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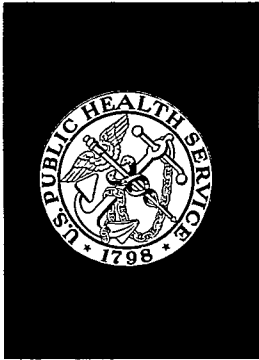
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# Hospitalization in the Last Year of Life

United States - 1961

U. S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
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**VITAL and HEALTH STATISTICS**  
DATA FROM THE NATIONAL VITAL STATISTICS SYSTEM

# Hospitalization in the Last Year of Life

## United States - 1961

Statistics on place of death and on care received by decedents during the year preceding death in short-stay hospitals or resident institutions, and differences in the proportions receiving care associated with age, sex, color, residence, and cause of death. Based on data from a sample survey of hospitals and institutions providing care to persons dying in 1961.

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*IN THIS REPORT results of a survey of hospitals and resident institutions concerning inpatient care provided during the last 12 months of life to a representative sample of persons dying in 1961 are presented. The report deals with statistics on decedents showing whether or not hospital or institutional care was received in the last year of life in short-stay hospitals or in resident institutions and the differences in the likelihood of care associated with age, sex, color, residence, and cause of death. The survey data show that there are large differences in the likelihood of care in hospitals and institutions among decedents classified by the 10 leading causes of death, varying from more than 9 in 10 persons who died of certain diseases of early infancy, congenital malformations, and malignant neoplasms receiving care to less than half of those who died from accidents. Females as a group more often received care in the last year of life than did males and white persons more often than nonwhite. Infants were more likely to have been hospitalized than persons of any other age. Apart from infants, the percent of persons with hospital or institutional care is lowest for the young and increases with age. The age pattern for both sexes combined applies also to males alone. Females of the young- to middle-adult years, however, display a peak in the proportion receiving care followed by a decline with age, so that the proportions of males and females receiving hospital and institutional care converge beyond age 75. Decedents from metropolitan areas were somewhat more likely to have received care in hospitals and institutions than those who resided elsewhere. Residents of the South, especially females, were less likely to have been hospitalized or institutionalized in the terminal year of life than those who had resided in other regions of the United States.*

#### 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-----	*

# HOSPITALIZATION IN THE LAST YEAR OF LIFE

Gordon F. Sutton, *Division of Health Records Statistics*

## INTRODUCTION

This is the first report prepared in the Division of Health Records Statistics on the use of hospitals and resident institutions by recently deceased persons. Data are based upon information obtained in the National Mortality Survey from hospitals and institutions which provided care to a national probability sample of persons who died in 1961 and upon information found on death certificates for these persons.

The data collected in the National Mortality Survey may be viewed as extending for statistical purposes the range of items which are normally included on the certificate of death. This extension permits the preparation of estimates of deaths and of recently deceased persons by characteristics not previously available in national statistics. As a result, answers to many social and economic questions about conditions surrounding death and about differentials in mortality in the United States may be made available.

This report is concerned with persons who died in 1961 as to whether or not they had hospital or institutional care in the last year of life and the relationship between hospitalization and selected characteristics of decedents. The terms hospitalization and hospitalization experience in the last year of life are used in this report to refer to care received by deceased persons in the 12-month period before death in short-stay hospitals (places providing care which is usually of less than 30 days' duration) and in resident institutions

(chronic disease hospitals, nursing homes, and other places providing nursing or personal care).

## Background of National Mortality Survey

During the period 1850 to 1900, mortality statistics published by the Federal Government were derived principally from reports collected in the decennial censuses. Since 1900, however, when the collection of mortality statistics on an annual basis was started for selected cities and States included in the death-registration area, the death certificate has been the only source of data for national mortality statistics. During the early decades of this century, a major goal of the vital statistics system was to extend the death-registration area to cover the entire United States. This was achieved in 1933, and since that year national mortality statistics for the entire country have been derived annually from statistical data reported on the death records. Since 1933 there have been continuing efforts to improve national mortality statistics by raising the level of completeness of registration of deaths and by improving the accuracy of data reported on death records.

It has become increasingly apparent in recent years that the statistics being derived from the information reported on the death record were not meeting the expanding needs for mortality data in public health, medical research, epidemiology, demography, and other related fields. The periodic revisions of the standard death record

since 1900 at intervals of about 10 years have produced a small net change in its content of statistical items. On the other hand, there have been phenomenal changes in American society during the 65-year period, particularly in the areas of health and medicine, which have greatly expanded and altered the needs for mortality statistics.

Yet, in seeking a solution to this problem, it seemed very unlikely and even undesirable that statistics derived from the death record would or should be able to cope with expanding needs for national mortality data. The registrars of vital events in State offices of vital statistics are generally opposed to enlarging the content of the death record for the purpose of expanding mortality statistics. From their viewpoint, the death record serves as a legal as well as a statistical document which has many nonstatistical uses. Furthermore they must consider the burden of the funeral directors and physicians who have to complete the forms. Vital statisticians are also not in sympathy with a plan to collect detailed statistical information annually for 1½ to 2 million deaths since the level of reliability usually needed in the estimates can be achieved by collecting detailed supplementary data for relatively small samples of deaths.

Beginning about 1956, attention was focused on the possibility of developing a survey methodology for collecting detailed information for relatively small samples of deaths. Research studies were undertaken to test and develop a particular methodology for deriving mortality statistics by means of conducting surveys linked to death records. This work culminated in the establishment in 1961 of the National Mortality Survey on a continuing basis.

### Selected Findings

Of the 1.7 million persons who died in the United States in 1961, about 72 percent had one or more episodes of hospital or institutional care in the last year of life. Most frequently, this hospital or institutional experience took place in short-stay hospitals—places where medical services are provided to patients who are generally expected to stay less than 30 days. While 63 per-

cent of those who died in 1961 had some care in short-stay hospitals, just over 14 percent had some care in resident institutions providing medical or personal care. Included in these figures are the 5 percent of all decedents who had care in both short-stay and resident places.

Although only 28 percent of those who died in 1961 had no hospital or institutional care in the year before death, 39 percent were not in medical facilities at the time of death. Thus, 11 percent of all decedents were hospitalized some time in the last year of life yet did not die in a hospital or an institution. Of deaths occurring in hospitals and institutions, 823,000 were in short-stay hospitals and 214,000 in resident institutions.

Proportionately more females than males received care in hospitals or institutions in their last year of life (76 percent as compared with 70 percent). Most of this sex difference is accounted for by the more frequent use of resident institutions by females.

Twelve percent fewer nonwhite decedents were reported as having hospital or institutional care than white. Care was less frequent for nonwhite persons than for white in both short-stay hospitals and resident institutions.

Among regions, the South, with 67 percent of its decedents in 1961 having hospital or institutional care in the last year of life, departed somewhat from the level found in the other regions (Northeast, North Central, and West), where 74 to 75 percent of their decedents had such care. Metropolitan status of residence, that is, whether the decedent had last resided in a county containing metropolitan population or not, had little effect upon hospitalization in the 12-month period prior to death. About 73 percent of the 1.1 million decedents from metropolitan areas had been hospitalized compared with 70 percent of the 0.6 million decedents from nonmetropolitan areas.

When classified according to the 10 leading causes of death in 1961, the decedents most likely to have had hospitalization in the last year of life were infants who died of certain diseases of early infancy and of congenital malformations and elderly persons who died of malignant neoplasms. More than 90 percent of the decedents in each of these three cause groups had hospitalization experience. At the other extreme, only 48 percent



of those who died from accidental causes had hospital or institutional care in the last year of life.

### Sources and Limitations of Data

Statistics presented in this report are based upon information obtained in a mail survey of hospitals and institutions which provided care to decedents identified on death certificates selected in a national probability sample of persons who died in 1961. The sample of 5,154 decedents was drawn by the systematic selection of 1 in 330 death records from the files maintained by the Division of Vital Statistics, National Center for Health Statistics. These statistics relate to persons who died in the United States during the 1961 calendar year and characterize these persons as to whether or not they had hospitalization during the last year of life.

The principal sources of information were hospitals and institutions which provided medical and personal care for the decedents during the 12-month period preceding death and the death certificate. In addition, the death record informant, usually a close relative of the decedent whose name and address appeared on the death certificate, was asked to provide information which would be helpful in locating hospitals and institutions which provided care.

Facsimiles of the hospital and institution and informant questionnaires and of the death certificate appear in Appendix III. A description of the procedures of the National Mortality Survey may be found in Appendix I, along with a description of the estimation procedures. Definitions of terms used in this report are stated in Appendix II.

The data in this report are based on a sample and are therefore subject to sampling error. Tables of approximate sampling error and instructions for their use are presented in Appendix I. Other sources of error such as those associated with nonresponse, with possible misunderstanding of questions in the survey, and with undetected problems in the processing and compiling of the statistics affect the quality of the data presented in this report and may create bias in the statistics. Nonsampling errors and some measures relating to bias in the survey are also discussed in Appendix I.

## DEATHS OCCURRING IN HOSPITALS AND INSTITUTIONS, 1937-61

National statistics on deaths occurring in hospitals and institutions have been published a number of times. In 1937 when annual data were first available on this subject, 37 percent of all deaths were reported as occurring in hospitals and institutions. In a series of annual statistics on this subject covering the years following 1937, there was a gradual but steady increase in the percent of deaths occurring in hospitals and institutions until 1949, when 50 percent of all deaths were recorded as occurring in such places.<sup>1</sup>

After 1949 data are not available again except for 1958. At that time 61 percent of all deaths were reported as occurring in hospitals and institutions.<sup>2</sup> Thus over a 21-year period, sizable increases in both the number and the relative frequency of deaths occurring in hospitals and institutions have been reported.

Data collected in the National Mortality Survey describe once more the frequency with which death occurred in hospitals and institutions in 1961 (tables 1 and 2). Data are also available from the survey which characterize the population that died in 1961 as to total hospitalization experience in the last year of life. In both 1961 and 1958, 61 percent of all deaths occurred in hospitals and institutions,<sup>3</sup> while 72 percent of all decedents in the 1961 survey had hospital or institutional care at some time during the last year of life (table A). Hence, the inquiry into hospitalization of decedents in the last year of life shows that 11 percent of all decedents had hospital or institutional care in the last year of life but had not died in a hospital or an institution.

### Care in the Last Year of Life by Cause of Death

Cause of death is related to both the likelihood of a death occurring in a hospital or an institution and to the likelihood of a decedent having hospitalization experience during the last year of life. The estimated number of decedents in 1961 with hospitalization experience in the last year of life was 19 percent greater than the estimated number of deaths occurring in hospitals

Table A. Percent of decedents with deaths occurring in hospitals or institutions and with hospitalization experience in last year of life, by sex and color: United States, 1958 and 1961

Sex and color	1958 <sup>1</sup>	1961	
	Deaths occurring in hospital or institution	Deaths occurring in hospital or institution	With hospitalization experience in last year of life
	Percent		
Total-----	60.9	60.9	72.2
Male-----	59.9	57.9	69.6
Female-----	62.2	64.9	75.6
White-----	61.9	62.0	73.2
Nonwhite-----	53.2	52.6	64.3

<sup>1</sup>Data selected from National Office of Vital Statistics, Vital Statistics of the United States, 1958, Volume II, table 67, Public Health Service, Washington, U.S. Government Printing Office, 1960.

Table B. Number of decedents and percent with deaths occurring in hospitals or institutions and with hospitalization experience during the last year of life, by cause of death: United States, 1961

Cause of death	Number of decedents in thousands	Deaths occurring in hospital or institution	With hospitalization experience in last year of life
		Percent	
All deaths-----	1,702	60.9	72.2
Diseases of heart-----	663	49.2	61.2
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	270	73.1	93.2
Vascular lesions affecting central nervous system-----	192	67.5	76.0
Accidents-----	95	40.9	48.4
Certain diseases of early infancy-----	68	95.4	95.4
Influenza and pneumonia, except pneumonia of newborn-----	55	66.7	73.4
General arteriosclerosis-----	34	69.6	77.0
Diabetes mellitus-----	29	71.7	78.4
Congenital malformations-----	21	90.3	95.0
Cirrhosis of liver-----	20	87.0	88.7
All other causes-----	255	63.7	73.6

and institutions. The relationship between the two kinds of statistics varies widely depending upon the cause of death (table B). For persons who died of certain diseases of early infancy (98 percent of which were represented by neonatal death, i.e., occurring in the first 28 days of life), the number dying in a hospital and the number having hospitalization experience were about the same. Of those who died of cirrhosis of the liver, the estimated number of persons having hospitalization experience was only 2 percent greater than the estimated number dying in hospitals or institutions. The comparable figure for deaths attributable to vascular lesions was 13 percent.

In contrast, the estimated number of persons who died of malignant neoplasms and who had hospitalization experience in the last year of life was about 27 percent larger than the estimate of those who died in hospitals or institutions and about 24 percent larger for persons who died of diseases of heart.

#### **Type of Service and Place of Death**

Care of decedents in hospitals and institutions can be viewed according to the kind of facility in which it was received: (a) care received in short-stay hospitals and (b) care received in resident institutions. Of the approximately 1 million persons who died in hospitals and institutions in 1961, most had care only in short-stay hospitals (table C and tables 3 and 4). Of those who died in short-stay hospitals, a very small proportion had received additional care in resident institutions in the last year of life; whereas among the group who died in resident institutions, nearly a third had additional care in short-stay hospitals.

About 665,000 persons, or about 39 percent of all decedents, died outside of hospitals in 1961 (tables 5 and 6). Although they were not in hospitals or institutions at the time of death, 29 percent of these persons had some hospitalization experience in the last year of life. And of this group who had hospitalization experience but who died outside of hospitals and institutions, more than 9 out of 10 had experience only in short-stay hospitals.

As is apparent from the above, use of the death certificate in attempting to estimate hospital or institutional care received by deceased persons in the year prior to death is deficient in two respects. First, more than one-fourth of the 665,000 deaths that occurred outside hospitals represent decedents who had hospital care in the last year of life. Second, 70,000 persons who died in resident institutions and 19,000 persons who died in short-stay hospitals had additional care in a different kind of facility which could not be detected on the death record.

