

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

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**Personal  
Health Expenses**  
**Per Capita Annual Expenses**  
**United States: July-December 1962**

Statistics on the per capita health expenses by age, sex, color, family income, education of the head of the household, family size, geographic region, residence, limitation of activity, and insurance coverage. Based on data collected by self-enumeration during the period July-December 1962.

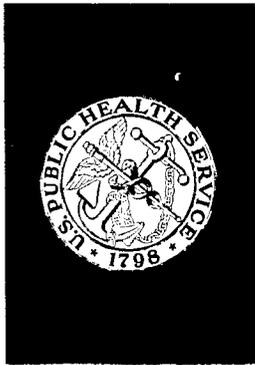
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U.S. DEPARTMENT OF  
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John W. Gardner  
Secretary

Public Health Service  
William H. Stewart  
Surgeon General



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In accordance with specifications established by the National Health Survey, the Bureau of the Census, under a contractual arrangement, participates in most aspects of survey planning, selects the sample, collects the data, and carries out certain parts of the statistical processing.

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*IN THIS SECOND REPORT on personal health expenses, data are presented on per capita expenses by the type of expenditure for the civilian, noninstitutional population. Expenses are presented for hospital care, doctor care, dental care, medicines, and special and other health services. The estimates are based on data collected by self-enumeration, employing a mail-in questionnaire left with the respondent for health interviews conducted during July-December 1962.*

*Per capita personal health expenses are shown by the type of expenditure for the characteristics of age, sex, color, size of family, family income, and education of head of family.*

*The average expense per person was estimated as \$129 for total expenses. This was divided as follows: \$30 for hospitalization, \$43 for doctor care, \$19 for dental care, \$26 for medicines, and \$11 for special and other health expenses. As expected, these expenses varied considerably when tabulated by personal, social, and health characteristics.*

#### 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-----	*

# PERSONAL HEALTH EXPENSES

## PER CAPITA ANNUAL EXPENSES

Elijah L. White, *Division of Health Interview Statistics*

### INTRODUCTION

Persons responsible for planning in the area of health facilities and services at the local, State, and Federal levels have expressed a need not only for more information on levels of health expenditures, but, in particular, for more data on the characteristics of persons in relation to their expenditure levels.<sup>1</sup> This report presents data from household interviews on per capita personal health expenses by type of expenditure and by a variety of social, economic, and health characteristics of the U.S. population.<sup>2</sup> Statistics are presented for five categories of expenditure—doctor, hospital, dental, medicine, and special and other.

Estimates for earlier years of personal health expenses of a roughly comparable nature, at least for total expenses and for a limited number of characteristics, may be found in a report of the Committee on the Costs of Medical Care,<sup>3</sup> the 1953 and 1958 reports of the Health Information Foundation-National Opinion Research Center studies,<sup>4</sup> and the Social Security Administration's series on health expenditures.<sup>5</sup>

Current economic indexes and series indicate a substantial and continuing increase in the part of national income devoted to health expenses. This report attempts to pinpoint some of the differences in the patterns of personal health expenses existing in different segments of the national population, e.g., by different regions, urban and rural groups, different income and educational levels, for insured and uninsured portions of the population, and by a number of personal and social characteristics.

Per capita expenses presented in this report are averages for the total population. For example, while the average annual expense for hospitalization was reported as \$30 per person in the total

population, the average annual expense for persons with hospitalization was about \$255 per person. Data on the varying proportions of the population who reported no health expenses for the various types of service are presented in table A.

Data on an age-adjusted basis were used for most of the charts in this report. For purposes of estimation or projection, unadjusted, as well as data adjusted for differences in age distribution by the direct method, are presented in the detailed tables.

### SOURCE AND LIMITATIONS OF THE DATA

The data for this report were tabulated from mail-in questionnaires which were left after the completion of household health interviews which are conducted on a continuing basis for a probability sample of the United States. Self-enumeration forms were selected for use for two basic reasons: (1) to avoid greatly lengthening the interviewing time for each health interview, and (2) to encourage participation of all family members in supplying more accurate information. It was suggested that bills, receipts, and other records be consulted to provide the best estimates for each person.

An earlier methodological study on "Measurement of Personal Health Expenditures," reported in *Vital and Health Statistics, Series 2, No. 2*, had indicated that the self-enumeration approach could be expected to yield about the same level of reporting as that from an interviewer-administered supplement to the regular health interview.

Special followup efforts by telephone were conducted to encourage the return of forms and to supply missing information on returned forms.

Table A. Percent of persons reporting no health expense, by age and type of expense

Age	Type of expense				
	Hospital	Doctor	Dental	Medicine	Special and other
All ages-----	87.9	38.7	61.7	32.7	75.6
Under 6 years-----	88.6	30.2	89.7	28.4	89.7
6-16 years-----	93.3	44.8	52.0	42.4	81.4
17-24 years-----	83.5	39.4	52.8	38.2	77.3
25-44 years-----	85.6	38.7	53.3	30.9	77.6
45-64 years-----	87.5	38.1	60.8	28.5	61.6
65+ years-----	86.1	37.5	77.7	24.1	65.7

Through this procedure, information was obtained for about 94 percent of the population in the interviewed households.

Data were obtained for each person for: (1) doctors' bills, (2) hospital bills, as an inpatient, (3) medicine costs, (4) dentists' bills, (5) special medical expenses, and (6) other medical expenses. The expense included all bills paid (or to be paid) by the person himself, his family, or friends, and any part paid by insurance, whether paid directly to the hospital or doctor, or paid to the person himself, or to his family. The respondents were asked to enter known amounts of expense, or, if exact amounts were unknown, the best estimates available. Certain classes of expenditure or payers were omitted, as follows: (1) health insurance premiums, (2) workmen's compensation, (3) charitable or welfare organizations, (4) military services, including Uniformed Services Dependents' Medical Care Program, (5) Veterans Administration, and (6) Federal, State, city, or county Governments. Medical care costs relating to delivery during the year prior to interview were reported for the mother. Other medical expenses, relating to the infant, were reported for the infant.

This report is based on data from household interviews conducted during the period July 1, 1962 to December 31, 1962. About 22,000 households were visited and information was secured for approximately 71,000 persons. Personal health expenses were sought for the 12-month period prior to the interview period. The population

covered was the noninstitutional population alive at the time of interview. Thus, the estimates exclude persons in the military service, residents of institutions, and that part of the population who died prior to the time of interview. The latter two groups represent important segments of the population whose health expenses would almost certainly be higher than many of those included in this report. Special surveys, aside from the regular household interview survey, are necessary to secure a more comprehensive picture of the health expenses for the total population. Such studies are within the purview of the family of surveys being conducted within the National Center for Health Statistics and provide the potential for a more comprehensive coverage in the future.

The interviewed population is a representative probability sample of the Nation's households exclusive of the military and institutionalized populations. A brief description of the statistical design of the Survey, the methods of estimation, and the general qualifications of the data is presented in Appendix I. Since all the data included in this report are estimates based on a sample of the population rather than on an enumeration of the entire population, they are subject to sampling error. While the sampling errors for most of the estimates are of relatively low magnitude, where an estimated number or the numerator or denominator of a rate or percentage is small, the sampling error may be high. A

chart from which approximate errors may be estimated and instructions for its use are contained in the section "Reliability of Estimates" in Appendix I.

