Yes (Go to question 9)      2 <input type="checkbox"/> No (Ask question 8b)	
b. Does he stay in his own room all or most of the day?		1 <input type="checkbox"/> Yes      2 <input type="checkbox"/> 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 <input type="checkbox"/> Yes      2 <input type="checkbox"/> No	
9. Which of these special aids does this resident (patient) use? (Show card C) (Check all that apply)		1 <input type="checkbox"/> Hearing aid      2 <input type="checkbox"/> Walker      3 <input type="checkbox"/> Crutches      4 <input type="checkbox"/> Braces      5 <input type="checkbox"/> Wheel chair      6 <input type="checkbox"/> Artificial limb(s)      7 <input type="checkbox"/> Eye glasses      OR      8 <input type="checkbox"/> 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
		<input type="checkbox"/> Never saw doctor while here	
11a. During his stay here, has he seen a dentist?		1 <input type="checkbox"/> Yes (Ask question 11b)      2 <input type="checkbox"/> 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 <input type="checkbox"/> Yes (Ask question 12b)      2 <input type="checkbox"/> No (Go to question 13)	
b. Does he wear full upper and lower dentures?		3 <input type="checkbox"/> Yes      4 <input type="checkbox"/> 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 <input type="checkbox"/> Yes      2 <input type="checkbox"/> No	
14. Does he have any of these conditions? (Show card E. Record in Table 1 each condition which the patient has)		1 <input type="checkbox"/> Yes      2 <input type="checkbox"/> No	
15a. Does he have any other CHRONIC conditions listed in his record that you have not told me about? If "Yes," ask:		1 <input type="checkbox"/> Yes      2 <input type="checkbox"/> No	
b. What are they? (Record in Table 1 each chronic condition mentioned)			



## 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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