## **HOSPITALIZATION EXPERIENCE IN THE LAST YEAR OF LIFE**

Of the 1,702,000 persons who died in the United States in 1961, 72 percent had at least some care in hospitals or institutions in the 12 months preceding deaths (tables 7 and 8). When these hospitals and institutions are classified by kind of facility, 58 percent of all decedents had received care only in short-stay hospitals, 9 percent only in resident institutions, and the remaining 5 percent had received some care in both short-stay hospitals and resident institutions.

#### **Sex, Age, and Color**

A somewhat larger proportion of females than of males had hospitalization experience in the last year of life. Of the 735,000 females who died in 1961, 76 percent had been hospitalized as compared with only 70 percent of the 968,000 male decedents. A large part of this sex difference is accounted for by the larger proportion of females who received care in resident institutions. The proportions of males and females with care in short-stay hospitals are about the same.

Infants who died in the first year of life received hospital care more frequently than persons of any other age. In contrast, relatively few persons who died at ages 1-24 had hospitalization experience in the year prior to death. After age 24, however, the likelihood of hospitalization increased with advancing age, attaining a maximum

Table C. Number and percent distribution of decedents with and without hospitalization experience in the last year of life, by place of death and kind of facility which provided care: United States, 1961

Hospitalization experience	All decedents	Place of death			
		In a hospital or institution			Outside hospitals and institutions
		Total	Short-stay hospital	Resident institution	
Number of decedents in thousands					
Total-----	1,702	1,037	823	214	665
With hospital or institutional care-----	1,229	1,037	823	214	192
In short-stay hospitals----	1,076	893	823	70	183
Without additional care in resident institutions-	984	804	804	...	180
With additional care in resident institutions----	92	89	19	70	3
In resident institutions only-----	153	144	...	144	9
Without hospital or institutional care-----	474	...	...	...	474
Percent distribution					
Total-----	100.0	100.0	100.0	100.0	100.0
With hospital or institutional care-----	72.2	100.0	100.0	100.0	28.8
In short-stay hospitals----	63.2	86.1	100.0	32.8	27.5
Without additional care in resident institutions-	57.8	77.6	97.7	...	27.0
With additional care in resident institutions----	5.4	8.6	2.3	32.8	0.5
In resident institutions only-----	9.0	13.9	...	67.2	1.3
Without hospital or institutional care-----	27.8	...	...	...	71.2

at ages 65-74 and falling off somewhat among those 75 years and over.

The age pattern in the proportion of male decedents who had hospitalization was similar to that observed for both sexes combined, but it ap-

peared more pronounced. Female decedents, on the other hand, had a different pattern of hospital and institutional experience. First, except for infants and for those persons 75 years and over, more female decedents than male had episodes in

hospitals or institutions in the last year of life. Second, there was a gradual decline with age in the percent of female decedents with hospitalization experience from a peak in the age group 25-44. Thus, the percent of women having hospitalization experience decreased with age after the young- to middle-adult years, while the percent of males with such experience increased. Beyond age 75, the sex differences are negligible or are reversed. Among both males and females of all ages, most of the care received by decedents with hospitalization experience was in short-stay hospitals; care in resident institutions became relatively important only for the older group of decedents, those 65 years and over.

Although white females were more frequently hospitalized during the year before death than their male counterparts, the apparent sex dif-

ference for nonwhite persons could be accounted for by sampling variation (tables 9 and 10). Furthermore, color differences appeared to outweigh those by sex as indicated by evidence that proportionately fewer nonwhite females had hospitalization experience than white males (fig. 1). About 77 percent of white female decedents had received hospital or institutional care as compared with only 66 percent of the nonwhite, and 71 percent of white males had hospital experience compared with 63 percent of the nonwhite male decedents.

The pattern of convergence in the proportions of males and females having hospitalization experience as age increased, noted above, was found again among white persons. The same pattern was found among nonwhite persons but was less pronounced (fig. 2).

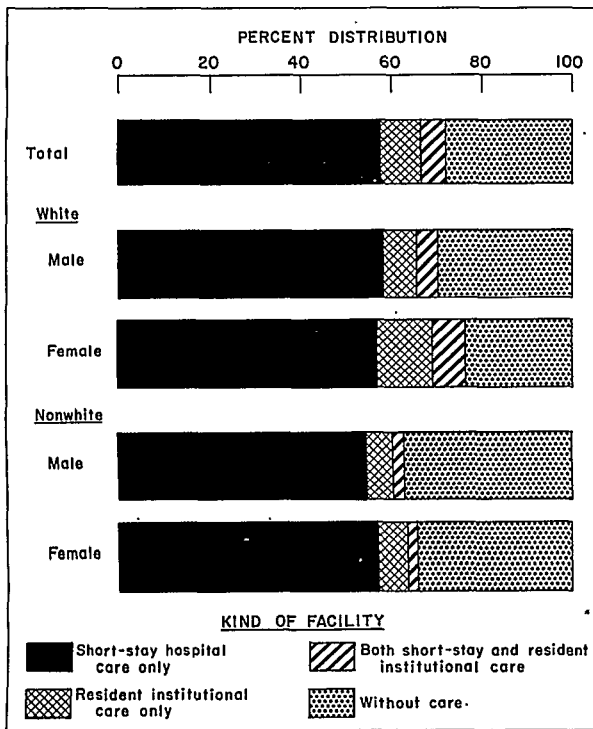


Figure 1. Percent distribution of decedents with and without hospitalization experience in the last year of life, by color, sex, and kind of facility which provided care.

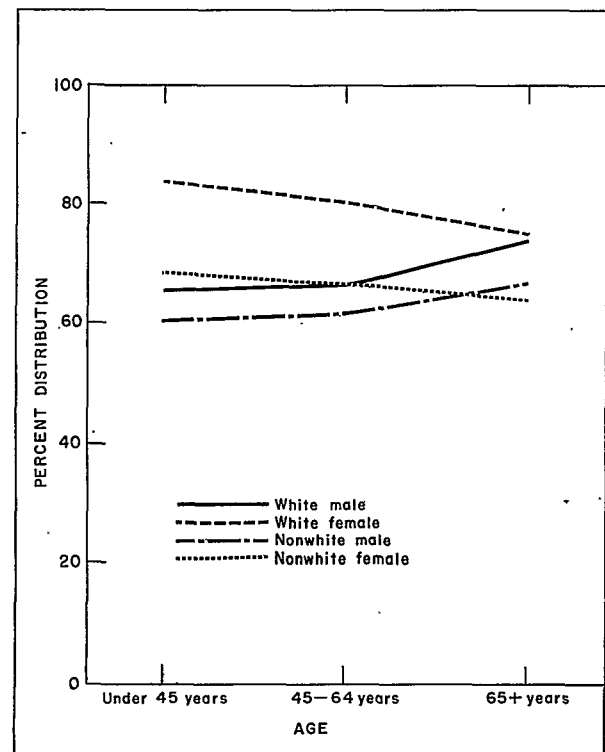


Figure 2. Percent distribution of decedents with hospitalization experience in the last year of life, by sex, color, and age.

The one instance in which sex differences seemed to outweigh color differences was in the comparison of the percent of decedents aged 65 years and over who had experience only in resident institutions. Elderly female decedents, both white and nonwhite, were more likely to have had only such care (16 percent of the white and 15 percent of the nonwhite) than male decedents (9 and 10 percent). Although data on marital status are not presented in this report, the greater prevalence of widowhood among living elderly females<sup>4</sup> as well as the greater survivorship of females may be important in accounting for sex differences.

### Regional Variations

The proportion of decedents with hospital or institutional care in the 12-month period preceding death varied markedly among regions only insofar as the South departed from the higher level of the other three regions taken together (tables 11 and 12). The variations among regions

by kind of facility which provided care departed from the pattern for all care combined. Although the South persisted as the region with the fewest decedents having hospital and institutional episodes in short-stay hospitals and in resident institutions, the differences among regions were only marginal in the percent of decedents having short-stay hospital care only. Larger differences were found, however, in contrasting the South with each of the other regions as to the percent of decedents with care in resident institutions (table D).

For both males and females, relatively fewer decedents in the South had episodes of hospital or institutional care in contrast with persons who died in other regions. The regional differences were somewhat greater for females than for males. Although male decedents in the South were less likely to have had only short-stay hospital experience than those in the rest of the Nation, females who died in the South did not differ in this respect from females who died in other regions; the important factor which distinguished

Table D. Number of decedents and percent distribution of decedents with and without hospitalization experience in the last year of life, by geographic region and kind of facility which provided care: United States, 1961

Region	All decedents		Percent with hospitalization experience in the last year of life			Percent without hospitalization experience in the last year of life
			In short-stay hospitals only	In resident institutions only	In short-stay hospitals and resident institutions	
	Number in thousands	Percent				
All regions-	1,702	100.0	57.8	9.0	5.4	27.8
Northeast-----	470	100.0	57.4	10.1	6.2	26.3
North Central-	493	100.0	60.5	9.1	5.7	24.8
South-----	498	100.0	56.0	7.1	4.0	32.9
West-----	241	100.0	56.8	10.5	6.2	26.5

the female decedents in the South from female decedents in other regions was the small proportion of Southern women who had care in resident institutions.

Hospitalization experience of persons dying at ages under 45 and 45-64 years was comparatively less frequent for the South and the West than for the remainder of the country. Persons who died at ages 65 and over, however, were somewhat more likely to have received care in the last year of life if they had lived in the West or North Central Regions than if they had lived elsewhere.

In the West and South, male decedents under age 45 and both males and females aged 45-64 were, again, somewhat less frequent users of

hospitals and institutions than decedents in the rest of the country. For both males and females who died at age 65 or later, those in the West were among the most frequent users of hospital and institutional services. When compared with the Western male of similar age, however, the elderly Western female was somewhat more likely to have had care in resident institutions. Moreover, the large proportion of older persons with care in resident institutions in the West is accounted for in the main by female decedents. Similarly, of the females in the South whose relative infrequent use of resident institutions is so noticeable, it was the group over 65 years of age which departed so markedly from comparable age-sex groups in other regions (table E).

Table E. Number of decedents and percent distribution of decedents 65 years and over with and without hospitalization experience in the last year of life, by geographic region, sex, and kind of facility which provided care: United States, 1961

Sex and region	All decedents 65 years and over		Percent with hospitalization experience in the last year of life				Percent without hospitalization experience in the last year of life
			In short- stay hospitals	In resident institutions			
	Number in thousands	Percent		Total	Without additional care in short-stay hospitals	With additional care in short-stay hospitals	
<u>Male</u>		Percent distribution					
All regions--	968	100.0	57.5	15.7	9.4	6.3	26.8
Northeast-----	260	100.0	56.5	18.3	10.9	7.4	25.2
North Central---	281	100.0	58.9	13.7	9.2	4.5	27.4
South-----	290	100.0	55.7	13.5	7.7	5.8	30.8
West-----	136	100.0	60.4	19.4	10.3	9.0	20.3
<u>Female</u>		Percent distribution					
All regions--	735	100.0	49.8	24.3	15.7	8.6	25.9
Northeast-----	210	100.0	48.2	23.5	15.4	8.1	28.3
North Central---	211	100.0	51.5	27.6	15.4	12.2	20.9
South-----	208	100.0	50.4	17.5	12.2	5.3	32.1
West-----	106	100.0	48.3	31.7	23.5	8.2	20.0

## Metropolitan Status

Although statistical evidence was present to suggest that the percent of decedents having hospital and institutional care in the last year of life was somewhat greater for the larger metropolitan areas than for the smaller metropolitan and nonmetropolitan areas, the differences were marginal (tables 13 and 14). The same pattern was observed when male and female decedents were considered separately. The differences by metropolitan status for those aged 65 years and over in care provided in all places, as well as that provided in short-stay and resident institutions separately, were negligible. For those aged 45-64 years and for those under 45 years, however, decedents in metropolitan areas, particularly the larger areas, appeared to have had more care than those in nonmetropolitan areas.

## Cause of Death

As is seen in tables 15 and 16, the probability of hospitalization during the last year of life varied greatly among groups of decedents classified by the 10 leading causes of death. Among these leading causes of death, the percent of decedents who received care in the 12-month period prior to death varied from more than 90 percent for those who died of malignant neoplasms, congenital malformations, and certain diseases of early infancy to less than 50 percent for those who died from accidents. Deaths caused by congenital malformations and by certain diseases of early infancy, which occur mainly during the first days of life,

almost always represent decedents with hospitalization experience because of the very large proportion of births in the United States which occur in hospitals. For each of the 10 leading causes of death, except general arteriosclerosis, most decedents with hospitalization experience had care only in short-stay hospitals.

Of persons who died of heart disease and, particularly, accidents, females were more likely than males to have received care in the year before death. The reverse appeared to be indicated, however, for deaths attributable to general arteriosclerosis.

Hospital and institutional care for persons who died of heart disease, malignant neoplasms, and accidents varied noticeably by age (table F). The likelihood of care increased with age among those who died of accidents. Similarly, there was evidence of an increase among those who died of diseases of heart. Persons dying of malignant neoplasms, by contrast, showed a decline in care with age.

In general, among the 10 leading causes of death except congenital malformations and certain diseases of early infancy, the percent of decedents having care in resident institutions increased with increasing age. For those who died of malignant neoplasms, this relationship was countered by a sharp decline in the percent who had care in short-stay places. Among persons who died of accidental causes, the increase with age in hospitalization experience was much more pronounced for short-stay hospital care than for care in resident institutions.