Definitions of certain terms used in this report are presented in Appendix II. Since many of the terms have specialized meanings for the purpose of the Survey, it is suggested that the reader familiarize himself with these definitions.

The basic health questionnaire used during July 1962-June 1963 is illustrated in the publication, "Current Estimates From the Health Interview Survey," United States, July 1962-June 1963 (*Vital and Health Statistics*, Series 10, No. 5). Appendix III shows a facsimile of the supplemental mail-in questionnaire on health expenses including the covering letter, general instructions, and the list of questions used in obtaining health expense information for each member of the household.

## HEALTH EXPENSES BY SELECTED CHARACTERISTICS

### Age and Sex

Total health expenses increased directly with age. While the average per person expenditure was \$129, the range varied from \$61 for those under 6 years of age to \$208 for those 65 years of age and over.

Expenditures for children under 6 years of age were greater for hospitals, doctors, and medicines than for children between 6 and 16 years of age; on the other hand, expenses for dental care were higher for the older group (table 1). The decrease in the rate of medical expenses among those 6-16 years was generally consistent with the conjecture that health hazards, and hence expenses, become somewhat less when children reach the age at which they become a part of the school population. Beginning with age 17, the pattern for all types of expenses showed a continuous increase with advancing age, with the sole exception of dental expenses which decreased for those age 65 years and over (fig. 1).

In general, health expenses were higher for females than for males with most of the differences accounted for by females in the child-bearing ages. Among persons 17-44 years, the higher expenses for medical care among females

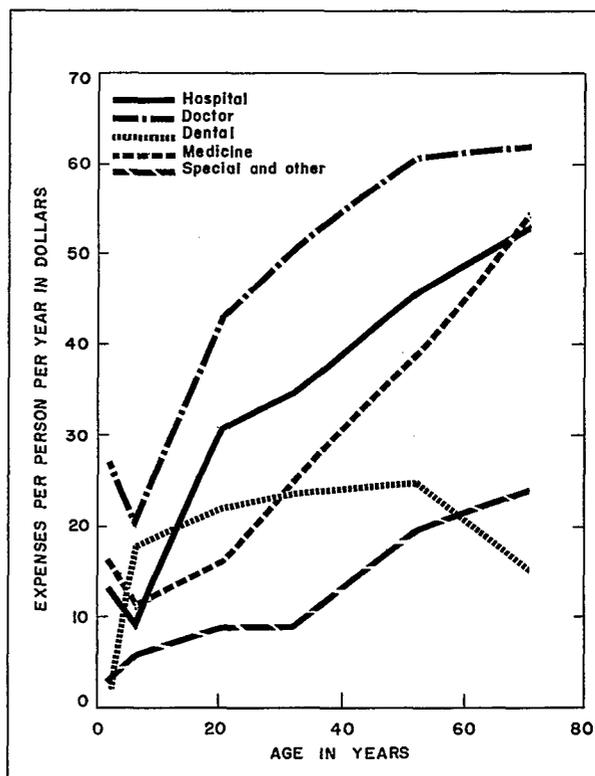


Figure 1. Health expenses per person per year, by type of expense and age.

were, for the most part, associated with hospital and doctor costs. On the other hand, females under 17 years of age had lower expenses for hospital and doctor care than did males of the same age. Among males 65 and over the hospital expenses per person were higher than for females in this age group. The level of expense for dental care was quite similar for males and females 45 years and older. Expenses for doctor care were almost the same for males and females among those 65 years of age and over.

### Education

The influence of education on health expenses added an important dimension to the examination of patterns of health expenditures.

These data use, as an indicator of education, the level of educational attainment reported for the head of the family. The assumption is that the education of the head of the family may be

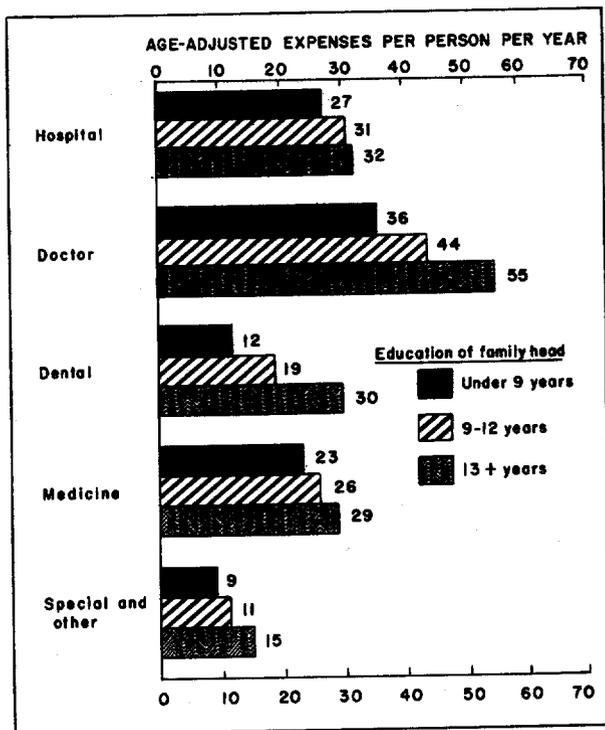


Figure 2. Age-adjusted health expenses per person per year, by type of expense and education of head of family.

more of a determining factor in the family's health practices than the education of its individual members.

As noted earlier, to facilitate comparisons between components of demographic variables, age-adjusted rates are shown in most of the tables. Since the data have been adjusted to the age composition of the total civilian, noninstitutional population, much of the difference among components, due to variations in the age distribution, has been removed.

All types of health expenses increased with educational level (fig. 2). After adjustment for differences in the age distribution of the educational groups, it was found that persons with less than 9 years of education spent an estimated \$107 per person for health care as compared with those with some college education who spent \$161, an increase of about 50 percent (table 2). Correspondingly, the average hospital expenses for persons living in families whose head had some col-

lege training were about 19 percent higher than for those whose head had less than 9 years of education; doctor expenses were about 53 percent higher; dental expenses, 150 percent higher; medicine expenses, 26 percent higher; and special and other health expenses, 67 percent higher.

The sizable increases for doctor and dental expenses with higher levels of education may possibly be accounted for by the greater use of preventive health care among the better educated families. It is reasonable to expect that persons with higher educational attainment recognize the need for preventive services, both medical and dental. Also, in case of illness, they are more likely to consult medical specialists for diagnosis and treatment.

Education of head of family	Doctor visits	Dental visits	Hospital discharges per 1,000 population
Under 5 years-	4.0	0.6	129.1
5-8 years-----	4.2	1.1	125.5
9-12 years----	4.4	1.6	132.0
13+ years-----	5.4	2.6	124.9

Recent data on the number of doctor visits by educational level support this supposition, following essentially the same pattern as that for doctor expenses. Persons living in families whose head had less than 5 years of education reported an average of about 4.0 visits per year compared with 5.4 visits per year for those where the head of the family had some college education. Differences in visits to a dentist were even more marked—0.6 and 2.6 visits per person per year, respectively, for the lower and higher educational levels.

