U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

**Public Health Service** 

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION



# VITAL STATISTICS REPORT

1968 Nursing Home Survey-Provisional Data

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NATIONAL CENTER FOR HEALTH STATISTICS

## Comparison of Selected Characteristics of Institutions for the Aged: United States, 1963 and 1968

tics conducted a sample survey of institutions for the aged. The survey collected data on type of service. type of ownership, bed size, residents, employees, admissions, discharges, and charges for care. Institutions for the aged are resident facilities with three beds or more that provide nursing or personal care to the aged and chronically ill. Nursing homes, rest

In 1963 the Division of Health Resources Statis- homes, homes for the aged, and convalescent homes are facilities classified as institutions for the aged. In 1968 similar data were collected in order to measure the changes that occurred in this 5-year period.

> The 1968 survey is a census of all institutions for the aged, and the 1963 survey is a probability sample of these institutions. However, the 1968 survey

Table 1. Number and percent distributions of institutions for the aged and residents of these institutions for 1963 and 1968 by type of service and type of ownership: United States

[Jue to rounding to nearest percent, subtotals may not add to 100]

	Instit	utions	Residents			
Primary type of service and type of ownership	1968	1963	1968	1963		
·		Num	ber			
Total	18,185	16,370	743,293	510,179		
		Percent di	stribution			
All types	100	100	100	100		
Nursing care	57	48	72	56		
Proprietary	47 7 3	42 4 2	54 12 7	40 9 8		
Personal care with nursing	20	30	20	34		
Proprietary	13 6 2	22 6 2	7 11 2	15 13 6		
Personal care	23	22	8	9		
ProprietaryChurch and other nonprofitGovernment	17 2 3	18 3 1	5 2 1	7 2 1		

is similar to the 1963 survey not only in the data collected and the wording of questions but also in the use of the Master Facility Inventory and its classification scheme to define the universe of institutions for the aged. (For further discussion of the universe for each survey, see Source of Data.)

Both the number of institutions and the number of residents increased from 1963 to 1968. The number of institutions increased by 11 percent, and the number of residents increased by 46 percent (table 1).

In this 5-year period, the percent of institutions providing nursing care (the highest level of nursing service) increased, but the percent of institutions providing personal care with nursing (an intermediate level of nursing service) decreased. This increase in the percent of nursing care institutions may be due to institutions upgrading their level of service to qualify as extended care facilities under the Medicare Act or as skilled nursing homes under the Medicaid Act. Changes in the percent distribution of residents are

Table 2. Average number of beds in institutions for the aged for 1963 and 1968, by type of service and type of ownership: United States

	Type of ownership									
Primary type of service	All types	Proprietary	Nonprofit	Government						
	Ave	rage number o	f beds, 196	8						
All types	45	38	75	60						
Nursing care	56 48 15	50 26 13	78 89 30	106 64 16						
	Ave	rage number o	f beds, 196	3						
All types	35	26	65	96						
Nursing care	40 39 16	32 24 14	78 75 27	125 92 37						

Table 3. Number and percent distributions of residents, admissions, and discharges in institutions for the aged for 1963 and 1968 by type of service: United States

[Due to round	ing to nearest	percent, subto	tals may not ad	d to 100]						
Primary type of service	Resid	ents	Admis	sions	Discharges (alive and dead)					
	1968	1963	1968	1963	1968	1963				
		Numl	Number							
Tota1	743,293	510,179	588,246	402,896	661,089	378,326				
,	Percent distribution									
All types	100	100	100	100	100	100				
Nursing care	72 20 8	56 34 9	85 11 4	66 23 11	84 12 . 4	67 23 10				

associated with the increase in the percent of institutions providing nursing care. In contrast to changes in the percent distributions of institutions and residents by type of service, the percent distributions by type of ownership changed very little from 1963 to 1968.