Table F. Number of decedents and percent distribution of decedents with and without hospitalization experience in the last year of life, by selected cause of death, age, and kind of facility which provided care: United States, 1961

Selected causes of death and age	All decedents		Percent with hospitalization experience in the last year of life				Percent without hospitalization experience in the last year of life
	Number in thousands	Percent	Total	In short-stay hospitals only	In resident institutions only	In both short-stay hospitals and resident institutions	
<u>All causes</u>							
All ages--	1,702	100.0	72.2	57.8	9.0	5.4	27.8
Under 45 years--	270	100.0	70.5	67.0	2.1	1.4	29.5
45-64 years----	419	100.0	69.8	61.4	5.1	3.2	30.2
65+ years-----	1,014	100.0	73.6	53.9	12.4	7.4	26.4
<u>Diseases of heart</u>							
All ages--	663	100.0	61.2	46.7	9.7	4.8	38.8
Under 45 years--	23	100.0	55.6	51.5	4.1	...	44.4
45-64 years----	171	100.0	53.9	48.6	4.3	1.0	46.1
65+ years-----	469	100.0	64.1	45.7	11.9	6.5	35.9
<u>Malignant neoplasms<sup>1</sup></u>							
All ages--	270	100.0	93.2	81.5	5.6	6.1	6.8
Under 45 years--	26	100.0	97.4	91.5	2.5	3.4	2.6
45-64 years----	97	100.0	95.9	84.6	5.8	5.5	4.1
65+ years-----	147	100.0	90.7	77.7	6.1	7.0	9.3
<u>Accidents</u>							
All ages--	95	100.0	48.4	43.6	2.0	2.8	51.6
Under 45 years--	51	100.0	31.7	29.9	1.8	...	68.3
45-64 years----	22	100.0	50.0	46.9	1.6	1.5	50.0
65+ years-----	23	100.0	83.7	70.6	3.0	10.1	16.3
<u>All other causes</u>							
All ages--	674	100.0	77.9	61.3	10.6	6.1	22.1
Under 45 years--	170	100.0	79.9	76.3	1.9	1.7	20.1
45-64 years----	129	100.0	74.4	63.4	6.4	4.6	25.6
65+ years-----	375	100.0	78.3	53.7	16.0	8.6	21.7

<sup>1</sup>Includes neoplasms of lymphatic and hematopoietic tissues.

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<sup>1</sup>National Office of Vital Statistics: *Vital Statistics of the United States, 1949*, Part I. Public Health Service. Washington. U.S. Government Printing Office, 1951. pp. LII and LIII.

<sup>2</sup>National Office of Vital Statistics: *Vital Statistics of the United States, 1958*, Volume I. Public Health Service. Washington. U.S. Government Printing Office, 1960. pp. 6-7 and 6-8.

<sup>3</sup>The values based on the 1961 survey may be expected to differ somewhat from comparable values obtained in the vital statistics reports insofar as the definition of "death in an institution" differs between the two sources and for other reasons; see Appendix II.

<sup>4</sup>Sheldon, H. D.: *The Older Population of the United States*. New York. John Wiley and Sons, Inc., 1958. p. 91.

<sup>5</sup>A more comprehensive discussion of the procedures used in the National Mortality Survey may be found on pp. 7-11 of National Vital Statistics Division, *Design of Surveys Linked to Death Records*, Public Health Service, Washington, D.C., Sept. 1962.

<sup>6</sup>National Vital Statistics Division: *Vital Statistics of the United States, 1961*, Volume II, Part A. Public Health Service. Washington. U.S. Government Printing Office, 1964. table 5-11.

<sup>7</sup>National Vital Statistics Division: *Vital Statistics of the United States, 1961*, Volume II, Part A. Public Health Service. Washington. U.S. Government Printing Office, 1964. pp. 7-11 through 7-13.

<sup>8</sup>National Vital Statistics Division: *Vital Statistics of the United States, 1961*, Volume II, Part A. Public Health Service. Washington. U.S. Government Printing Office, 1964. pp. 7-8 and 7-9.

<sup>9</sup>U.S. Bureau of the Census: *U.S. Census of Population: 1960. Number of Inhabitants, United States Summary*. Final Report PC(1)-1A. Washington. U.S. Government Printing Office, 1961.



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Table 1. Number of decedents, by place of death and selected characteristics: United States, 1961

Characteristic	All decedents	Place of death			
		In a hospital or institution			Outside hospitals and institutions
		Total	Short-stay hospital	Resident institution	
Number of decedents in thousands					
Total-----	1,702	1,037	823	214	665
<u>Sex</u>					
Male-----	968	560	468	92	407
Female-----	735	477	355	122	258
<u>Color</u>					
White-----	1,499	930	731	198	569
Nonwhite-----	203	107	91	15	96
<u>Age</u>					
Under 45 years-----	270	169	164	5	100
45-64 years-----	419	235	206	29	184
65+ years-----	1,014	633	453	179	381
<u>Region</u>					
Northeast-----	470	293	226	67	178
North Central-----	493	320	258	63	172
South-----	498	270	222	48	228
West-----	241	154	118	36	87
<u>Metropolitan status</u>					
Metropolitan-----	1,062	664	525	139	398
Nonmetropolitan-----	640	373	298	75	267
<u>Cause of death</u>					
Diseases of heart-----	663	326	240	86	337
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	270	197	169	28	73
Vascular lesions affecting central nervous system-----	192	130	89	41	63
Accidents-----	95	39	37	2	56
Certain diseases of early infancy-----	68	65	65	*	3
Influenza and pneumonia, except pneumonia of newborn-----	55	37	24	13	18
General arteriosclerosis-----	34	24	9	15	10
Diabetes mellitus-----	29	21	16	5	8
Congenital malformations-----	21	19	17	1	2
Cirrhosis of liver-----	20	18	16	2	3
All other causes-----	255	162	141	21	92

Table 2. Percent distribution of decedents, by place of death according to selected characteristics: United States, 1961

Characteristic	All decedents	Place of death			
		In a hospital or institution			Outside hospitals and institutions
		Total	Short-stay hospital	Resident institution	
Percent distribution					
Total-----	100.0	60.9	48.3	12.6	39.1
<u>Sex</u>					
Male-----	100.0	57.9	48.3	9.5	42.1
Female-----	100.0	64.9	48.3	16.6	35.1
<u>Color</u>					
White-----	100.0	62.0	48.8	13.2	38.0
Nonwhite-----	100.0	52.6	45.0	7.6	47.4
<u>Age</u>					
Under 45 years-----	100.0	62.8	60.7	2.0	37.2
45-64 years-----	100.0	56.1	49.1	7.0	43.9
65+ years-----	100.0	62.4	44.7	17.7	37.6
<u>Region</u>					
Northeast-----	100.0	62.2	48.0	14.2	37.8
North Central-----	100.0	65.0	52.3	12.7	35.0
South-----	100.0	54.2	44.5	9.7	45.8
West-----	100.0	63.9	48.9	15.0	36.1
<u>Metropolitan status</u>					
Metropolitan-----	100.0	62.5	49.4	13.1	37.5
Nonmetropolitan-----	100.0	58.3	46.6	11.7	41.7
<u>Cause of death</u>					
Diseases of heart-----	100.0	49.2	36.1	13.0	50.8
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	100.0	73.1	62.7	10.4	26.9
Vascular lesions affecting central nervous system-----	100.0	67.5	46.1	21.4	32.5
Accidents-----	100.0	40.9	38.8	2.1	59.1
Certain diseases of early infancy-----	100.0	95.4	94.8	*	4.6
Influenza and pneumonia, except pneumonia of newborn-----	100.0	66.7	43.6	23.2	33.3
General arteriosclerosis-----	100.0	69.6	26.9	42.7	30.4
Diabetes mellitus-----	100.0	71.7	55.7	15.9	28.3
Congenital malformations-----	100.0	90.3	83.7	6.6	9.7
Cirrhosis of liver-----	100.0	87.0	77.1	9.9	13.0
All other causes-----	100.0	63.7	55.6	8.2	36.3

Table 3. Number of persons who died in hospitals and institutions, by kind of hospitalization experience in the last year of life and selected characteristics: United States, 1961

Characteristic	Persons who died in hospitals and institutions	Death occurring in short-stay hospitals			Death occurring in resident institutions		
		Total	With no care in resident institutions	With some care in resident institutions	Total	With no care in short-stay hospitals	With some care in short-stay hospitals
Number of persons in thousands							
Total-----	1,037	823	804	19	214	144	70
<u>Sex</u>							
Male-----	560	468	458	10	92	61	31
Female-----	477	355	346	9	122	83	39
<u>Color</u>							
White-----	930	731	713	18	198	132	67
Nonwhite-----	107	91	91	1	15	12	4
<u>Age</u>							
Under 45 years-----	169	164	163	1	5	3	2
45-64 years-----	235	206	203	2	29	19	10
65+ years-----	633	453	437	16	179	121	58
<u>Region</u>							
Northeast-----	293	226	220	6	67	45	22
North Central-----	320	258	251	6	63	42	21
South-----	270	222	218	4	48	33	15
West-----	154	118	115	3	36	24	12
<u>Metropolitan status</u>							
Metropolitan-----	664	525	513	11	139	94	45
Nonmetropolitan-----	373	298	291	7	75	50	25
<u>Cause of death</u>							
Diseases of heart-----	326	240	234	6	86	62	25
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	197	169	167	2	28	14	14
Vascular lesions affecting central nervous system-----	130	89	85	3	41	27	14
Accidents-----	39	37	35	2	2	1	1
Certain diseases of early infancy-----	65	65	65	*	*	*	*
Influenza and pneumonia, except pneumonia of newborn-----	37	24	23	1	13	11	2
General arteriosclerosis-----	24	9	9	*	15	9	1
Diabetes mellitus-----	21	16	15	1	5	3	5
Congenital malformations-----	19	17	17	*	1	*	1
Cirrhosis of liver-----	18	16	15	1	2	1	1
All other causes-----	162	141	138	4	21	15	6

Table 4. Percent distribution of persons who died in hospitals and institutions, by kind of hospitalization experience in the last year of life according to selected characteristics: United States, 1961

Characteristic	Persons who died in hospitals and institutions	Death occurring in short-stay hospitals			Death occurring in resident institutions		
		Total	With no care in resident institutions	With some care in resident institutions	Total	With no care in short-stay hospitals	With some care in short-stay hospitals
Percent distribution							
Total-----	100.0	79.4	77.6	1.8	20.6	13.9	6.8
<u>Sex</u>							
Male-----	100.0	83.5	81.8	1.8	16.5	10.9	5.6
Female-----	100.0	74.5	72.6	1.9	25.5	17.4	8.1
<u>Color</u>							
White-----	100.0	78.7	76.7	1.9	21.3	14.2	7.2
Nonwhite-----	100.0	85.5	84.9	0.7	14.5	11.1	3.3
<u>Age</u>							
Under 45 years-----	100.0	96.8	96.4	0.4	3.2	1.9	1.3
45-64 years-----	100.0	87.6	86.6	1.0	12.4	8.2	4.2
65+ years-----	100.0	71.7	69.2	2.5	28.3	19.2	9.2
<u>Region</u>							
Northeast-----	100.0	77.1	75.1	2.0	22.9	15.4	7.5
North Central-----	100.0	80.4	78.5	2.0	19.6	13.1	6.5
South-----	100.0	82.2	80.7	1.5	17.8	12.1	5.7
West-----	100.0	76.5	74.8	1.7	23.5	15.8	7.7
<u>Metropolitan status</u>							
Metropolitan-----	100.0	79.0	77.3	1.7	21.0	14.2	6.8
Nonmetropolitan-----	100.0	79.9	78.0	1.9	20.1	13.4	6.7
<u>Cause of death</u>							
Diseases of heart-----	100.0	73.5	71.7	1.8	26.5	18.9	7.6
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	100.0	85.8	84.8	1.0	14.2	6.9	7.3
Vascular lesions affecting central nervous system-----	100.0	68.3	65.8	2.5	31.7	20.8	10.9
Accidents-----	100.0	94.8	90.6	4.2	5.2	2.6	2.6
Certain diseases of early infancy-----	100.0	99.4	99.4	*	*	*	*
Influenza and pneumonia, except pneumonia of newborn-----	100.0	65.3	62.5	2.7	34.7	30.2	4.5
General arteriosclerosis-----	100.0	38.7	38.7	*	61.3	38.3	23.0
Diabetes mellitus-----	100.0	77.7	74.6	3.1	22.3	16.0	6.3
Gongenital malformations-----	100.0	92.7	92.7	*	7.3	*	5.5
Cirrhosis of liver-----	100.0	88.6	85.0	3.6	11.4	7.5	3.9
All other causes-----	100.0	87.2	84.9	2.3	12.8	9.3	3.5

Table 5. Number of persons who died outside hospitals and institutions with and without hospitalization experience in the last year of life, by kind of facility which provided care, and selected characteristics: United States, 1961

Characteristic	Persons who died outside hospitals and institutions	With hospital or institutional care				Without hospital and institutional care	
		Total	In short-stay hospitals		In resident institutions only		
			Total	With no care in resident institutions			With some care in resident institutions
Number of persons in thousands							
Total-----	665	192	183	180	3	9	474
<u>Sex</u>							
Male-----	407	113	107	105	2	7	294
Female-----	258	79	77	75	2	2	179
<u>Color</u>							
White-----	569	168	160	157	3	8	401
Nonwhite-----	96	24	23	23	*	1	72
<u>Age</u>							
Under 45 years-----	100	21	18	17	1	2	80
45-64 years-----	184	57	55	54	1	2	127
65+ years-----	381	114	110	109	1	4	267
<u>Region</u>							
Northeast-----	178	54	52	50	2	2	124
North Central-----	172	50	48	47	1	3	122
South-----	228	64	62	61	*	3	164
West-----	87	23	22	22	*	1	64
<u>Metropolitan status</u>							
Metropolitan-----	398	114	110	107	2	5	284
Nonmetropolitan-----	267	78	74	73	1	4	190
<u>Cause of death</u>							
Diseases of heart-----	337	80	77	76	1	3	258
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	73	54	53	53	*	2	18
Vascular lesions affecting central nervous system-----	63	16	15	15	1	1	46
Accidents-----	56	7	6	6	*	1	49
Certain diseases of early infancy--	3	*	*	*	*	*	*
Influenza and pneumonia, except pneumonia of newborn-----	18	4	4	3	*	*	15
General arteriosclerosis-----	10	3	3	3	*	*	8
Diabetes mellitus-----	8	*	*	*	*	*	*
Congenital malformations-----	2	*	*	*	*	*	*
Cirrhosis of liver-----	3	*	*	*	*	*	*
All other causes-----	92	25	23	22	1	3	67