The uniform pattern of unadjusted per capita hospital expenses by educational level, shown in table 2, does not reflect the irregularities of the utilization rates shown above. Such factors as the exclusion of public funds from the expense data, and the effect of costs associated with varied and extra hospital services contribute to the lack of variation in the expense pattern.

The percentage distribution of total expenses by type of expenditure is presented for each ed-

Table B. Percent distribution of unadjusted health expenses according to selected characteristics: United States, July-December 1962

Characteristic	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>Sex</u>						
Percent distribution						
Male-----	100.0	22.5	33.3	15.3	29.8	9.0
Female-----	100.0	23.6	34.0	13.9	20.1	8.3
<u>Age</u>						
Under 6 years-----	100.0	21.3	44.3	3.3	26.2	4.9
6-16 years-----	100.0	14.1	31.3	28.1	17.2	9.4
17-24 years-----	100.0	25.6	35.5	18.2	13.2	7.4
25-44 years-----	100.0	24.3	35.4	16.7	17.4	6.2
45-64 years-----	100.0	24.1	31.9	13.1	20.4	10.5
65+ years-----	100.0	25.5	29.8	7.2	26.0	11.5
<u>Educational groups</u>						
Under 9 years-----	100.0	25.6	32.2	10.7	22.3	9.1
9-12 years-----	100.0	23.4	33.9	15.3	19.4	8.1
13+ years-----	100.0	19.4	34.8	19.4	17.4	9.0
<u>Family income</u>						
Under 2,000-----	100.0	25.0	32.1	8.0	25.0	9.8
\$2,000-\$3,999-----	100.0	25.9	32.8	9.5	22.4	9.5
\$4,000-\$6,999-----	100.0	25.2	34.5	13.4	19.3	7.6
\$7,000-\$9,999-----	100.0	21.5	34.1	17.8	18.5	8.1
\$10,000+-----	100.0	19.1	33.7	20.8	17.4	9.0
<u>Color</u>						
White-----	100.0	23.0	33.3	14.8	20.0	8.9
Nonwhite-----	100.0	25.6	34.6	10.3	21.8	7.7
<u>Geographic region</u>						
Northeast-----	100.0	22.1	32.4	17.6	19.9	8.1
North Central-----	100.0	26.4	33.1	13.2	18.2	9.1
South-----	100.0	22.9	33.9	11.9	22.9	8.5
West-----	100.0	21.2	35.8	16.6	17.2	9.3
<u>Residence</u>						
Urban-----	100.0	23.0	33.8	15.1	19.4	8.6
Urbanized areas-1 million+	100.0	21.9	33.8	17.2	19.2	7.9
Urbanized areas-less than 1 million-----	100.0	23.1	34.3	14.9	19.4	8.2
Other urban places-----	100.0	25.4	31.7	12.7	20.6	9.5
Rural nonfarm-----	100.0	24.5	33.6	11.8	20.9	9.1
Rural farm-----	100.0	23.1	33.0	12.1	20.9	11.0

Table B. Percent distribution of unadjusted health expenses according to selected characteristics: United States, July-December 1962—Con.

Characteristic	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>Family size</u>		Percent distribution				
1 member-----	100.0	21.9	31.5	13.5	20.8	12.4
2 members-----	100.0	24.1	31.4	12.0	22.5	9.9
3 members-----	100.0	23.5	34.2	14.8	19.5	8.1
4 members-----	100.0	21.8	34.7	16.9	18.5	8.1
5 members-----	100.0	22.0	35.0	17.0	19.0	7.0
6 members-----	100.0	23.1	35.2	15.4	18.7	7.7
7+ members-----	100.0	27.1	35.7	12.9	17.1	7.1
<u>Activity limitation status</u>						
Persons with no chronic conditions-----	100.0	16.7	33.3	23.6	18.1	8.3
Persons with 1+ chronic conditions-----	100.0	26.4	33.8	10.4	20.4	9.0
Not limited in activity-----	100.0	23.2	34.8	14.0	19.5	8.5
With limitation but not in major activity <sup>1</sup> -----	100.0	27.4	35.2	7.4	21.9	8.1
With limitations in amount or kind of major activity <sup>1</sup> -----	100.0	28.8	33.0	6.0	23.2	9.0
Unable to carry on major activity <sup>1</sup> -----	100.0	37.7	28.9	2.4	20.8	10.3
<u>Insurance status</u>						
<u>Hospital insurance</u>						
Insured-----	100.0	23.8	33.6	15.4	18.9	8.4
Not insured-----	100.0	21.9	33.3	11.5	22.9	10.4
<u>Surgical insurance</u>						
Insured-----	100.0	23.6	34.0	15.3	18.7	8.3
Not insured-----	100.0	22.0	33.0	12.0	23.0	10.0
<u>Occupational status</u>						
White-collar workers-----	100.0	18.9	33.7	18.9	18.3	9.5
Blue-collar workers-----	100.0	25.2	31.7	14.6	18.7	8.9
Service workers-----	100.0	24.3	34.3	13.6	20.0	8.6
Farm workers-----	100.0	20.2	31.0	13.1	23.8	13.1

<sup>1</sup>Major activity refers to ability to work, keep house, or engage in school or pre-school activities.

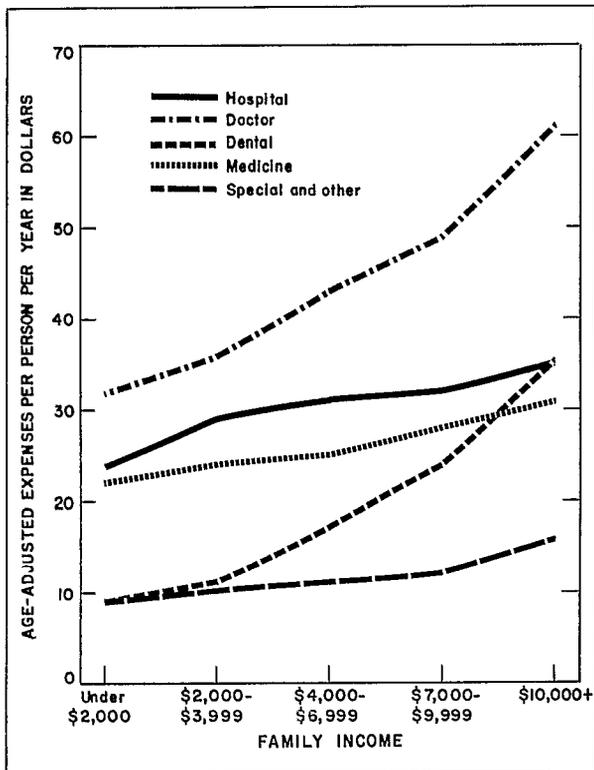


Figure 3. Age-adjusted health expenses per person per year, by type of expense and family income.

educational level in table B. Hospital expenses represented a smaller proportion of the health expenses of those with some college, 19.4 percent in comparison with 25.6 percent for those with less than 9 years' education, while dental expenses accounted for 19.4 percent of the total expenses for those with some college compared with 10.7 percent for those with less than 9 years' education. The proportion spent for medicine declined as the

level of education became higher. Doctor and special and other expenses were approximately the same proportion for all educational levels.