Along with an increase in the *number* of institutions for the aged, there was an increase in the *size* of these institutions. Institutions for the aged were larger by an average of 10 beds in 1968 than they were in 1963 (table 2). By type of service, nursing care institutions had the largest increase in average number of beds—they were 16 beds larger in 1968 than in 1963. Running counter to the general increase in average number of beds were the Government-owned institutions—they were 36 beds smaller in 1968 than in 1963. Since they comprised 8 percent of all institutions for the aged, their decrease in bed size was more than offset by the smaller bed size increases of the proprietary and nonprofit institutions which comprised 92 percent of all institutions (table 1).

From 1963 to 1968 both the number of residents and the number of admissions increased by 46 percent, and the number of discharges (alive and dead) increased by 75 percent (table 3). The greater increase in the number of discharges as compared with the number of admissions may be related to the current emphasis on institutions for the aged as

extended care facilities. These institutions provide restorative care to the patient, often transferred from a hospital, who is discharged when he recovers from his operation or illness. The greater increase in discharges may also be related to the 100 days maximum stay in an extended care facility which the hospital insurance section of the medicare program provides for qualified patients transferred from hospitals.

The increase in the percent of institutions providing nursing care (table 1) is associated with the increase in the percent of residents, admissions, and discharges in institutions providing nursing care (table 3). From 1963 to 1968 the number of residents increased by 46 percent, and the number of employees increased by 103 percent. In 1963 there were 49 employees per 100 residents, and in 1968 there were 68 employees per 100 residents—an increase of 19 employees per 100 residents (table 4). Because the number of employees is one measure of care available to the resident, this increase over the 5-year period probably represents an increase in the amount of care received by the residents.

By type of service, institutions providing nursing care had the largest *number* of employees per 100 residents and the largest *increase* in the number of employees per 100 residents—an increase of 18 employees per 100 residents.

Table 4. Number of employees per 100 residents in institutions for the aged for 1963 and 1968, by type of service and region: United States

		1968		1963					
Primary type of service and region	Residents	Total employees	Total employees per 100 residents	Residents	Total employees	Total employees per 100 residents			
TYPE OF SERVICE						·····			
All types	743,293	505,031	68	510,179	249,103	49			
Nursing care Personal care with	535,743	398,420	74	287,893	161,765	56			
nursing	150,291 57,259	83,280 23,331	55 41	174,200 48,086	70,929 16,409	41 34			
REGION									
All regions	743,293	505,031	68	510,179	249,103	49			
Northeast	179,249 264,050 173,089 126,905	138,881 170,735 112,044 83,371	78 65 65 66	149,890 188,426 98,355 73,508	80,240 86,298 46,416 36,149	54 46 47 49			

The number of employees per 100 residents in 1963 and in 1968 was largest for the Northeast Region. For the North Central, South, and West Regions the number of employees per 100 residents differed by not more than three.

The most frequent charge per resident per month (the mode) increased on the average by 48 percent—from \$170 in 1963 to \$252 in 1968 (table 5). By type of service, the largest increase (from \$117 to \$181) was 55 percent for institutions providing personal care. By type of ownership, the largest increase (from \$128 to \$248) was 94 percent for nonprofit institutions.

The relationship between type of service and average most frequent charge remained the same during the 5-year period. As the level of service increased, the charges increased. Charges were highest in institutions providing nursing care because they usually maintain more equipment and a larger nursing staff.

The relationship between type of ownership and average most frequent charge also remained the same during the 5-year period. Proprietary institutions charged the highest amounts; nonprofit institutions, the next highest; and Government-owned insti-

tutions, the lowest. Charges were often less in nonprofit and Government-owned institutions because part of the cost is absorbed by the group operating the institution and is not passed on to the resident.