Table 6. Percent distribution of persons who died outside hospitals and institutions with and without hospitalization experience in the last year of life, by kind of facility which provided care according to selected characteristics: United States, 1961

Characteristic	Persons who died outside hospitals and institutions	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
Percent distribution							
Total-----	100.0	28.8	27.5	27.0	0.5	1.3	71.2
<u>Sex</u>							
Male-----	100.0	27.8	26.1	25.8	0.4	1.7	72.2
Female-----	100.0	30.4	29.7	29.1	0.6	0.7	69.6
<u>Color</u>							
White-----	100.0	29.5	28.1	27.6	0.5	1.4	70.5
Nonwhite-----	100.0	24.8	24.1	23.8	*	0.6	75.2
<u>Age</u>							
Under 45 years-----	100.0	20.7	18.3	17.3	1.0	2.4	79.3
45-64 years-----	100.0	31.1	29.9	29.3	0.5	1.3	68.9
65+ years-----	100.0	29.9	28.8	28.5	0.3	1.0	70.1
<u>Region</u>							
Northeast-----	100.0	30.5	29.2	28.3	0.9	1.3	69.5
North Central-----	100.0	29.3	27.6	27.0	0.6	1.7	70.7
South-----	100.0	28.1	27.0	26.9	*	1.1	71.9
West-----	100.0	26.5	25.4	25.0	*	1.1	73.5
<u>Metropolitan status</u>							
Metropolitan-----	100.0	28.7	27.5	26.9	0.6	1.2	71.3
Nonmetropolitan-----	100.0	29.0	27.6	27.2	0.4	1.4	71.0
<u>Cause of death</u>							
Diseases of heart-----	100.0	23.6	22.9	22.5	0.4	0.8	76.4
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	100.0	74.8	72.5	72.5	*	2.3	25.2
Vascular lesions affecting central nervous system-----	100.0	26.0	24.5	23.5	1.1	1.5	74.0
Accidents-----	100.0	12.6	11.1	11.1	*	1.6	87.4
Certain diseases of early infancy-----	100.0	*	*	*	*	*	*
Influenza and pneumonia, except pneumonia of newborn-----	100.0	20.0	20.0	18.0	*	*	80.0
General arteriosclerosis-----	100.0	24.5	24.5	24.5	*	*	75.5
Diabetes mellitus-----	100.0	*	*	*	*	*	*
Congenital malformations-----	100.0	*	*	*	*	*	*
Cirrhosis of liver-----	100.0	*	*	*	*	*	*
All other causes-----	100.0	27.2	24.4	23.4	1.0	2.8	72.8

Table 7. Number of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, sex, and detailed age: United States, 1961

Sex and age	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
<u>Both sexes</u>		Number of decedents in thousands.					
All ages-----	1,702	1,229	1,076	984	92	153	474
Under 45 years-----	270	190	184	181	4	6	80
Under 1 year-----	108	90	89	89	*	*	18
1-24 years-----	58	34	33	32	1	1	25
25-44 years-----	103	66	62	60	2	5	37
45-64 years-----	419	292	270	257	13	22	127
45-54 years-----	153	103	95	92	3	8	50
55-64 years-----	266	189	175	166	10	13	77
65+ years-----	1,014	746	621	546	75	125	267
65-74 years-----	416	309	279	260	19	30	107
75-84 years-----	408	302	248	214	34	53	106
85+ years-----	190	136	93	72	22	42	54
<u>Male</u>							
All ages-----	968	673	606	563	43	68	294
Under 45 years-----	163	105	101	100	2	4	58
Under 1 year-----	62	52	52	52	*	*	10
1-24 years-----	37	19	19	18	*	*	18
25-44 years-----	64	34	31	30	1	3	30
45-64 years-----	270	177	163	155	8	14	93
45-54 years-----	98	60	55	54	2	5	38
55-64 years-----	172	117	108	102	6	9	55
65+ years-----	535	391	341	307	34	50	143
65-74 years-----	248	180	165	154	10	15	68
75-84 years-----	208	151	130	115	15	22	56
85+ years-----	79	60	47	38	9	13	19
<u>Female</u>							
All ages-----	735	555	470	421	49	85	179
Under 45 years-----	107	85	83	81	2	2	22
Under 1 year-----	46	38	38	37	*	*	8
1-24 years-----	21	15	15	13	1	1	6
25-44 years-----	40	32	31	30	1	2	7
45-64 years-----	149	115	107	102	6	8	84
45-54 years-----	55	43	40	38	2	3	12
55-64 years-----	94	72	68	64	4	4	22
65+ years-----	479	355	280	239	41	75	124
65-74 years-----	168	129	115	106	9	14	39
75-84 years-----	201	150	119	99	19	31	50
85+ years-----	111	75	46	34	13	29	35

Table 8. Percent distribution of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care according to sex and detailed age: United States, 1961

Sex and age	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
<u>Both sexes</u>		Percent distribution					
All ages-----	100.0	72.2	63.2	57.8	5.4	9.0	27.8
Under 45 years-----	100.0	70.5	68.4	67.0	1.4	2.1	29.5
Under 1 year-----	100.0	83.2	82.8	82.5	*	*	16.8
1-24 years-----	100.0	57.9	57.1	54.3	2.7	0.9	42.1
25-44 years-----	100.0	64.3	59.7	57.8	1.9	4.6	35.7
45-64 years-----	100.0	69.8	64.6	61.4	3.2	5.1	30.2
45-54 years-----	100.0	67.5	62.1	59.9	2.2	5.3	32.5
55-64 years-----	100.0	71.1	66.0	62.3	3.7	5.1	28.9
65+ years-----	100.0	73.6	61.3	53.9	7.4	12.4	26.4
65-74 years-----	100.0	74.3	67.2	62.5	4.7	7.1	25.7
75-84 years-----	100.0	73.9	60.9	52.5	8.4	13.1	26.1
85+ years-----	100.0	71.5	49.1	37.8	11.3	22.4	28.5
<u>Male</u>							
All ages-----	100.0	69.6	62.6	58.2	4.4	7.0	30.4
Under 45 years-----	100.0	64.4	62.2	61.3	1.0	2.2	35.6
Under 1 year-----	100.0	83.8	83.2	83.2	*	*	16.2
1-24 years-----	100.0	50.4	50.4	49.7	*	*	49.6
25-44 years-----	100.0	53.6	48.7	46.7	2.0	4.9	46.4
45-64 years-----	100.0	65.6	60.4	57.6	2.8	5.2	34.4
45-54 years-----	100.0	61.4	56.5	54.7	1.7	4.9	38.6
55-64 years-----	100.0	68.0	62.6	59.2	3.4	5.3	32.0
65+ years-----	100.0	73.2	63.8	57.5	6.3	9.4	26.8
65-74 years-----	100.0	72.5	66.4	62.3	4.1	6.1	27.5
75-84 years-----	100.0	72.9	62.4	55.3	7.1	10.5	27.1
85+ years-----	100.0	76.3	59.5	48.3	11.2	16.8	23.7
<u>Female</u>							
All ages-----	100.0	75.6	64.0	57.3	6.7	11.5	24.4
Under 45 years-----	100.0	79.8	77.8	75.6	2.1	2.0	20.2
Under 1 year-----	100.0	82.3	82.3	81.7	*	*	17.7
1-24 years-----	100.0	71.1	68.8	62.5	6.2	2.4	28.9
25-44 years-----	100.0	81.5	77.3	75.6	1.6	4.2	18.5
45-64 years-----	100.0	77.3	72.2	68.4	3.8	5.1	22.7
45-54 years-----	100.0	78.3	72.3	69.3	3.0	6.0	21.7
55-64 years-----	100.0	76.8	72.2	67.9	4.3	4.6	23.2
65+ years-----	100.0	74.1	58.4	49.8	8.6	15.7	25.9
65-74 years-----	100.0	77.0	68.4	62.9	5.5	8.6	23.0
75-84 years-----	100.0	74.9	59.3	49.6	9.7	15.7	25.1
85+ years-----	100.0	68.1	41.7	30.3	11.4	26.3	31.9

Table 9. Number of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, color, sex, and age: United States, 1961

Color, sex, and age	All decedents	With hospital or institutional care				Without hospital and institutional care	
		Total	In short-stay hospitals		In resident institutions only		
			Total	With no care in resident institutions			With some care in resident institutions
Number of decedents in thousands							
<u>White, both sexes</u>							
All ages-----	1,499	1,098	958	870	88	140	401
Under 45 years-----	207	150	146	142	4	4	57
45-64 years-----	355	251	231	219	12	20	103
65+ years-----	937	697	581	508	72	116	241
<u>Male</u>							
All ages-----	855	603	541	501	40	61	253
Under 45 years-----	127	83	81	80	1	2	44
45-64 years-----	234	155	142	135	7	13	79
65+ years-----	493	364	318	286	32	46	129
<u>Female</u>							
All ages-----	644	495	416	369	47	79	149
Under 45 years-----	79	66	65	62	2	2	13
45-64 years-----	120	96	89	84	5	7	24
65+ years-----	444	333	263	223	40	70	111
<u>Nonwhite, both sexes</u>							
All ages-----	203	131	118	114	5	12	72
Under 45 years-----	63	40	39	38	*	2	23
45-64 years-----	64	41	39	38	1	2	23
65+ years-----	76	50	41	38	3	9	26
<u>Male</u>							
All ages-----	112	71	64	62	3	6	42
Under 45 years-----	35	21	20	20	*	1	14
45-64 years-----	36	22	21	20	1	1	14
65+ years-----	41	27	23	22	2	4	14
<u>Female</u>							
All ages-----	91	60	54	52	2	6	31
Under 45 years-----	27	19	18	18	*	*	9
45-64 years-----	28	19	18	18	1	1	10
65+ years-----	35	22	17	16	1	5	13

Table 10. Percent distribution of decedents with and without hospitalization experience in the last year of life by kind of facility which provided care according to color, sex, and age: United States, 1961

Color, sex, and age	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
		Percent distribution					
<u>White, both sexes</u>							
All ages-----	100.0	73.2	63.9	58.1	5.8	9.3	26.8
Under 45 years-----	100.0	72.5	70.5	68.8	1.7	1.9	27.5
45-64 years-----	100.0	70.9	65.2	61.9	3.4	5.6	29.1
65+ years-----	100.0	74.3	61.9	54.2	7.7	12.4	25.7
<u>Male</u>							
All ages-----	100.0	70.5	63.3	58.6	4.7	7.2	29.5
Under 45 years-----	100.0	65.5	63.8	62.8	1.0	1.7	34.5
45-64 years-----	100.0	66.2	60.7	57.7	3.0	5.5	33.8
65+ years-----	100.0	73.8	64.4	57.9	6.5	9.4	26.2
<u>Female</u>							
All ages-----	100.0	76.9	64.7	57.3	7.4	12.2	23.1
Under 45 years-----	100.0	83.6	81.4	78.5	2.9	2.3	16.4
45-64 years-----	100.0	80.0	74.1	69.9	4.2	5.8	20.0
65+ years-----	100.0	74.9	59.2	50.2	9.0	15.7	25.1
<u>Nonwhite, both sexes</u>							
All ages-----	100.0	64.3	58.2	55.9	2.2	6.1	35.7
Under 45 years-----	100.0	64.0	61.4	60.9	*	2.6	36.0
45-64 years-----	100.0	63.5	61.1	59.0	2.0	2.5	36.5
65+ years-----	100.0	65.3	53.1	49.2	3.9	12.2	34.7
<u>Male</u>							
All ages-----	100.0	63.0	57.3	55.0	2.4	5.7	37.0
Under 45 years-----	100.0	60.4	56.8	56.0	*	3.6	39.6
45-64 years-----	100.0	61.4	58.5	56.6	1.9	2.8	38.6
65+ years-----	100.0	66.6	56.7	52.6	4.1	9.9	33.4
<u>Female</u>							
All ages-----	100.0	66.0	59.3	57.2	2.1	6.7	34.0
Under 45 years-----	100.0	68.6	67.3	67.3	*	*	31.4
45-64 years-----	100.0	66.2	64.2	62.1	2.2	2.0	33.8
65+ years-----	100.0	63.8	48.9	45.3	3.6	14.8	36.2

Table 11. Number of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, sex, age, and geographic region: United States, 1961

Sex, age, and region	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
<u>BOTH SEXES</u>							
<u>All ages</u>							
Number of decedents in thousands							
All regions-----	1,702	1,229	1,076	984	92	153	474
Northeast-----	470	347	300	270	29	47	124
North Central-----	493	371	326	298	28	45	122
South-----	498	334	299	279	20	35	164
West-----	241	177	152	137	15	25	64
<u>Under 45 years</u>							
All regions-----	270	190	184	181	4	6	80
Northeast-----	58	43	41	39	2	2	15
North Central-----	72	55	54	54	*	2	17
South-----	94	61	59	59	1	2	32
West-----	47	31	31	30	1	1	15
<u>45-64 years</u>							
All regions-----	419	292	270	257	13	22	127
Northeast-----	120	89	82	77	5	8	30
North Central-----	114	83	77	74	3	6	31
South-----	127	83	76	73	4	6	44
West-----	58	37	35	33	2	2	21
<u>65+ years</u>							
All regions-----	1,014	746	621	546	75	125	267
Northeast-----	293	215	177	154	23	38	78
North Central-----	307	232	195	170	25	37	74
South-----	277	190	163	148	15	27	87
West-----	137	109	86	75	12	23	28
<u>MALE</u>							
<u>All ages</u>							
All regions-----	968	673	606	563	43	68	294
Northeast-----	260	189	167	153	14	22	71
North Central-----	281	200	180	170	9	20	82
South-----	290	190	173	162	12	16	100
West-----	136	95	86	78	8	9	41
<u>Under 45 years</u>							
All regions-----	163	105	101	100	2	4	58
Northeast-----	36	25	24	23	1	1	11
North Central-----	44	31	30	30	*	1	13
South-----	59	35	34	34	*	1	23
West-----	25	14	14	14	*	*	11

Table 11. Number of decedents with and without hospitalization experience in the last year of life, by kind of facility, which provided care, sex, age, and geographic region: United States, 1961--Con.