### Family Income

Age-adjusted data indicated that personal health expenses increased, as expected, with the level of family income (fig. 3). For example, total expenses varied from \$96 for those with family incomes of less than \$2,000 to \$178 for those with \$10,000 or more income, an increase of 85 percent (table 3). This same type of variation was true for all types of expenditure. For example, hospital expenses were 46 percent higher; doctor expenses, 91 percent higher; dental expenses, 289 percent higher; and medicine expenses were 41 percent higher.

While these differences might be realistic on the basis of out-of-pocket expenses, some allowance must be made for the fact that those at the lower income levels were also the beneficiaries of public health expenditures for medical care. Other reports from the National Health Survey program have indicated that persons with a higher income do utilize medical services and facilities more, in general. Nevertheless, these differences are not accounted for entirely by the number of doctor or dental visits or the number of hospitalizations. Some of the differences may also be due to differential charges for health services based on the ability to pay, or differential use of publicly supported facilities. Although data are not available from this period of the survey for health services and the associated expenses for these services, it is possible to compare utilization from another year of the survey with unadjusted per capita expenses for hospital, doctor, and dental services:

Income	Number of doctor visits per person	Per capita doctor expenses	Number of dental visits per person	Per capita dental expenses	Number of short-stay hospital discharges per 1,000 population per year	Per capita hospital expenses
Under \$2,000-----	4.3	\$36	0.8	\$9	136.4	\$28
\$2,000-\$3,999----	4.3	38	0.9	11	145.6	30
\$4,000-\$6,999----	4.5	41	1.4	16	128.0	30
\$7,000-\$9,999----	4.7	46	1.9	24	121.7	29
\$10,000+-----	5.1	60	2.8	37	116.5	34

Note: Utilization estimates are based on data collected during the period, July 1963-June 1964; estimates of expense are based on the July-December 1962 collection period.

Table C. Age-adjusted health expenses per person per year, by education of head of family and family income: United States, July-December 1962

Education of head of family and family income	Total	Type of expense				
		Hospital	Doctor	Dental	Medicine	Special and other
<u>Under 9 years</u>		Age-adjusted expense per person per year				
All incomes-----	\$107	\$27	\$36	\$12	\$23	\$9
Under \$2,000-----	82	21	27	6	21	7
\$2,000-\$3,999-----	101	27	33	9	23	9
\$4,000-\$6,999-----	111	28	38	13	23	9
\$7,000-\$9,999-----	141	35	49	20	27	10
\$10,000+-----	145	32	46	27	28	12
<u>9-12 years</u>						
All incomes-----	131	31	44	19	26	11
Under \$2,000-----	111	29	39	10	22	11
\$2,000-\$3,999-----	117	30	38	13	26	10
\$4,000-\$6,999-----	132	34	45	17	25	10
\$7,000-\$9,999-----	139	32	45	23	28	11
\$10,000+-----	172	35	60	30	31	17
<u>13+ years</u>						
All incomes-----	161	32	55	30	29	15
Under \$2,000-----	141	37	42	23	24	14
\$2,000-\$3,999-----	137	36	42	18	28	13
\$4,000-\$6,999-----	143	29	48	25	27	14
\$7,000-\$9,999-----	158	34	56	27	29	12
\$10,000+-----	191	35	66	41	32	17

### Income and Education

It has been shown that the level of per capita health expenses rises with an increase in either family income or the education of the family head. Data in table 4 show the combined effect of family income and educational attainment on the levels of health expenses.

Unadjusted estimates of expense show a general pattern of upward progression as educational level increases within each income group for total expenses and for each of the expense categories. However, with age adjustment there is a sharp increase in the differential of expenses among persons in the lower and higher educational

groups within each income group. This increase emphasizes the comparatively high proportion of older persons (with high medical expenses) at the low educational level.

Reference to table C indicates an overlapping of expenditure levels for persons of higher educational level with those in higher income groups but with lower education. For example, persons in the group in which the head of the family had attained 9-12 years of formal education and whose income was less than \$2,000 spent the same amount (\$111) for health expenses as those with an educational level of less than 9 years and an income of \$4,000-\$6,999. This overlapping pattern is most clearly exemplified by dental ex-

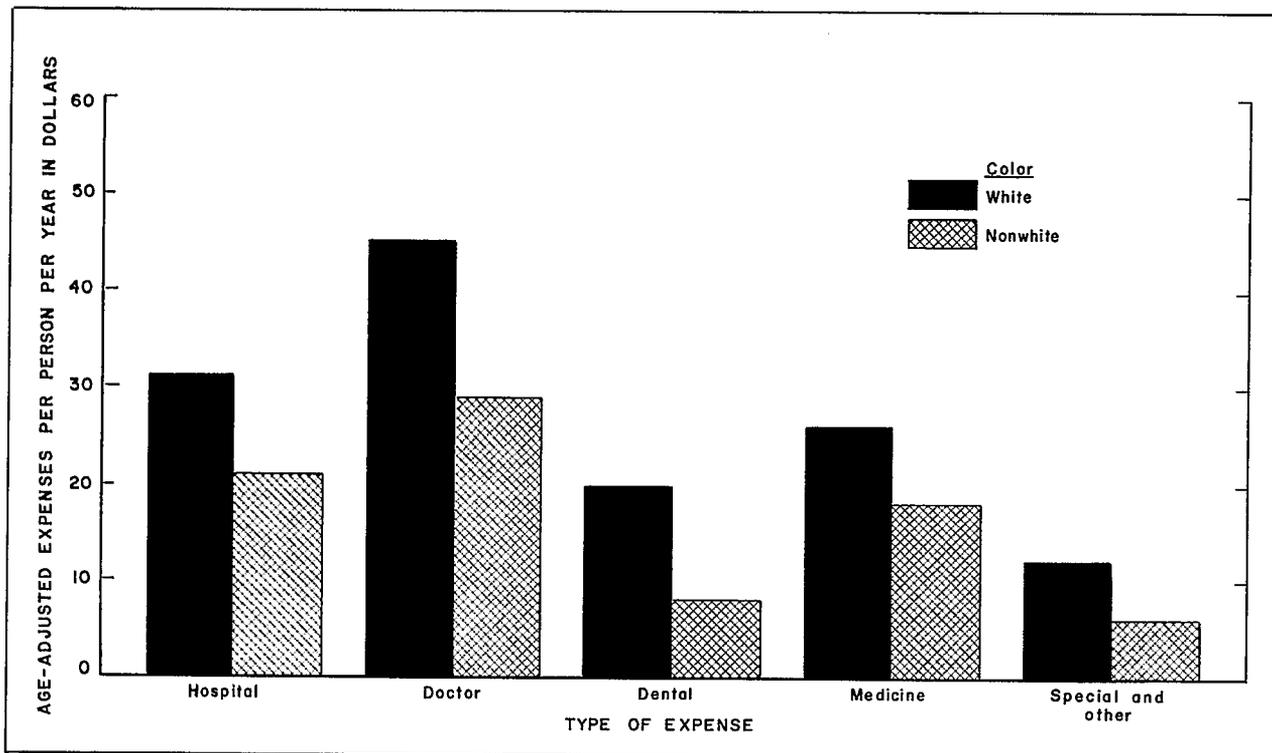


Figure 4. Age-adjusted health expenses per person per year, by color and type of expense.

penditures. In almost all instances, those with some college education and a specified income level spent about as much, or more, than those of lesser education at the next higher income level. Thus, education seems to have more influence than income on health expenditures.