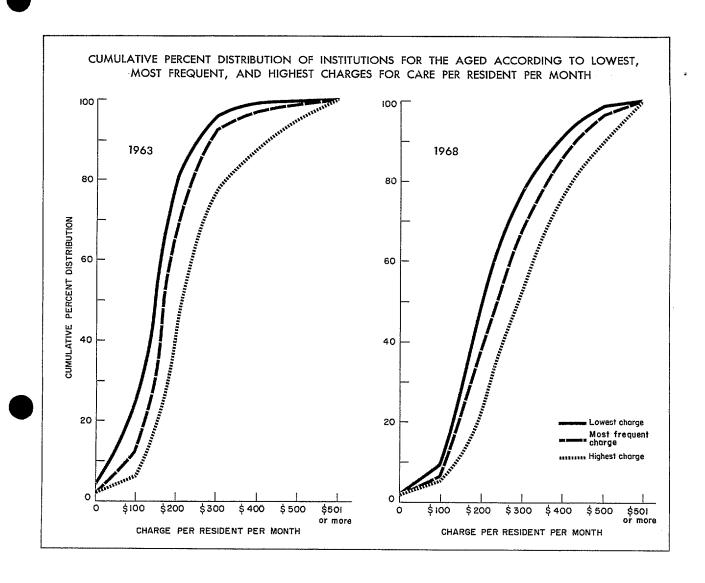
A comparison of the cumulative percent distributions of the lowest, most frequent, and highest monthly charges for 1963 and 1968 identifies the overall changes in range and interrelationship of charges. Although the percent of institutions with no charge for care remained at 2 percent for 1963 and 1968, the lowest, most frequent, and highest charges increased during this period.

In 1963, 50 percent of the institutions for the aged had no charge higher than \$213 per month. In 1968, 50 percent of the institutions had no charge higher than \$291—an increase of \$78. There were comparable increases in the lowest and most frequent charges during the 5-year period. (See chart.)

The interrelationship of the lowest, most frequent, and highest charges also changed from 1963 to 1968. In 1963 the most frequent charge was closer to the lowest charge than to the highest charge. In 1968, however, the most frequent charge moved away from the lowest charge until it was almost equidistant to the lowest and the highest charges.

Table 5. Average most frequent charge per resident per month in institutions for the aged for 1963 and 1968, by type of service and type of ownership: United States

Primary type of service and type of ownership	cha in do	e most uent rge llars charge)	Primary type of service and type of ownership	Average most frequent charge in dollars (modal charge)		
	1968	1963		1968	1963	
All types	\$252	\$170	Personal care with nursing	\$210	\$147	
ProprietaryChurch and other nonprofitGovernment	258 248 207	179 128 121	Proprietary	207 225 184	159 113 104	
Nursing care	\$295	\$206	Personal care	\$181	\$117	
Proprietary	298 286 259	211 176 165	Proprietary	183 185 170	124 86 66	



### **Technical Notes**

#### SOURCE OF DATA

Both the 1963 and the 1968 surveys used the Master Facility Inventory (MFI) and its classification scheme to define the universe of institutions for the aged. Every 2 years, a survey of the MFI is conducted among all institutions for the aged to collect and verify information on the name, address, and certain characteristics of those institutions. Newly established institutions are added to the list on a continuing basis,

and out-of-business institutions are deleted through the biennial surveys.

The 1962 MFI of institutions for the aged was the universe for the 1963 sample survey and the 1967 MFI for the 1968 census. The classification of institutions for each survey was based on type of service and type of ownership information collected in the MFI Survey of the previous year. (See Definitions of Terms for this classification scheme.) During this 1-year interval, the type of ownership and type of

service probably changed for some of the institutions. Because of this short period, however, any changes which may have occurred should have only negligible effect on the distribution of establishments by type of either ownership or service.

The institutions in scope for the 1963 sample survey were those providing nursing care, personal care with nursing, personal care, and domiciliary care. Since domiciliary care institutions were few in number, they were included in the personal care classification. Domiciliary institutions were not in scope for the 1968 census. Because these institutions comprised only 1 percent of all institutions in 1967, their exclusion from the 1968 census has little effect on the data and the comparisons presented here.

#### SAMPLE

Because the figures for the 1963 survey are based on a sample of institutions for the aged rather than on all such institutions, they are subject to sampling variability. One measure of sampling variability is the standard error.