Sex, age, and region	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
<u>MALE--Con.</u>							
<u>45-64 years</u>							
All regions-----	270	177	163	155	8	14	93
Northeast-----	69	48	44	42	2	4	21
North Central-----	76	52	48	46	2	4	24
South-----	83	52	48	45	3	4	31
West-----	41	25	24	22	1	1	16
<u>65+ years</u>							
All regions-----	535	391	341	307	34	50	143
Northeast-----	155	116	99	88	11	17	39
North Central-----	161	117	102	95	7	15	44
South-----	148	102	91	82	9	11	46
West-----	70	56	48	42	6	7	14
<u>FEMALE</u>							
<u>All ages</u>							
All regions-----	735	555	470	421	49	85	179
Northeast-----	210	157	133	118	15	25	53
North Central-----	211	171	146	128	19	25	40
South-----	208	144	125	117	8	19	64
West-----	106	83	66	59	7	16	23
<u>Under 45 years</u>							
All regions-----	107	85	83	81	2	2	22
Northeast-----	22	17	17	16	1	*	4
North Central-----	28	24	24	24	*	1	3
South-----	35	26	25	25	*	1	9
West-----	22	17	17	16	1	*	5
<u>45-64 years</u>							
All regions-----	149	115	107	102	6	8	34
Northeast-----	51	41	38	35	3	3	10
North Central-----	38	32	30	29	1	2	7
South-----	44	31	28	27	1	2	13
West-----	16	12	11	11	1	*	5
<u>65+ years</u>							
All regions-----	479	355	280	239	41	75	124
Northeast-----	138	99	77	66	11	21	39
North Central-----	145	115	93	75	18	22	30
South-----	129	88	72	65	7	16	42
West-----	67	54	38	32	6	16	13

Table 12. Percent distribution of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, according to sex, age, and geographic region: United States, 1961

Sex, age, and region	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
<u>BOTH SEXES</u>							
<u>All ages</u>							
All regions-----	100.0	72.2	63.2	57.8	5.4	9.0	27.8
Northeast-----	100.0	73.7	63.7	57.4	6.2	10.1	26.3
North Central-----	100.0	75.2	66.2	60.5	5.7	9.1	24.8
South-----	100.0	67.1	60.0	56.0	4.0	7.1	32.9
West-----	100.0	73.5	63.0	56.8	6.2	10.5	26.5
<u>Under 45 years</u>							
All regions-----	100.0	70.5	68.4	67.0	1.4	2.1	29.5
Northeast-----	100.0	73.9	71.3	67.6	3.7	2.6	26.1
North Central-----	100.0	76.9	74.6	74.6	*	2.2	23.1
South-----	100.0	65.3	63.2	62.5	0.7	2.1	34.7
West-----	100.0	66.9	65.5	63.2	2.3	1.4	33.1
<u>45-64 years</u>							
All regions-----	100.0	69.8	64.6	61.4	3.2	5.1	30.2
Northeast-----	100.0	74.7	68.3	64.4	3.9	6.4	25.3
North Central-----	100.0	73.0	67.7	65.1	2.6	5.2	27.0
South-----	100.0	65.1	60.2	57.3	2.9	4.9	34.9
West-----	100.0	63.5	60.6	57.1	3.5	3.0	36.5
<u>65+ years</u>							
All regions-----	100.0	73.6	61.3	53.9	7.4	12.4	26.4
Northeast-----	100.0	73.3	60.3	52.6	7.7	13.0	26.7
North Central-----	100.0	75.7	63.6	55.4	8.2	12.1	24.3
South-----	100.0	68.6	58.8	53.2	5.6	9.8	31.4
West-----	100.0	79.9	63.1	54.5	8.6	16.8	20.1
<u>MALE</u>							
<u>All ages</u>							
All regions-----	100.0	69.6	62.6	58.2	4.4	7.0	30.4
Northeast-----	100.0	72.8	64.2	58.6	5.5	8.6	27.2
North Central-----	100.0	71.0	63.8	60.5	3.3	7.2	29.0
South-----	100.0	65.4	59.8	55.8	4.0	5.6	34.6
West-----	100.0	69.7	63.1	57.5	5.6	6.6	30.3
<u>Under 45 years</u>							
All regions-----	100.0	64.4	62.2	61.3	1.0	2.2	35.6
Northeast-----	100.0	70.0	66.5	63.1	3.4	3.5	30.0
North Central-----	100.0	69.8	67.5	67.5	*	2.3	30.2
South-----	100.0	60.2	58.6	58.1	*	1.6	39.8
West-----	100.0	56.6	55.3	55.3	*	*	43.4



Table 12. Percent distribution of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, according to sex, age, and geographic region: United States, 1961—Con.

Sex, age, and region	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals		In resident institutions only		
			Total	With no care in resident institutions		With some care in resident institutions	
<u>MALE—Con.</u>		Percent distribution					
<u>45-64 years</u>							
All regions-----	100.0	65.6	60.4	57.6	2.8	5.2	34.4
Northeast-----	100.0	69.8	63.5	61.1	2.4	6.3	30.2
North Central-----	100.0	68.1	62.4	59.8	2.6	5.7	31.9
South-----	100.0	62.4	57.6	54.4	3.2	4.8	37.6
West-----	100.0	60.5	57.1	53.9	3.2	3.3	39.5
<u>65+ years</u>							
All regions-----	100.0	73.2	63.8	57.5	6.3	9.4	26.8
Northeast-----	100.0	74.8	63.9	56.5	7.4	10.9	25.2
North Central-----	100.0	72.6	63.4	58.9	4.5	9.2	27.4
South-----	100.0	69.2	61.5	55.7	5.8	7.7	30.8
West-----	100.0	79.7	69.4	60.4	9.0	10.3	20.3
<u>FEMALE</u>							
<u>All ages</u>							
All regions-----	100.0	75.6	64.0	57.3	6.7	11.5	24.4
Northeast-----	100.0	74.9	63.1	55.9	7.2	11.8	25.1
North Central-----	100.0	80.9	69.3	60.4	8.9	11.6	19.1
South-----	100.0	69.4	60.3	56.3	3.9	9.1	30.6
West-----	100.0	78.3	62.8	55.9	6.9	15.6	21.7
<u>Under 45 years</u>							
All regions-----	100.0	79.8	77.8	75.6	2.1	2.0	20.2
Northeast-----	100.0	80.5	79.4	75.3	4.1	*	19.5
North Central-----	100.0	87.9	85.8	85.8	*	2.1	12.1
South-----	100.0	73.8	70.9	70.0	*	2.9	26.2
West-----	100.0	78.3	76.9	72.0	4.8	*	21.7
<u>45-64 years</u>							
All regions-----	100.0	77.3	72.2	68.4	3.8	5.1	22.7
Northeast-----	100.0	81.2	74.7	68.8	5.8	6.6	18.8
North Central-----	100.0	82.8	78.4	75.8	2.6	4.4	17.2
South-----	100.0	70.3	65.2	62.9	2.3	5.1	29.7
West-----	100.0	71.3	69.3	65.1	4.2	*	28.7
<u>65+ years</u>							
All regions-----	100.0	74.1	58.4	49.8	8.6	15.7	25.9
Northeast-----	100.0	71.7	56.3	48.2	8.1	15.4	28.3
North Central-----	100.0	79.1	63.8	51.5	12.2	15.4	20.9
South-----	100.0	67.9	55.7	50.4	5.3	12.2	32.1
West-----	100.0	80.0	56.5	48.3	8.2	23.5	20.0

Table 13. Number of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, sex, age, and metropolitan status: United States, 1961

Sex, age, and metropolitan status	All decedents	With hospital or institutional care				Without hospital and institutional care	
		Total	In short-stay hospitals				
			Total	With no care in resident institutions	With some care in resident institutions		In resident institutions only
Number of decedents in thousands							
<u>BOTH SEXES</u>							
<u>All ages</u>							
Total-----	1,702	1,229	1,076	984	92	153	474
In metropolitan areas of 1 million or more-----	597	443	385	353	32	58	153
In metropolitan areas of under 1 million-----	466	335	294	267	27	41	131
Outside metropolitan areas-----	640	450	397	364	33	54	190
<u>Under 45 years</u>							
Total-----	270	190	184	181	4	6	80
In metropolitan areas of 1 million or more-----	96	73	71	69	2	2	23
In metropolitan areas of under 1 million-----	74	53	53	52	*	1	21
Outside metropolitan areas-----	99	64	61	59	2	3	35
<u>45-64 years</u>							
Total-----	419	292	270	257	13	22	127
In metropolitan areas of 1 million or more-----	153	113	104	98	5	9	41
In metropolitan areas of under 1 million-----	121	84	75	70	6	8	38
Outside metropolitan areas-----	144	96	91	89	2	4	48
<u>65+ years</u>							
Total-----	1,014	746	621	546	75	125	267
In metropolitan areas of 1 million or more-----	347	258	211	185	25	47	89
In metropolitan areas of under 1 million-----	270	198	166	145	21	32	72
Outside metropolitan areas-----	397	291	245	216	29	46	106
<u>MALE</u>							
<u>All ages</u>							
Total-----	968	673	606	563	43	68	294
In metropolitan areas of 1 million or more-----	326	236	214	200	14	22	89
In metropolitan areas of under 1 million-----	269	185	164	151	13	21	84
Outside metropolitan areas-----	373	252	228	212	16	24	120
<u>Under 45 years</u>							
Total-----	163	105	101	100	2	4	58
In metropolitan areas of 1 million or more-----	56	39	38	37	1	2	16
In metropolitan areas of under 1 million-----	45	29	29	29	*	*	16
Outside metropolitan areas-----	62	37	35	34	1	2	26

Table 13. Number of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, sex, age, and metropolitan status: United States, 1961—Con.

Sex, age, and metropolitan status	All decedents	With hospital or institutional care				Without hospital and institutional care	
		Total	In short-stay hospitals		In resident institutions only		
			Total	With no care in resident institutions			With some care in resident institutions
<u>MALE—Con.</u>							
<u>45-64 years</u>							
Total-----	270	177	163	155	8	14	93
In metropolitan areas of 1 million or more-----	93	64	60	57	3	4	28
In metropolitan areas of under 1 million-----	79	51	45	42	3	6	28
Outside metropolitan areas-----	98	62	58	56	1	4	37
<u>65+ years</u>							
Total-----	535	391	341	307	34	50	143
In metropolitan areas of 1 million or more-----	178	133	116	106	10	16	45
In metropolitan areas of under 1 million-----	145	105	90	80	10	15	40
Outside metropolitan areas-----	212	154	135	121	14	19	58
<u>FEMALE</u>							
<u>All ages</u>							
Total-----	735	555	470	421	49	85	179
In metropolitan areas of 1 million or more-----	271	207	171	153	18	36	64
In metropolitan areas of under 1 million-----	197	150	130	116	14	20	47
Outside metropolitan areas-----	267	198	169	152	17	29	69
<u>Under 45 years</u>							
Total-----	107	85	83	81	2	2	22
In metropolitan areas of 1 million or more-----	41	34	33	33	1	1	7
In metropolitan areas of under 1 million-----	29	24	24	24	*	*	5
Outside metropolitan areas-----	37	27	26	24	1	1	10
<u>45-64 years</u>							
Total-----	149	115	107	102	6	8	34
In metropolitan areas of 1 million or more-----	61	48	44	41	2	5	12
In metropolitan areas of under 1 million-----	42	33	30	28	2	3	9
Outside metropolitan areas-----	46	34	34	33	1	*	12
<u>65+ years</u>							
Total-----	479	355	280	239	41	75	124
In metropolitan areas of 1 million or more-----	169	125	94	79	15	31	44
In metropolitan areas of under 1 million-----	125	93	76	65	11	17	32
Outside metropolitan areas-----	184	137	109	94	15	28	47

Table 14. Percent distribution of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, according to sex, age, and metropolitan status: United States, 1961

Sex, age, and metropolitan status	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
<u>BOTH SEXES</u>							
<u>All ages</u>							
Total-----	100.0	72.2	63.2	57.8	5.4	9.0	27.8
In metropolitan areas of 1 million or more-----	100.0	74.3	64.6	59.2	5.4	9.8	25.7
In metropolitan areas of under 1 million-----	100.0	71.9	63.2	57.4	5.7	8.7	28.1
Outside metropolitan areas-----	100.0	70.4	62.0	56.8	5.2	8.4	29.6
<u>Under 45 years</u>							
Total-----	100.0	70.5	68.4	67.0	1.4	2.1	29.5
In metropolitan areas of 1 million or more-----	100.0	75.9	73.6	72.0	1.6	2.3	24.1
In metropolitan areas of under 1 million-----	100.0	71.8	70.9	70.4	*	0.9	28.2
Outside metropolitan areas-----	100.0	64.2	61.4	59.5	1.9	2.8	35.8
<u>45-64 years</u>							
Total-----	100.0	69.8	64.6	61.4	3.2	5.1	30.2
In metropolitan areas of 1 million or more-----	100.0	73.5	67.6	64.2	3.5	5.9	26.5
In metropolitan areas of under 1 million-----	100.0	69.0	62.2	57.6	4.6	6.7	31.0
Outside metropolitan areas-----	100.0	66.4	63.4	61.8	1.6	3.0	33.6
<u>65+ years</u>							
Total-----	100.0	73.6	61.3	53.9	7.4	12.4	26.4
In metropolitan areas of 1 million or more-----	100.0	74.2	60.7	53.4	7.3	13.5	25.8
In metropolitan areas of under 1 million-----	100.0	73.2	61.4	53.7	7.7	11.8	26.8
Outside metropolitan areas-----	100.0	73.4	61.6	54.3	7.3	11.7	26.6
<u>MALE</u>							
<u>All ages</u>							
Total-----	100.0	69.6	62.6	58.2	4.4	7.0	30.4
In metropolitan areas of 1 million or more-----	100.0	72.5	65.6	61.3	4.3	6.9	27.5
In metropolitan areas of under 1 million-----	100.0	68.7	60.9	56.1	4.8	7.7	31.3
Outside metropolitan areas-----	100.0	67.7	61.1	56.9	4.3	6.6	32.3
<u>Under 45 years</u>							
Total-----	100.0	64.4	62.2	61.3	1.0	2.2	35.6
In metropolitan areas of 1 million or more-----	100.0	70.6	67.6	66.0	1.6	3.0	29.4
In metropolitan areas of under 1 million-----	100.0	64.5	63.8	63.8	*	*	35.5
Outside metropolitan areas-----	100.0	58.8	56.3	55.3	1.0	2.5	41.2

Table 14. Percent distribution of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, according to sex, age, and metropolitan status: United States, 1961—Con.