From these data it is apparent that persons at the higher educational levels spent a relatively higher proportion of their income for health care than did persons in poorly educated families.

### Color

Personal health expenses for the nonwhite population were approximately two-thirds the level reported for the white population, regardless of type of health expense (fig. 4 and table 5). Consistent with this finding, data on doctor visits, dental visits, and the number of hospital discharges indicate a lower rate of utilization for the nonwhite portion of the population.

Color	Doctor visits per person per year	Per capita doctor expenses	Dental visits per person per year	Per capita dental expenses	Hospital discharges per 1,000 persons	Per capita hospital expenses
White-----	4.7	\$45	1.7	\$20	132.3	\$31
Nonwhite-----	3.3	29	0.9	8	96.4	21

Note: Utilization estimates are based on data collected during the period, July 1963-June 1964, estimates of expense are based on the July-December 1962 collection period.

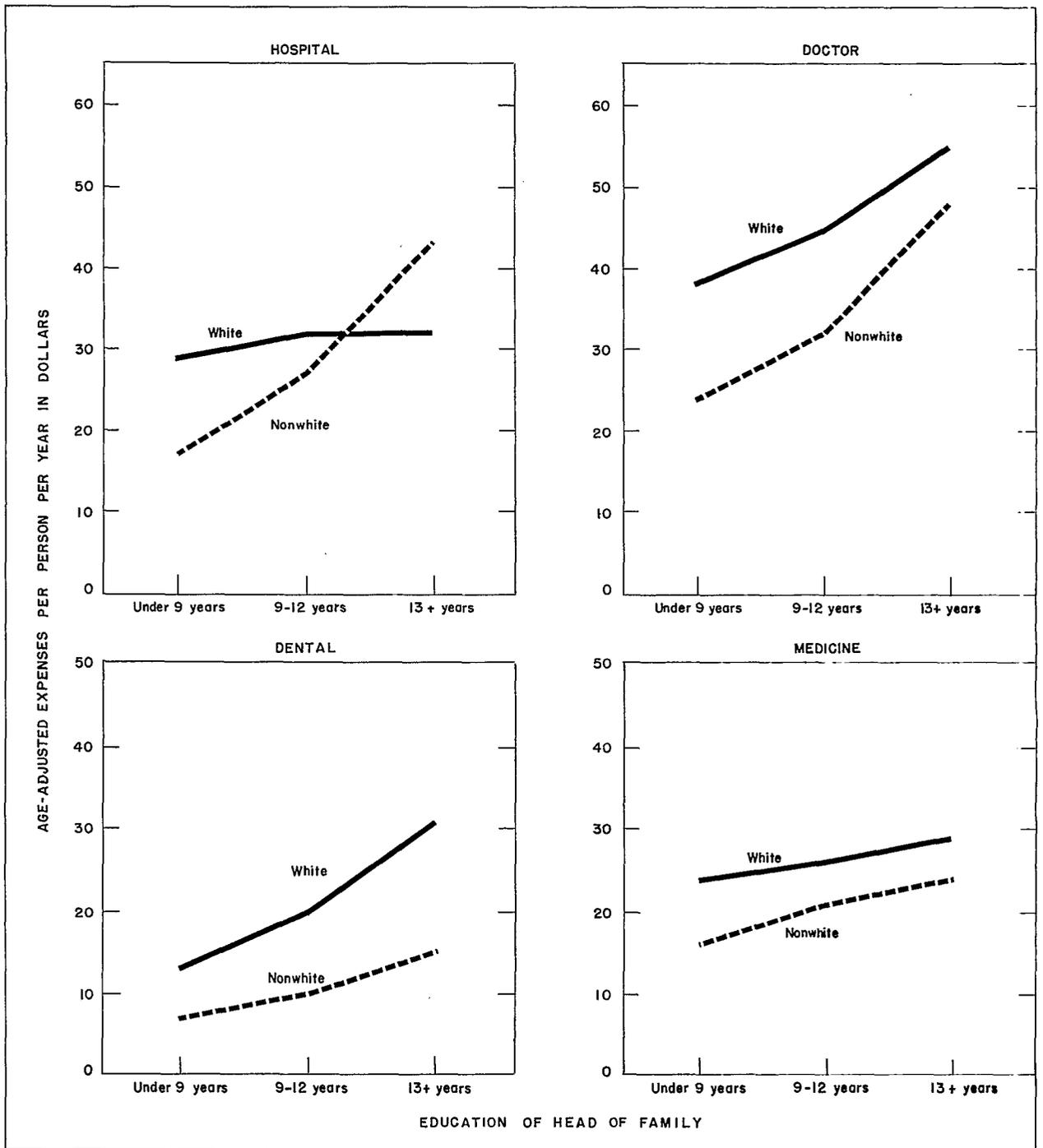


Figure 5. Age-adjusted health expenses per person per year, by type of expense, color, and education of head of family.