Shown in table I for the 1963 survey are the standard errors appropriate for the estimates of the percent of institutions and residents. Thirty percent of all institutions provided personal care withnursing (table 1). The standard error of 30 percent is 0.9 percentage points. Ten percent of all discharges were from institutions providing personal care (table 3). The standard error of 10 percent is 0.6 percentage points.

Table II shows the standard errors appropriate for the average charges for care. The average most frequent charge for institutions providing nursing care in 1963 was \$206 per month (table 5). There were 7.858 institutions providing nursing care in 1963

Table I. Approximate standard errors, expressed in percentage points, of estimates based on number of institutions and number of residents or beds for 1963

	Base estimated	of percentage		
Estimated percentage	Number of insti- tutions	Number of residents or beds		
5 or 95	0.4 0.6 0.8 0.9	0.4 0.6 0.7 0.8		

(calculated from table 1). The standard error of \$200 average charge based on 5,000 institutions is \$9; based on 10,000 institutions it is \$5. Therefore, the standard error of \$206 based on 7,858 institutions is between \$5 and \$9. By interpolation, the desired standard error is approximately \$7.

Because the figures for the 1968 census are based on *all* institutions for the aged, they are *not* subject to sampling variability. As in any survey, figures for both 1963 and 1968 are subject to errors due to reporting, processing, and nonresponse.

#### DEFINITIONS OF TERMS

Type of service.—Institutions are classified by type of service (nursing care, personal care with nursing, and personal care) according to the following four criteria:

1. The number of persons receiving nursing care during the "past 7 days." Nursing care is defined as the provision of one or more of the following services:

Taking of temperature-pulse-respiration or blood pressure
Full bed bath
Application of dressings or bandages
Catheterization
Intravenous injection
Intramuscular injection
Nasal feeding
Irrigation
Bowel and bladder retraining
Hypodermic injection
Oxygen therapy
Enema

Table II. Approximate standard errors, expressed in dollars, of average monthly charges for care for 1963

Number of	Average monthly charge									
institutions	\$100	\$150	\$200	\$250	\$300					
500 1,000 2,000 3,000 5,000 5,000	18 13 9 7 6 5	24 17 12 9 8 7	29 20 14 11 10	35 24 17 13 11 10	40 28 19 16 13					

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- 2. The presence or absence of nurses on the staff.
- 3. Whether or not the institution provides administration of medications or supervision over self-administered medications.
- 4. The number of activities for daily living with which the facility provides assistance. These activities for daily living include rub and massage; help with tub bath or shower; help with dressing, correspondence, or shopping; help with walking or getting about; and help with feeding.

Table III shows in detail the scheme for classifying facilities according to these criteria.

Type of ownership.—Institutions are also classified by type of ownership:

*Proprietary institution.*—An institution operated under private commercial ownership.

Nonprofit institution.—An institution operated under voluntary or nonprofit auspices, including both church-related and non-church-related institutions.

Government-owned institution.—An institution operated under Federal, State, or local government auspices.

Table III. Criteria for classification of establishments

Classification variables	Classification criteria													
Percent of total residents who received nursing care during the week prior to day of survey	50 percent or more Some but less than 50 percent					None								
Number of registered or licensed practical nurses	1+ None 1+ None			one	•	0+		)+						
Does the facility provide:  (a) Administration of medicine or treatments according to doctor's orders or  (b) Supervision over self-administered medicine?	ļ	Yes	-	No		•••	Yes No		Yes		No			
Does the facility offer help with three activities or more for daily living?		•••	Yes	1	Йо			Yes	1	No		Yes	1	No
Does the facility offer help with one or two activities for daily living?				Yes	No		•••		Yes	No		,	Yes	No
Does the facility offer room and/or board as its only service?				,.,	Yes					Yes				Yes
Classification	Nc	Pen	Pen	Pc	D	Pen	Pen	Pcn	Pc	D	Pc	Pc	D	В

EXPLANATION OF S	SYMBOLS USED	IN TABLES	
Data not available			
Category not applicable	***********		• • •
Quantity zero			-
Quantity more than 0 but less	than 0.05		0.0
Figure does not meet standard	ls of reliability	or precision	*

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