Sex, age, and metropolitan status	All decedents	With hospital or institutional care					Without hospital and institutional care <sup>1</sup>
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
MALE—Con.							
45-64 years							
Total-----	100.0	65.6	60.4	57.6	2.8	5.2	34.4
In metropolitan areas of 1 million or more-----	100.0	69.6	64.9	61.7	3.2	4.7	30.4
In metropolitan areas of under 1 million-----	100.0	64.4	57.3	53.1	4.2	7.1	35.6
Outside metropolitan areas-----	100.0	62.7	58.7	57.3	1.3	4.1	37.3
65+ years							
Total-----	100.0	73.2	63.8	57.5	6.3	9.4	26.8
In metropolitan areas of 1 million or more-----	100.0	74.7	65.4	59.7	5.7	9.3	25.3
In metropolitan areas of under 1 million-----	100.0	72.4	62.1	55.4	6.6	10.3	27.6
Outside metropolitan areas-----	100.0	72.6	63.7	57.1	6.6	8.9	27.4
FEMALE							
All ages							
Total-----	100.0	75.6	64.0	57.3	6.7	11.5	24.4
In metropolitan areas of 1 million or more-----	100.0	76.5	63.3	56.6	6.7	13.2	23.5
In metropolitan areas of under 1 million-----	100.0	76.3	66.2	59.1	7.1	10.1	23.7
Outside metropolitan areas-----	100.0	74.1	63.2	56.7	6.5	10.9	25.9
Under 45 years							
Total-----	100.0	79.8	77.8	75.6	2.1	2.0	20.2
In metropolitan areas of 1 million or more-----	100.0	83.2	81.8	80.1	1.6	1.4	16.8
In metropolitan areas of under 1 million-----	100.0	83.1	82.0	80.8	*	*	16.9
Outside metropolitan areas-----	100.0	73.4	69.9	66.5	3.4	3.4	26.6
45-64 years							
Total-----	100.0	77.3	72.2	68.4	3.8	5.1	22.7
In metropolitan areas of 1 million or more-----	100.0	79.5	71.8	67.9	3.9	7.7	20.5
In metropolitan areas of under 1 million-----	100.0	77.6	71.5	66.0	5.5	6.1	22.4
Outside metropolitan areas-----	100.0	74.3	73.5	71.3	2.2	*	25.7
65+ years							
Total-----	100.0	74.1	58.4	49.8	8.6	15.7	25.9
In metropolitan areas of 1 million or more-----	100.0	73.8	55.8	46.9	8.9	18.0	26.2
In metropolitan areas of under 1 million-----	100.0	74.2	60.7	51.8	8.9	13.5	25.8
Outside metropolitan areas-----	100.0	74.3	59.3	51.1	8.2	14.9	25.7

Table 15. Number of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, sex, cause of death, and age: United States, 1961

Sex, cause of death, and age	All decedents	With hospital or institutional care				Without hospital and institutional care	
		Total	In short-stay hospitals		In resident institutions only		
			Total	With no care in resident institutions			With some care in resident institutions
<u>Both sexes</u>		Number of decedents in thousands					
All causes-----	1,702	1,229	1,076	984	92	153	474
Diseases of heart-----	663	406	342	310	32	64	258
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	270	252	236	220	16	15	18
Vascular lesions affecting central nervous system-----	192	146	118	100	18	28	46
Accidents-----	95	46	44	41	3	2	49
Certain diseases of early infancy-----	68	65	65	65	*	*	3
Influenza and pneumonia, except pneumonia of newborn-----	55	40	29	26	3	11	15
General arteriosclerosis-----	34	26	17	12	5	9	8
Diabetes mellitus-----	29	23	19	17	2	3	6
Congenital malformations-----	21	20	19	18	1	*	1
Cirrhosis of liver-----	20	18	17	15	1	1	2
All other causes-----	255	187	170	159	10	18	67
<u>Male</u>							
All causes-----	968	673	606	563	43	68	294
Diseases of heart-----	391	224	198	186	12	26	167
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	147	140	131	123	8	9	7
Vascular lesions affecting central nervous system-----	90	69	60	51	9	10	21
Accidents-----	65	25	24	22	2	1	40
Certain diseases of early infancy-----	41	39	38	38	*	*	2
Influenza and pneumonia, except pneumonia of newborn-----	30	22	18	16	2	4	8
General arteriosclerosis-----	17	14	9	7	3	5	3
Diabetes mellitus-----	100	7	6	5	1	1	3
Congenital malformations-----	11	11	11	10	*	*	1
Cirrhosis of liver-----	13	12	11	10	1	*	1
All other causes-----	153	111	100	94	5	12	41
<u>Female</u>							
All causes-----	735	555	470	421	49	85	179
Diseases of heart-----	272	181	143	124	20	38	91
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	123	112	105	97	9	7	11
Vascular lesions affecting central nervous system-----	102	77	59	49	9	18	25
Accidents-----	30	21	20	20	1	1	9
Certain diseases of early infancy-----	27	26	26	26	*	*	1
Influenza and pneumonia, except pneumonia of newborn-----	25	18	11	10	1	7	7
General arteriosclerosis-----	18	12	8	5	3	4	5
Diabetes mellitus-----	19	16	13	12	1	2	3
Congenital malformations-----	9	*	*	*	*	*	*
Cirrhosis of liver-----	7	*	*	*	*	*	*
All other causes-----	102	76	70	65	5	6	26

Table 15. Number of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, sex, cause of death, and age: United States, 1961--Con.

Sex, cause of death, and age	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
<u>Under 45 years</u>							
Number of decedents in thousands:							
All causes-----	270	190	184	181	4	6	80
Diseases of heart-----	23	13	12	12	*	1	10
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	26	25	25	24	1	1	1
Vascular lesions affecting central nervous system-----	6	*	*	*	*	*	*
Accidents-----	51	16	15	15	*	1	34
Certain diseases of early infancy---	68	65	65	65	*	*	3
Influenza and pneumonia, except pneumonia of newborn-----	14	6	6	5	*	*	8
General arteriosclerosis-----	*	*	*	*	*	*	*
Diabetes mellitus-----	2	*	*	*	*	*	*
Congenital malformations-----	18	17	17	17	1	*	1
Cirrhosis of liver-----	4	*	*	*	*	*	*
All other causes-----	58	38	36	35	1	2	20
<u>45-64 years</u>							
All causes-----	419	292	270	257	13	22	127
Diseases of heart-----	171	92	85	83	2	7	79
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	97	93	87	82	5	6	4
Vascular lesions affecting central nervous system-----	32	22	21	19	2	1	10
Accidents-----	22	11	10	10	*	*	11
Certain diseases of early infancy---	*	*	*	*	*	*	*
Influenza and pneumonia, except pneumonia of newborn-----	9	*	*	*	*	*	*
General arteriosclerosis-----	1	*	*	*	*	*	*
Diabetes mellitus-----	8	*	*	*	*	*	*
Congenital malformations-----	1	*	*	*	*	*	*
Cirrhosis of liver-----	10	10	9	9	*	*	*
All other causes-----	67	49	45	43	3	3	19
<u>65+ years</u>							
All causes-----	1,014	746	621	546	75	125	267
Diseases of heart-----	469	301	245	215	30	56	169
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	147	133	124	114	10	9	14
Vascular lesions affecting central nervous system-----	154	118	92	76	16	26	36
Accidents-----	23	19	18	16	2	10	4
Certain diseases of early infancy---	*	*	*	*	*	*	*
Influenza and pneumonia, except pneumonia of newborn-----	31	27	18	16	2	8	5
General arteriosclerosis-----	33	25	16	11	5	9	8
Diabetes mellitus-----	19	15	13	11	2	2	4
Congenital malformations-----	1	*	*	*	*	*	*
Cirrhosis of liver-----	6	*	*	*	*	*	*
All other causes-----	129	101	88	82	6	13	28

Table 16. Percent distribution of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, according to sex, cause of death, and age: United States, 1961

Sex, cause of death, and age	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
		Percent distribution					
<u>Both sexes</u>							
All causes-----	100.0	72.7	63.2	57.8	5.4	9.0	27.8
Diseases of heart-----	100.0	61.2	51.5	46.7	4.8	9.7	38.8
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	100.0	93.2	87.6	81.5	6.1	5.6	6.8
Vascular lesions affecting central nervous system-----	100.0	76.0	61.4	52.0	9.4	14.5	24.0
Accidents-----	100.0	48.4	46.4	43.6	2.8	2.0	51.6
Certain diseases of early infancy-----	100.0	95.4	94.8	94.8	*	*	4.6
Influenza and pneumonia, except pneumonia of newborn-----	100.0	73.4	53.2	47.7	5.5	20.2	26.6
General arteriosclerosis-----	100.0	77.0	50.4	34.4	16.0	26.7	23.0
Diabetes mellitus-----	100.0	78.4	66.9	60.2	6.7	11.4	21.6
Congenital malformations-----	100.0	95.0	93.3	88.4	5.0	*	5.0
Cirrhosis of liver-----	100.0	88.7	82.2	75.6	6.6	6.5	11.3
All other causes-----	100.0	73.6	66.6	62.6	4.0	7.0	26.4
<u>Male</u>							
All causes-----	100.0	69.6	62.6	58.2	4.4	7.0	30.4
Diseases of heart-----	100.0	57.4	50.7	47.6	3.1	6.7	42.6
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	100.0	94.9	89.0	83.8	5.2	5.9	5.1
Vascular lesions affecting central nervous system-----	100.0	76.4	65.8	56.0	9.8	10.6	23.6
Accidents-----	100.0	38.2	36.2	33.7	2.5	2.0	61.8
Certain diseases of early infancy-----	100.0	95.6	94.6	94.6	*	*	4.4
Influenza and pneumonia, except pneumonia of newborn-----	100.0	73.7	61.4	54.7	6.7	12.2	26.3
General arteriosclerosis-----	100.0	84.1	54.6	39.3	15.4	29.4	15.9
Diabetes mellitus-----	100.0	69.5	59.8	50.1	9.7	9.7	30.5
Congenital malformations-----	100.0	93.6	93.6	90.5	*	*	6.4
Cirrhosis of liver-----	100.0	89.9	87.3	77.0	10.2	*	10.1
All other causes-----	100.0	72.9	65.2	61.8	3.4	7.7	27.1
<u>Female</u>							
All causes-----	100.0	75.6	64.0	57.3	6.7	11.5	24.4
Diseases of heart-----	100.0	66.6	52.6	45.4	7.2	14.0	33.4
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	100.0	91.2	85.8	78.7	7.2	5.3	8.8
Vascular lesions affecting central nervous system-----	100.0	75.6	57.5	48.5	9.0	18.1	24.4
Accidents-----	100.0	70.2	68.3	65.0	3.3	2.0	29.8
Certain diseases of early infancy-----	100.0	95.2	95.2	95.2	*	*	4.8
Influenza and pneumonia, except pneumonia of newborn-----	100.0	73.1	43.5	39.5	4.0	29.5	26.9
General arteriosclerosis-----	100.0	70.3	46.3	29.7	16.6	24.0	29.7
Diabetes mellitus-----	100.0	83.0	70.7	65.5	5.2	12.3	17.0
Congenital malformations-----	100.0	*	*	*	*	*	*
Cirrhosis of liver-----	100.0	*	*	*	*	*	*
All other causes-----	100.0	74.6	68.7	63.8	4.9	5.8	25.4



Table 16. Percent distribution of decedents with and without hospitalization experience in the last year of life, by kind of facility which provided care, according to sex, cause of death, and age: United States, 1961—Con.