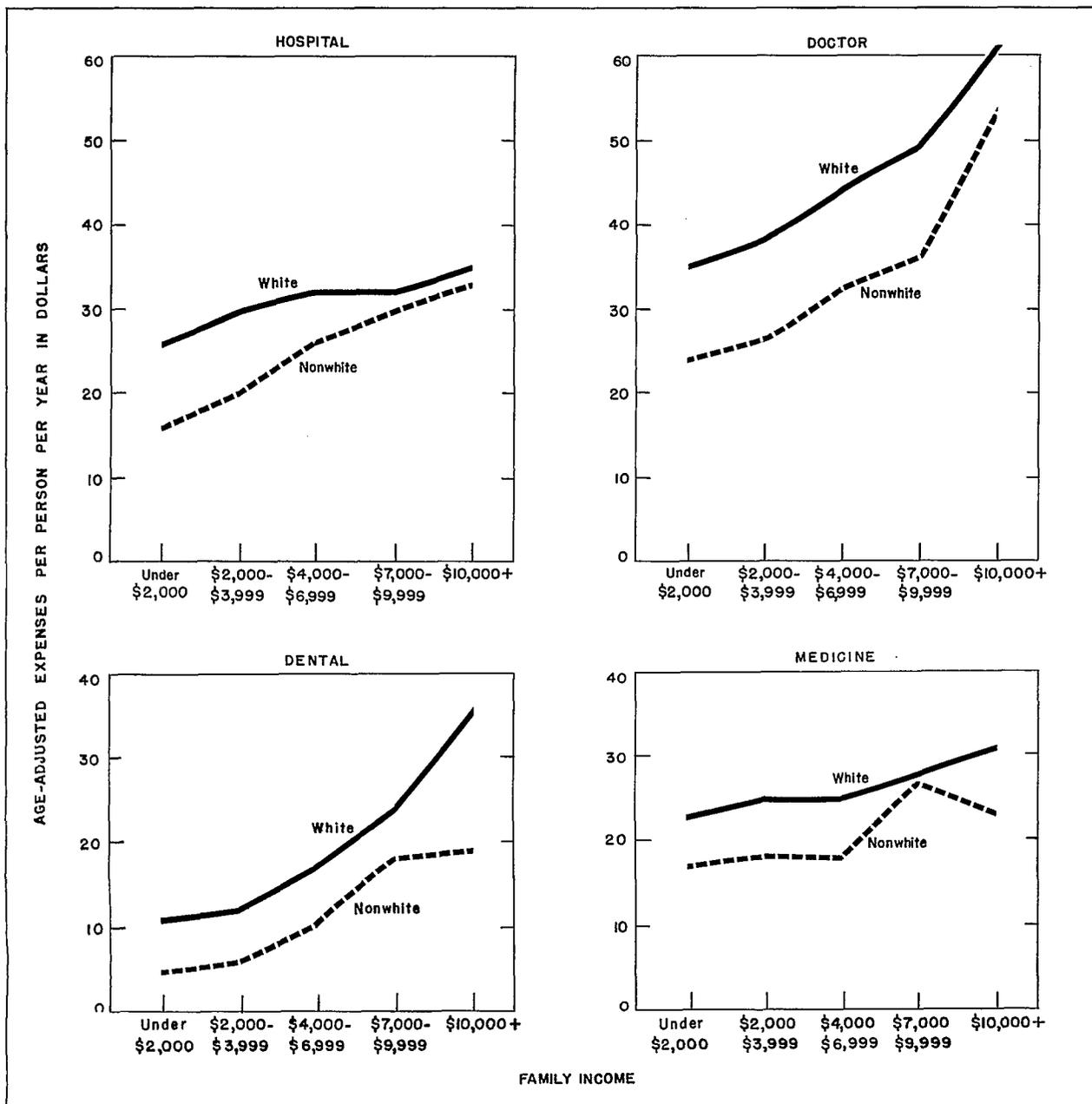


Figure 6. Age-adjusted health expenses per person per year, by type of expense, color, and family income.

Additional tabulations were designed to show age-adjusted data for color by income, and color by education to explore the relationship of health expense and color when income and education were taken into account. Table 6 indicates that, while the level of total expenses in general increased with income regardless of color, the white population still spent more for health care

at each income level, although a narrowing of the differences occurred at the highest income level.

In general, age-adjusted rates by color according to the educational attainment of the head of the household also indicated a lower level of expense for nonwhite persons (table 7). However, among persons who had some college education, expenses for hospitalization were higher among

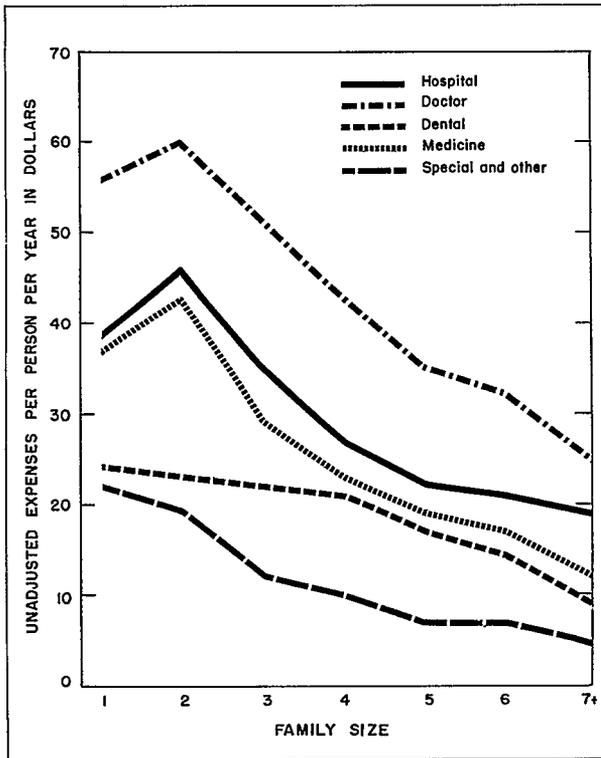


Figure 7. Unadjusted health expenses per person per year, by type of expense and family size.

nonwhite than among white persons. Except for dental expenses there was a definite decrease in the differences in expenditure levels by color as the educational level increased (fig. 5).

The levels of total health expenses by color and income, as shown in table 6, also indicate a closing of the gap between expenses for white and nonwhite persons as family income increased, moving from a difference of about 57 percent at the under \$2,000 level to approximately 30 percent at the \$10,000+ level (according to age-adjusted data). However, as indicated in figure 6, the difference in level of expenses varied by the type of expense and the level of income. Hospital and doctor expenses came closer together as income increased, but expenses for dental care and medicines unexpectedly dropped off for nonwhite persons at the highest income level.

It should be noted that other factors such as the size of a family should be taken into account in considering the magnitude of these differences. For example, on a family basis, more total health

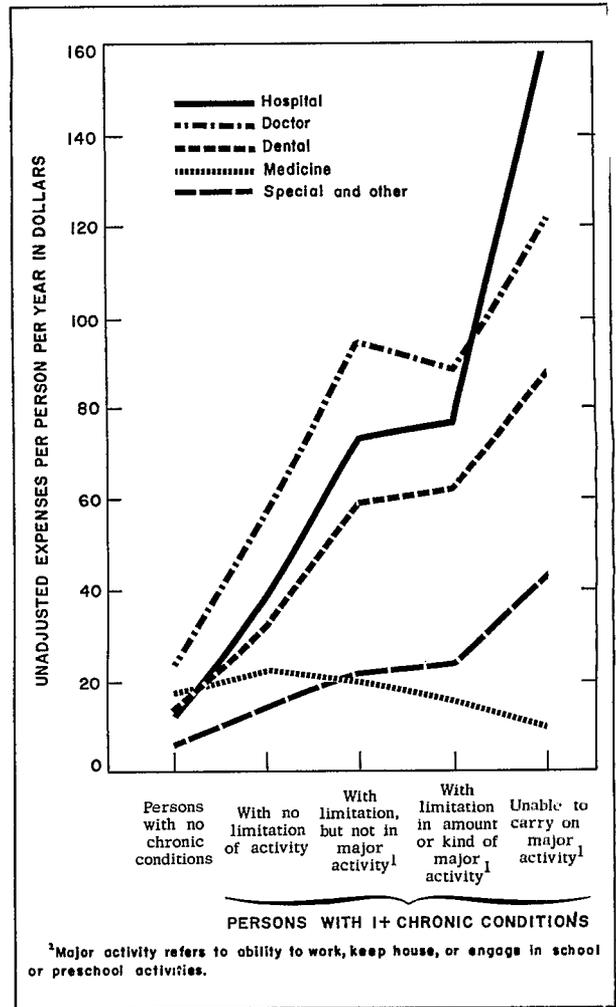


Figure 8. Unadjusted health expenses per person per year, by type of expense and degree of chronic limitation of activity.

expenses may be involved in nonwhite families even though per capita expenses are lower for nonwhite than for white persons.

Because of the preponderance of white persons in the weighted estimates, their patterns of expenses were essentially the same as those for the total population discussed elsewhere under the single variables of education and income.

### Family Size

Data are presented in figure 7 for the per capita expenses of individuals who live in families

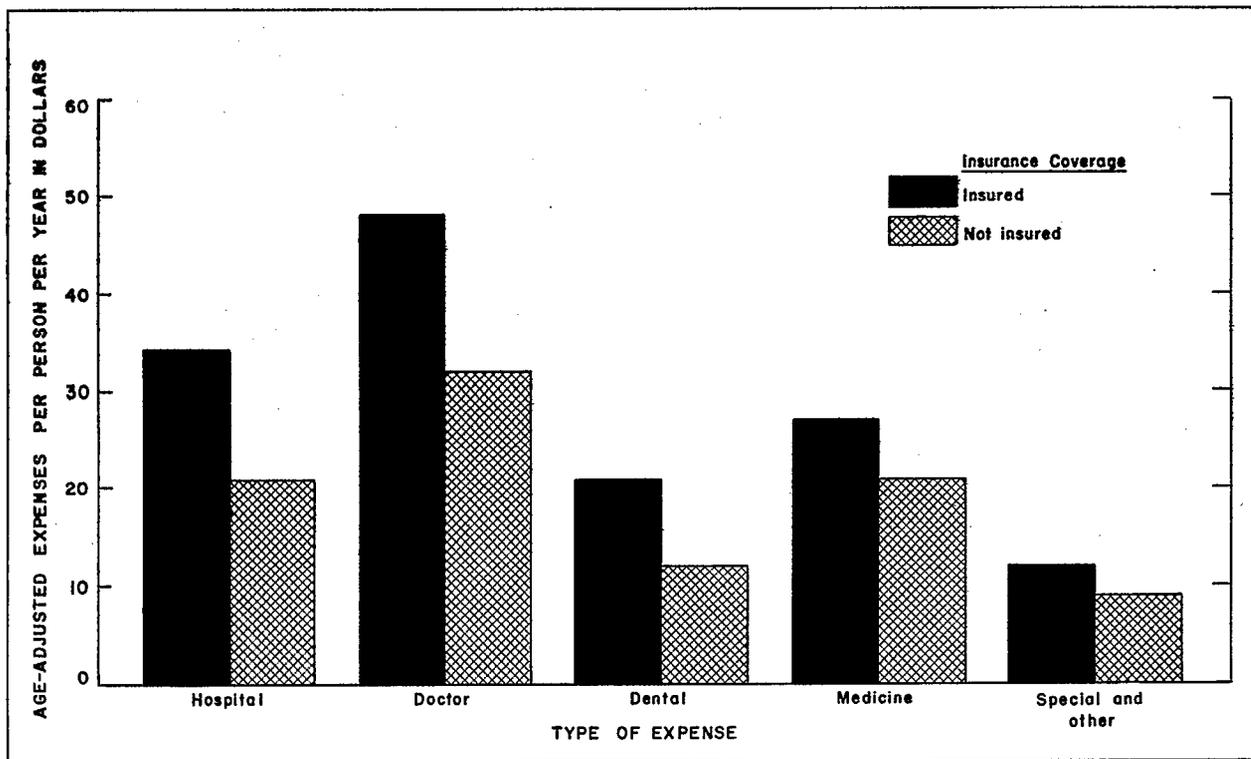


Figure 9. Age-adjusted health expenses per person per year, by hospital insurance coverage and type of expense.

of a specified size. Since family size is related to age, this chart, unlike most others in this report, has not been presented on an age-adjusted basis. It should be emphasized that these data do not reflect total family expenses. Instead they should be considered as only indicative of the general effect of family size on expenditures for individual members of the family. Among persons living in a family of three or more persons, there was a gradual decrease in health expenses with the increase in family size (table 8). Data for persons living alone or in 2-member families did not fall into this same pattern.

The characteristic age composition of families of varying size accounts to some extent for the marked differences in the level of health expenses among persons living alone or in 2-member families, and those in families with three or more members. Persons 65 years and older comprise approximately 29 percent of the persons in the former category, while in the latter group

they represent only 3 percent of the population.

An earlier report on "Medical Care, Health Status, and Family Income" (*Vital and Health Statistics*, Series 10, No. 9, pp. 46,47), indicated a dramatic difference in the health expenditure level for children under the age of 15 when family size and family income were taken into account. Not only did the per capita expenses decrease with increasing family size, but the expenses for health care were actually five times higher for a child under 15 years of age in a family of three when family income was \$7,000 or more than for a child living in a family of seven or more members where the family income was less than \$2,000.

#### Chronic Activity Limitation Status

As expected, among persons with chronic conditions, there is a pattern of increasing health expenses with the increased severity of the dis-

ability associated with chronic illness (table 9). Because of the high correlation of advancing age with the existence of chronic conditions and associated disability, age-adjustment is not an appropriate statistical procedure in the analysis of these data.

Significant changes in the level of expenses for medicine, doctor, hospital, and special and other services were evident for persons who had chronic disease and increasing amounts of activity limitation (fig. 8). On the rough scale of disability, represented in these data, the average annual amount of health expenses among persons unable to carry on their major activity of working, keeping house, or going to school (\$419) was approximately six times the average expenses among those with no chronic conditions reported (\$72). This ratio was fairly constant for doctor and medicine expenses, but for hospital expenses disabled persons spent about 13 times the amount reported by those with no chronic conditions.

On the other hand, dental expenses followed a pattern of decrease with an increase in activity limitation. This finding supports the concern which recent dental publications have shown with respect to the need of providing care for persons whose limitation of activity or mobility restricts visits to a dentist's office.

### Hospital Insurance Coverage

Persons with hospital insurance coverage reported expenses for hospitalization, doctors, and dentists which were about 50 percent higher than those without coverage. Medicine and other expenses were approximately one-third higher for the insured population (fig. 9 and table 10).

The distribution of total expenses according to each type of expenditure in relation to hospital insurance status was interesting (table B). Both the insured and those not insured spent an estimated one-third of their health expenses for doctor services, about 19 and 23 percent for medicine, 15 and 12 percent for dental services, 24 and 22 percent for hospitalization, and 8 and 10 percent respectively, for special and other health expenses.

Data for surgical insurance coverage indicate an almost identical pattern since one kind of coverage was almost always accompanied by the other.

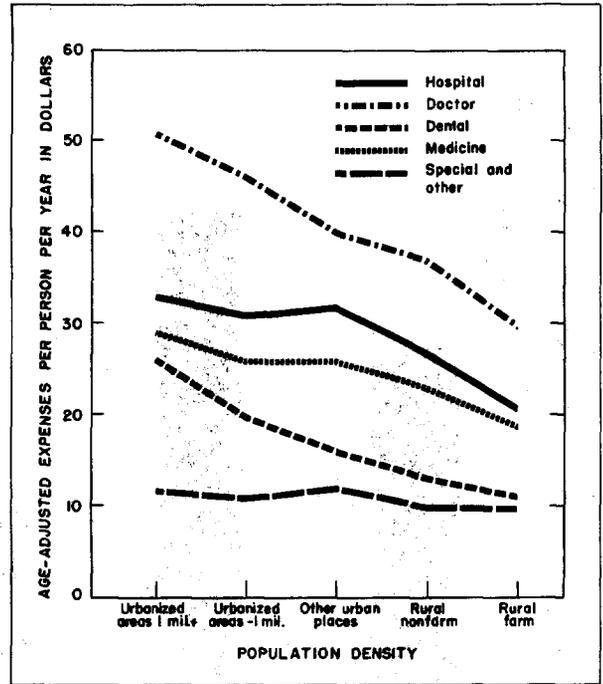


Figure 10. Age-adjusted health expenses per person per year, by type of expense and population density.