Sex, cause of death, and age	All decedents	With hospital or institutional care					Without hospital and institutional care
		Total	In short-stay hospitals			In resident institutions only	
			Total	With no care in resident institutions	With some care in resident institutions		
Percent distribution							
<u>Under 45 years</u>							
All causes-----	100.0	70.5	68.4	67.0	1.4	2.1	29.5
Diseases of heart-----	100.0	55.6	51.5	51.5	*	4.1	44.4
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	100.0	97.4	94.9	91.5	3.4	2.5	2.6
Vascular lesions affecting central nervous system-----	100.0	*	*	*	*	*	*
Accidents-----	100.0	31.7	29.9	29.9	*	1.8	68.3
Certain diseases of early infancy---	100.0	95.4	94.8	94.8	*	*	4.6
Influenza and pneumonia, except pneumonia of newborn-----	100.0	42.1	39.8	37.3	*	*	57.9
General arteriosclerosis-----	*	*	*	*	*	*	*
Diabetes mellitus-----	100.0	*	*	*	*	*	*
Congenital malformations-----	100.0	94.3	94.3	90.7	3.7	*	5.7
Cirrhosis of liver-----	100.0	*	*	*	*	*	*
All other causes-----	100.0	65.4	62.2	60.0	2.2	3.2	34.6
<u>45-64 years</u>							
All causes-----	100.0	69.8	64.6	61.4	3.2	5.1	30.2
Diseases of heart-----	100.0	53.9	49.6	48.6	1.0	4.3	46.1
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	100.0	95.9	90.1	84.6	5.5	5.8	4.1
Vascular lesions affecting central nervous system-----	100.0	69.6	65.5	60.4	5.1	4.1	30.4
Accidents-----	100.0	50.0	48.4	46.9	*	*	50.0
Certain diseases of early infancy---	*	*	*	*	*	*	*
Influenza and pneumonia, except pneumonia of newborn-----	100.0	*	*	*	*	*	*
General arteriosclerosis-----	100.0	*	*	*	*	*	*
Diabetes mellitus-----	100.0	*	*	*	*	*	*
Congenital malformations-----	100.0	*	*	*	*	*	*
Cirrhosis of liver-----	100.0	93.5	90.3	87.2	*	*	*
All other causes-----	100.0	71.9	67.0	63.1	3.9	4.9	28.1
<u>65+ years</u>							
All causes-----	100.0	73.6	61.3	53.9	7.4	12.4	26.4
Diseases of heart-----	100.0	64.1	52.2	45.7	6.5	11.9	35.9
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues-----	100.0	90.7	84.6	77.7	7.0	6.1	9.3
Vascular lesions affecting central nervous system-----	100.0	76.8	59.9	49.2	10.7	16.9	23.2
Accidents-----	100.0	83.7	80.7	70.6	10.1	3.0	16.3
Certain diseases of early infancy---	*	*	*	*	*	*	*
Influenza and pneumonia, except pneumonia of newborn-----	100.0	84.4	57.5	50.2	7.3	26.9	15.6
General arteriosclerosis-----	100.0	76.4	48.9	33.4	15.5	27.4	23.6
Diabetes mellitus-----	100.0	79.3	67.5	59.2	8.3	11.8	20.7
Congenital malformations-----	100.0	*	*	*	*	*	*
Cirrhosis of liver-----	100.0	*	*	*	*	*	*
All other causes-----	100.0	78.1	68.4	63.5	4.9	9.7	21.9

## APPENDIX I

### TECHNICAL NOTE ON METHODS

#### Statistical Design of the National Mortality Survey

*Survey procedures.*<sup>5</sup>—The procedures for conducting the National Mortality Survey assumed the existence of and took advantage of a national system for the registration of deaths. The death record served as the sampling unit, and samples of these units were selected from the frame of records representing registered deaths. The survey was conducted principally with sources of information identified on the death record and, occasionally, with referral or secondary sources reported by a primary source. Since the mailing addresses of the primary sources were usually reported on the death record or could readily be obtained from directories or from the funeral director, the mail survey was the principal method of data collection. There was provision, however, for collecting information by other means which included telephone reminders and personal interviews.

The survey sample was subselected each month from a 10-percent systematic sample taken monthly from death certificates received in State vital statistics offices from local registrars and forwarded to the Division of Vital Statistics, National Center for Health Statistics. Since the subsampling of deaths was systematic at a rate of 1 out of 33, the monthly sample of deaths cumulated over the year to a selection of 1 out of 330. This procedure produced a sample of 5,154 deaths in 1961 for the survey.

After copies of the selected death certificates were received in the Division of Health Records Statistics, they were grouped according to whether or not the place of death was a hospital or an institution. For any death occurring in a hospital or an institution, a questionnaire was mailed to the establishment to obtain information about periods of care during the last year of life and to inquire about names and addresses of other hospitals and institutions in which care may have been provided. For deaths occurring outside hospitals and institutions, questionnaires were sent to death-record informants (usually relatives of the deceased persons) to ask for names and addresses of hospitals and institutions in which care was received. (Informants in 10 percent of deaths occurring in hospitals and institutions were surveyed for methodological reasons as explained

later in this appendix.) The returns from informants were used, then, to initiate mailings to hospitals and institutions.

Followup mailings were routinely sent to persons and establishments not responding, and other mailings were made to obtain complete and consistent information on the forms rejected as inadequate in a concurrent editing procedure. Special efforts were made in each sample case to assure that complete and consistent information was obtained.

*Estimating methods.*—The statistics shown in this report are estimates prepared by use of a post-stratified ratio estimation procedure. This procedure was used for each of the following 40 groups.

<i>Group</i>	<i>Sex, color, and age</i>
<i>Male, white:</i>	
1-----	Under 1 year
2-----	1-14 years
3-----	15-24 years
4-----	25-34 years
5-----	35-44 years
6-----	45-54 years
7-----	55-64 years
8-----	65-74 years
9-----	75-84 years
10-----	85+ years
<i>Male, nonwhite:</i>	
11 through 20----	Same groups as for male, white
<i>Female, white:</i>	
21 through 30----	Same groups as for male, white
<i>Female, nonwhite:</i>	
31 through 40----	Same groups as for male, white

For each of the 40 groups, the national count of deaths was obtained,<sup>6</sup> and the ratio of the sample count of deaths to the complete count was determined. Each death in the group was then assigned a constant value such that the sum of the values equaled the national total for the group. This post-stratified ratio estimation

procedure tends to reduce the sampling error by making the sample more closely representative of the population of all deaths than would be expected by random methods alone.

*Rounding of numbers.*—The tabulations upon which the tables in this report were based show figures to the nearest unit. The published tables were prepared with corresponding figures rounded to the nearest thousand. Percentages were computed; however, using unrounded data. Neither numbers nor percentages are necessarily accurate in the detail shown.

### Reliability of Estimates

Since the estimates were obtained from a sample, they may differ somewhat from the results that would have been obtained had a survey covering all decedents been undertaken using the same questionnaires and procedures. As is true of all surveys, the results are also subject to nonsampling errors such as those of response and recording.

*Nonsampling error, general.*—Failure to secure complete questionnaire returns in the survey, errors made by respondents in interpreting survey questions, and errors in processing the returned questionnaires and their associated records represent a few of the

main sources of nonsampling error. Although there are many cases in which adequate measures of such errors which may tend to affect the data are not available, in some cases compensating factors play a role in randomizing and thus minimizing the effect of errors on the estimates. In other instances, measures of error are available.

*Error associated with nonresponse.*—About 2 percent of the forms mailed out to hospitals and institutions in the survey were either not returned or were returned without information about care of the deceased person in the last year of life. The corresponding nonresponse rate for informants who played a role in providing names of hospitals and institutions caring for persons in the year before death is 7 percent. The effect of nonresponse in this survey was to limit information about hospital and institutional care of deceased persons.

A general review of the file of materials relating to each decedent was made at the close of the survey to determine whether any episodes of hospital or institutional care might have been missing. This review procedure showed that an estimated 55,000 decedents who were reported as having no hospital or institutional care in the last year of life may in fact have received such care (table I). This estimated number of deceased

Table I. Number and percent of decedents classified as having no hospitalization experience in the last year of life who may have been misclassified: United States, 1961

Sex and age	All decedents in thousands	Decedents possibly misclassified as without hospitalization experience in the last year of life	
		Number in thousands	Percent
<u>Both sexes</u>			
All ages-----	1,702	55	3.3
Under 45 years-----	270	16	6.1
45-64 years-----	419	17	4.0
65+ years-----	1,014	22	2.2
<u>Male</u>			
All ages-----	968	32	3.3
Under 45 years-----	163	10	6.3
45-64 years-----	270	11	4.0
65+ years-----	535	11	2.0
<u>Female</u>			
All ages-----	735	24	3.2
Under 45 years-----	107	6	5.7
45-64 years-----	149	6	4.0
65+ years-----	479	12	2.4

persons who may have had hospitalization in the last year of life but who were not so classified is comprised of those decedents for whom no satisfactory information was obtained concerning hospitalization because of the inability to locate establishments or informants who could provide information, as well as because of non-response and inadequate response to the survey questionnaires.

*Error associated with a problem in identifying places providing care.*—The procedures designed to identify all places providing care to the survey decedents were deficient in certain respects, resulting in a minor bias in the distribution of decedents by type of service. Specifically, an assumption was made that it was not necessary to uniformly survey death record informants to gather information about hospital and institutional care of deceased persons when it was established that the decedent had died in a hospital or an institution. However, the informant for 10 percent of all such deaths was surveyed in order to estimate the effect of the procedures based upon this assumption. The results of the test of the assumption are available only in terms of the amount of care and not in terms of number of decedents.

Since the informant was routinely approached where no information about hospital or institutional care for a decedent was shown on the death record, the planned omission of informants in the survey had no effect in determining whether or not the decedent had hospital or institutional care. The only effect this omission had on the statistics in this report was a slight overestimate of the numbers of decedents who had received care *only* in short-stay hospitals or *only* in resident institutions, countered by a corresponding underestimate of decedents who had both short-stay and resident care.

*Sampling error.*—The standard error is one measure of the variations that occur by chance because only a small portion rather than the whole population of decedents was covered in the survey. The chances are about 68 out of 100 that the sample estimate would differ from the value that would be obtained from a complete survey by less than the standard error.

Rules to determine the approximate standard errors for estimates presented in this report are as follows:

1. *Estimates of aggregates.*—Approximate standard errors of estimates of numbers of decedents are given in table II.
2. *Estimates of percentages.*—Approximate standard errors for percentages are determined in one of the two following ways, depending upon the source of the base of the percentage:
  - a. Where both numerator and denominator are estimates from the sample data, such as the percentage of males in the Northeast Region who had care in short-stay hospitals, the approximate standard errors are given in table III.
  - b. Where the denominator is a value found in 1 of the 40 ratio estimate cells shown on page 36, that is, where the denominator is a population value taken from the vital registration system and is therefore not subject to sampling error, the relative standard error of the percent is equivalent to the relative standard error of the numerator. 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 percentage of the estimate. For example, table 10 shows that 57.2 percent of all nonwhite female decedents had care in short-stay hospitals only. The base of this percentage is the group of nonwhite females and is found to be one of the cells in the ratio estimation table shown on page 36. Therefore, the standard error of the numerator of the percentage 52,000 is determined from table II, by interpolation, to be 3,858. Dividing this figure by the numerator, the quotient is 0.074 (relative standard error = 7.4 percent) which when multiplied by the estimate itself, 57.2, yields 4.2 as the standard error. Thus, the chances are 68 out of 100 that a complete survey would produce a figure between 53.0 percent and 61.4 percent and 95 out of 100 that this figure would lie between 48.8 percent and 65.6 percent.

Table II. Approximate standard errors for estimated numbers of decedents

Estimate	Standard error
10,000-----	1,700
25,000-----	2,700
50,000-----	3,800
100,000-----	5,250
250,000-----	7,850
500,000-----	9,950
750,000-----	10,600
1,000,000-----	10,100

Example: In table 9, 60,000 nonwhite female decedents are estimated as having had hospital care in the last year of life. Using linear interpolation in table II, we obtain a standard error of 4,100. The chances are about 68 out of 100 that a complete survey would produce a figure differing from the sample result by less than 4,100; and the chances are about 95 out of 100 that the difference would be less than twice the standard error, or 8,200.

Table III. Approximate standard errors of estimated percentages of decedents

Estimated percent	Base of percentage (1,000)					
	10	50	100	250	500	1,000
2 or 98-----	2.4	1.1	.8	0.5	0.3	0.2
5 or 95-----	3.7	1.7	1.2	0.7	0.5	0.4
10 or 90-----	5.1	2.3	1.6	1.0	0.7	0.5
25 or 75-----	7.4	3.3	2.3	1.5	1.0	0.7
50-----	8.6	3.8	2.7	1.7	1.2	0.9

Example: Table 12 shows that 62.4 percent of the male decedents aged 45-64 years residing in the South had care in hospitals and institutions in the last year of life. The standard error of this percentage with a base of 83,000 is, by interpolation, about 2.9 percent. Therefore, the chances are about 68 out of 100 that a complete survey would produce a figure between 59.5 and 65.3 percent and 95 out of 100 that this figure would lie between 56.6 percent and 68.2 percent.

— O O O —

## APPENDIX II

### DÉFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

#### Terms Relating to Hospitalization

*Hospitals and institutions.*—In this report hospitals and institutions is a phrase used to refer to facilities providing medical or personal care, such as hospitals listed in the Guide Issue of *Hospitals*, Journal of the American Hospital Association, and includes homes for the mentally retarded, nursing homes, other homes for the aged, and other places providing medical, nursing, personal, or domiciliary care. Questionnaires returned by establishments claiming to have provided care to decedents as inpatients or inmates were accepted as reports of hospitals and institutions regardless of whether the establishments could be located in the several listings of such places which were used in connection with the processing of the survey data.

*Short-stay hospital.*—A short-stay hospital is a facility for which the type of service—a classification of hospitals according to the predominant types of cases for which they provide care—is general; maternity, eye, ear, nose, and throat; children's; and osteopathic hospital. The type-of-service category to which an individual hospital is assigned and the definition of these categories follows the usage of the American Hospital Association.

*Resident institution.*—A resident institution is a facility for which the type of service is psychiatric, tuberculosis, orthopedic, contagious disease, chronic disease and/or convalescent, and hospital department of institution. Also included are homes for the mentally retarded, nursing or convalescent homes, other homes for the aged, and other places which provide medical, nursing, personal, or domiciliary care.

*Hospitalization and hospitalization experience.*—Hospitalization and hospitalization experience are terms used in this report to refer to care provided to deceased persons in the last year of life by hospitals or institutions. Such care was determined to have been provided if any continuous period of inpatient care or inmate experience was completed in a hospital or an institution within 364 days preceding death as well as on the day of death itself. Any such period of care may

or may not have begun within the 12-month period preceding death.

*Place of death.*—The place of death is the classification of decedents as to whether the death certificate or other information collected in the survey indicates that the death took place in a hospital or institution and, if so, the kind of facility. Data for "deaths occurring in hospitals or institutions" shown in table A and selected from *Vital Statistics of the United States, 1958*, may differ somewhat from comparable data gathered in the National Mortality Survey for three reasons. First, in the survey it is possible to identify some places of death as hospitals and institutions by querying informants, where this would not be possible by reference to the death certificate alone. Second, deaths in hospitals and institutions as defined in *Vital Statistics of the United States* include deaths classified as "died on entry" or "died on arrival," while the National Mortality Survey data exclude deaths among persons who were not "admitted" on hospital records. Third, some deaths recorded as having occurred in hospitals or institutions on the death record were found in the survey to have occurred before, or on arrival, or otherwise before admission of the decedent.

#### Other Terms

*Cause of death.*—Data are shown in this report for the 10 leading causes of death in 1961. These are the 10 most frequent causes as a result of ranking the causes included in the List of 59 Selected Causes of Death (Seventh Revision of International Lists of Diseases and Causes of Death, 1955) in accordance with the rules of ranking recommended by the Public Health Conference on Records and Statistics.<sup>7</sup>

*Death record informant.*—The informant is usually the person whose name is recorded on the death certificate as having provided the information about personal characteristics of the decedent such as name and age which are shown on the death certificate. The informant is commonly a close relative of the decedent.

*Age.*—Age is recorded or derived from entries on the death certificate for age or date of birth. Reported or calculated age is age at last birthday.

*Color.*—Color is recorded or derived from entries on the death certificate for color or race as white or nonwhite. The nonwhite population includes Negro, American Indian, Chinese, Japanese, Aleut, Eskimo, Hawaiian and part-Hawaiian. Mexican and Puerto Rican are included with white.<sup>8</sup>

*Metropolitan status.*—Usual residence of decedent was classified by location inside or outside counties falling in standard metropolitan statistical areas (metropolitan State economic areas in New England) as delineated by the Office of Statistical Standards, U.S. Bureau of the Budget for the 1960 Census. (See pages XXVII and XXVIII of *U.S. Census of Population: 1960*.)<sup>9</sup> Standard metropolitan statistical areas were divided into two groups for use in the tables shown in this report—those with a population in the 1960 census of 1,000,000 or more and those with less than 1,000,000.

*Region.*—State of usual residence of decedents is classified according to four regions which correspond to the regions used by the U.S. Bureau of the Census. These are comprised as follows:

<i>Region</i>	<i>States Included</i>
Northeast -----	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
North Central -----	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
South -----	Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
West -----	Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming



**APPENDIX III**  
**SOURCE FORMS**

<b>CERTIFICATE OF DEATH</b>										Form approved, Budget Bureau No. 68-R376 2.			
BIRTH NO.		STATE OF			STATE FILE NO.								
<b>1. PLACE OF DEATH</b> a. COUNTY				<b>2. USUAL RESIDENCE</b> (Where deceased lived. If institution: Residence before admission) a. STATE								b. COUNTY	
b. CITY, TOWN, OR LOCATION				c. LENGTH OF STAY IN 1b		c. CITY, TOWN, OR LOCATION							
d. NAME OF HOSPITAL OR INSTITUTION <i>(If not in hospital, give street address)</i>						d. STREET ADDRESS							
e. IS PLACE OF DEATH INSIDE CITY LIMITS? YES <input type="checkbox"/> NO <input type="checkbox"/>				e. IS RESIDENCE INSIDE CITY LIMITS? YES <input type="checkbox"/> NO <input type="checkbox"/>				f. IS RESIDENCE ON A FARM? YES <input type="checkbox"/> NO <input type="checkbox"/>					
<b>3. NAME OF DECEASED</b> (Type or print)			<i>First</i>	<i>Middle</i>		<i>Last</i>			<b>4. DATE OF DEATH</b> <i>Month Day Year</i>				
<b>5. SEX</b>		<b>6. COLOR OR RACE</b>		<b>7. MARRIED</b> <input type="checkbox"/> <b>NEVER MARRIED</b> <input type="checkbox"/>		<b>8. DATE OF BIRTH</b>		<b>9. AGE</b> (In years last birthday)		<b>IF UNDER 1 YEAR</b>	<b>IF UNDER 24 HRS.</b>		
				<b>WIDOWED</b> <input type="checkbox"/> <b>DIVORCED</b> <input type="checkbox"/>				<i>Months Days Hours Min.</i>					
<b>10a. USUAL OCCUPATION</b> (Give kind of work done during most of working life, even if retired)				<b>10b. KIND OF BUSINESS OR INDUSTRY</b>		<b>11. BIRTHPLACE</b> (State or foreign country)			<b>12. CITIZEN OF WHAT COUNTRY?</b>				
<b>13. FATHER'S NAME</b>						<b>14. MOTHER'S MAIDEN NAME</b>							
<b>15. WAS DECEASED EVER IN U. S. ARMED FORCES?</b> (Yes, no, or unknown) <i>(If yes, give war or dates of service)</i>				<b>16. SOCIAL SECURITY NO.</b>		<b>17. INFORMANT</b> <i>Address</i>							
<b>18. CAUSE OF DEATH</b> [Enter only one cause per line for (a), (b), and (c).] PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a) _____  Conditions, if any, which gave rise to above cause (a), stating the underlying cause last. } DUE TO (b) _____ DUE TO (c) _____										<b>INTERVAL BETWEEN ONSET AND DEATH</b>			
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a)												<b>19. WAS AUTOPSY PERFORMED?</b> YES <input type="checkbox"/> NO <input type="checkbox"/>	
<b>20a. ACCIDENT</b> <input type="checkbox"/>			<b>SUICIDE</b> <input type="checkbox"/>		<b>HOMICIDE</b> <input type="checkbox"/>		<b>20b. DESCRIBE HOW INJURY OCCURRED.</b> (Enter nature of injury in Part I or Part II of item 18.)						
<b>20c. TIME OF INJURY</b> <i>Hour a. m. p. m. Month, Day, Year</i>													
<b>20d. INJURY OCCURRED</b> WHILE AT WORK <input type="checkbox"/> NOT WHILE AT WORK <input type="checkbox"/>			<b>20e. PLACE OF INJURY</b> (e. g., in or about home, farm, factory, street, office bldg., etc.)			<b>20f. CITY, TOWN, OR LOCATION</b>			<b>COUNTY</b>		<b>STATE</b>		
<b>21. I attended the deceased from _____, to _____ and last saw her/him alive on _____</b> <i>Death occurred at _____ m on the date stated above; and to the best of my knowledge, from the causes stated.</i>													
<b>22a. SIGNATURE</b> <i>(Degree or title)</i>						<b>22b. ADDRESS</b>			<b>22c. DATE SIGNED</b>				
<b>23a. BURIAL, CREMATION, REMOVAL</b> (Specify)		<b>23b. DATE</b>		<b>23c. NAME OF CEMETERY OR CREMATORY</b>			<b>23d. LOCATION</b> (City, town, or county) (State)						
<b>24. FUNERAL DIRECTOR</b> <i>ADDRESS</i>				<b>25. DATE RECD. BY LOCAL REG.</b>				<b>26. REGISTRAR'S SIGNATURE</b>					

1956 REVISION OF STANDARD CERTIFICATE

GPO 1955 O - 114778

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE—PUBLIC HEALTH SERVICE

MEDICAL CERTIFICATION

PHS-706 REV. 11/54



# Survey Questionnaire for Hospitals

PHS-3699  
(3-61)

CONFIDENTIALITY has been assured the individual  
as published in the Federal Register May 20, 1959

Budget Bureau No. 68-6102  
Approval Expires: 12-31-62

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service - NOVS  
Washington 25, D.C.

## HOSPITAL UTILIZATION IN THE LAST YEAR OF LIFE

Name of Deceased \_\_\_\_\_ File Number \_\_\_\_\_

Address of Deceased \_\_\_\_\_ Date of Birth \_\_\_\_\_

\_\_\_\_\_ Date of Death \_\_\_\_\_

Hospital in which Deceased was a Patient \_\_\_\_\_

Approximate Date of Last Discharge \_\_\_\_\_

### PART I - HOSPITAL CARE IN THIS INSTITUTION

A. How many times was the person whose name appears above discharged from this hospital since JANUARY 1, 1960?  
\_\_\_\_\_ number of separate discharges since JANUARY 1, 1960 (Please complete a section below for each of these times beginning with the deceased's last stay in this hospital. If there were more than four separate discharges since JANUARY 1, 1960, please attach separate sheet.)

PERIODS OF CARE	ADMITTED ON	DISCHARGED ON	FINAL DIAGNOSES	OPERATIONS PERFORMED
LAST PERIOD	Month _____	Month _____	Primary _____	_____
	Day _____	Day _____	Secondary _____	_____
	Year _____	Year _____	_____	_____
				Check if none <input type="checkbox"/>
NEXT TO LAST PERIOD	Month _____	Month _____	Primary _____	_____
	Day _____	Day _____	Secondary _____	_____
	Year _____	Year _____	_____	_____
				Check if none <input type="checkbox"/>
PERIOD BEFORE THAT	Month _____	Month _____	Primary _____	_____
	Day _____	Day _____	Secondary _____	_____
	Year _____	Year _____	_____	_____
				Check if none <input type="checkbox"/>
PERIOD BEFORE THAT	Month _____	Month _____	Primary _____	_____
	Day _____	Day _____	Secondary _____	_____
	Year _____	Year _____	_____	_____
				Check if none <input type="checkbox"/>

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PART II - CARE IN OTHER HOSPITALS

A. According to your records or to your personal knowledge, was the deceased a patient in any other hospital or medical institution since JANUARY 1, 1960?

1.  Yes      2.  No

(If Yes: please list below each hospital and medical institution in which the deceased was a patient since JANUARY 1, 1960)

OTHER INSTITUTIONS IN WHICH DECEASED WAS A PATIENT

1. Name of Institution \_\_\_\_\_  
Street Address \_\_\_\_\_ City or Place \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_  
Approximate Discharge Date \_\_\_\_\_
2. Name of Institution \_\_\_\_\_  
Street Address \_\_\_\_\_ City or Place \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_  
Approximate Discharge Date \_\_\_\_\_
3. Name of Institution \_\_\_\_\_  
Street Address \_\_\_\_\_ City or Place \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_  
Approximate Discharge Date \_\_\_\_\_
4. Name of Institution \_\_\_\_\_  
Street Address \_\_\_\_\_ City or Place \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_  
Approximate Discharge Date \_\_\_\_\_

\* \* \* \* \*

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature of person completing this form \_\_\_\_\_  
Name of this institution \_\_\_\_\_  
Your position in this institution \_\_\_\_\_

Survey Questionnaire for Informants

PHS-3700  
(3-61)

CONFIDENTIALITY has been assured the individual  
as published in the Federal Register May 20, 1959

Budget Bureau No. 68-6102  
Approval Expires: 12-31-62

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service - NOVS  
Washington 25, D.C.

HOSPITAL UTILIZATION IN THE LAST YEAR OF LIFE

Name of Deceased \_\_\_\_\_ File Number \_\_\_\_\_

Please answer the following questions about the person named above. If you do not know the exact answers, give your best estimates. Feel free to ask the assistance of others who may be able to help you in answering the questions.

PART I - HOSPITAL CARE

A. Since JANUARY 1, 1960, was the deceased a patient in a hospital or medical institution?

1.  Yes 2.  No (If No; SKIP to Part II on the reverse side)

B. How many times was he discharged from these hospitals since JANUARY 1, 1960?

\_\_\_\_\_ number of times (Please complete a section below for each of these discharges beginning with last hospital stay. For example, if he died in a hospital; this discharge should be entered as his last hospital stay.)

1. LAST HOSPITAL STAY

A. When was he discharged from the hospital?

\_\_\_\_\_ Day \_\_\_\_\_ Month \_\_\_\_\_ Year

B. What is the name and address of the hospital?

Name \_\_\_\_\_

C. How many nights was he in the hospital?

\_\_\_\_\_ number of nights

City or Place \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_

2. NEXT TO LAST HOSPITAL STAY

A. When was he discharged from the hospital?

\_\_\_\_\_ Day \_\_\_\_\_ Month \_\_\_\_\_ Year

B. What is the name and address of the hospital?

Name \_\_\_\_\_

C. How many nights was he in the hospital?

\_\_\_\_\_ number of nights

City or Place \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_

3. HOSPITAL STAY BEFORE THAT

A. When was he discharged from the hospital?

\_\_\_\_\_ Day \_\_\_\_\_ Month \_\_\_\_\_ Year

B. What is the name and address of the hospital?

Name \_\_\_\_\_

C. How many nights was he in the hospital?

\_\_\_\_\_ number of nights

City or Place \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_

4. HOSPITAL STAY BEFORE THAT

A. When was he discharged from the hospital?

\_\_\_\_\_ Day \_\_\_\_\_ Month \_\_\_\_\_ Year

B. What is the name and address of the hospital?

Name \_\_\_\_\_

C. How many nights was he in the hospital?

\_\_\_\_\_ number of nights

City or Place \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_

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PART II - CHARACTERISTICS OF THE DECEASED PERSON

A. Where did the deceased person die?

- 1.  At home
- 2.  In a hospital Name \_\_\_\_\_  
City or Place \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_
- 3.  Other place (specify \_\_\_\_\_)

B. During 1960, what was the total income of the deceased and those of his family living with him? (Include income from all sources such as wages, salaries, rents from property, pensions, help from relatives, etc.)

- 1.  Under \$2,000
- 2.  \$2,000 - \$3,999
- 3.  \$4,000 - \$6,999
- 4.  \$7,000 or more

If the deceased was under 16 years of age, SKIP to Part III below.

C. What was he doing most of the 12 months before death?

- 1.  Working
- 2.  Retired
- 3.  Something else (specify \_\_\_\_\_)

D. What was the highest grade the deceased attended in school? (Circle the highest grade)

None    1 2 3 4 5 6 7 8    1 2 3 4    1 2 3 4 5+

Elementary    High School    College

PART III - INFORMATION ABOUT THE PERSON COMPLETING THIS FORM

A. Enter below the name and address of the person actually completing this form, even if different from the person to whom the form was mailed.

Name \_\_\_\_\_

Street Address \_\_\_\_\_ City \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_

B. Do you know of someone else who might be able to add to the information that you supplied?

- 1.  Yes
- 2.  No

If Yes: What is the name and address of this person?

Name \_\_\_\_\_

Address \_\_\_\_\_

\* \* \* \* \*

Use the space below to provide any additional information about the deceased person's hospital care.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



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