### Residence

Health expenditure data presented in figure 10 indicate that as population density decreases the per capita expenditures for all types of care also decrease. However, as shown in table B, the proportions of the health expenses for each type of service except dental care vary only slightly for places of residence when ranked by the size of the city and on the urban-rural continuum. The proportion of the health dollar spent for dental care varies from about 12 percent in the rural areas to 17 percent in urbanized areas with over one million population. Doctor expenses make up about one-third of total expenses regardless of the area of residence.

The comparatively low average amount of expense among rural-farm residents (table 11) for all types of health expenses is consistent with the low rate of doctor visits in farm areas (Series 10, No. 18), the low rate of dental visits (Series 10, No. 23), the low rate of hospital discharges among farm residents (Series B, No. 32),



Figure 11. Age-adjusted health expenses per person per year, by geographic region and type of expense.

and the low proportion of persons in these areas with health insurance coverage (Series 10, No. 11).

### Region

Per capita health expenses for people living in the West were higher than those for the other

geographic regions regardless of the type of expenditure (fig. 11). According to age-adjusted data in table 12, persons in the North Central and the West Regions reported the highest expenses for hospitalization while the expenses for medicine were highest in the South and West. Expenses for doctor care in the West were dramatically higher

Table D. Number of doctor and dental visits per person per year, number of discharges from short-stay hospitals per 1,000 persons per year, and average length of stay in days per person hospitalized, by geographic region: United States, July 1963-June 1964

Geographic region	Doctor visits per person per year	Dental visits per person per year	Discharges from short-stay hospitals per 1,000 persons per year	Average length of stay per person hospitalized
All regions-----	4.5	1.6	128.1	8.1
Northeast-----	4.5	2.1	119.1	9.2
North Central-----	4.4	1.5	128.2	8.0
South-----	4.2	1.1	134.7	7.5
West-----	5.4	1.7	129.1	7.9

Table E. Health expenses per person per year for persons aged 17+ years in the labor force, by type of expense and occupation: United States, July-December, 1962

Occupation	Total	Type of expense				
		Hospital	Doctor	Dental	Medicine	Special and other
Expenses per person per year						
All occupations-----	\$142	\$31	\$47	\$24	\$27	\$13
<u>White-collar workers</u>						
Total-----	169	32	57	32	31	16
Professional, technical, and kindred workers-----	162	28	55	35	29	16
Managers, officials, and proprietors, except farm-----	192	38	63	34	36	21
Clerical and kindred workers----	161	33	55	32	28	14
Sales workers-----	163	29	59	26	35	15
<u>Blue-collar workers</u>						
Total-----	123	31	39	18	23	11
Craftsmen, foremen, and kindred workers-----	129	32	41	20	24	11
Operatives and kindred workers--	124	31	39	18	24	11
Laborers, except farm and mine--	103	27	35	13	19	9
<u>Service workers</u>						
Total-----	140	34	48	19	28	12
Private household workers-----	120	27	41	15	26	12
Other service workers-----	147	36	50	20	28	12
<u>Farm workers</u>						
Total-----	84	17	26	11	20	11
Farmers and farm managers-----	93	20	28	12	21	12
Farm laborers and foremen-----	71	12	22	9	18	9

than those in any other region. This reflects the high proportion of persons with complete medical care insurance coverage (41.6 percent) in the West Region. Comparable percentages in the other regions were 15 percent or less (Series 10, No. 16). Dental care costs were highest in the West and Northeast. Except for medicine expense, the South was lowest of any of the regions with respect to each type of expenditure. Utilization data

in table D tend to support the above patterns except for hospitalization.

Reference to table B indicates that persons in the North Central Region spent a higher proportion of their total health expenses (26.4 percent) for hospitalization than did persons in any of the other regions. The West was highest in the proportion spent for doctor care; the Northeast for dental care; and the South for medicine.

## Occupational Status

Personal health expenses for persons in the labor force and by broad occupational groups are presented in table E. Total expenses for those in the labor force (\$142) were about 10 percent higher than those for the population as a whole (\$129). Although the per capita expenses were higher for each type, the greatest difference was in doctor and dental expenses. Inspection of the data for the various occupational groups indicates a much higher than average expenditure among the white-collar workers. In contrast, the expenses among farm workers were substantially below those for the total labor force and the general population.

A detailed presentation of these expenses for occupational groups by age and sex is presented in Series 10, No. 21, "Selected Health Characteristics by Occupation, United States, July 1961-June 1963." Definitions and inclusions of the classifications used in table E are also included in this publication.

## ALLOCATION OF PERSONAL HEALTH EXPENSES BY TYPE OF EXPENDITURE

Although references have already been made to the distribution of health expenses by selected characteristics, it may be of interest to summarize differences among these characteristics. The differences in patterns of spending the health dollar for the various types of health care may reflect a variation in the needs or type of health practices found in the various segments of the population. Obviously, if expenses are relatively high for one type of service, the proportions spent for other services must be necessarily lower.

Examination of data in table B on expenses for doctors' services reveals a remarkable uniformity of the proportion of total expenses for these services. Thus, regardless of education, income, size of family, place of residence, region, insurance status, activity limitation status, or color, approximately one-third of all expenses were for doctor services. More variation is found for the different age groups than for all the other

personal, social, or health characteristics considered in this report. For example, among children under age 6, 44.3 percent of the total expenses were for doctors' services, as compared with 29.8 percent for persons 65 or more years of age.

The average proportion of the total expenses which were spent for hospital service was about 23 percent. Persons with 26 percent or more spent on hospital care included persons living in the North Central Region, persons living in households of seven or more members, and persons with chronic conditions causing any degree of limitation of activity. On the other hand, those whose hospital expenses were 20 percent or less of the total health expenses included children between the ages of 6 and 16, persons with any college education, persons with a family income of \$10,000 or more, white-collar workers, and persons reporting no chronic conditions.

On an overall basis, about 15 percent of the total health expenses was for dental care. The variation in expenditures for dental care was much greater among the various segments of the population than for all the other types of expenses. Characteristics of persons with relatively smaller proportions of expenses for dental care included persons under 6 and persons 65 years or over in age, persons with less than 9 years of education, those with incomes less than \$4,000, the nonwhite population, and persons with chronic disease who had any degree of limitation of activity. However, other segments of the population spent considerably above the average proportion of their health expenses for dental care including children 6-16, those with an income over \$10,000, those with any college education, white-collar workers, and persons reporting no chronic conditions.

The proportion of health expenses applied to the purchase of medicine averaged about 20 percent for the total population. Of all the characteristics considered, the greatest difference was found among the various age groups. Those under 6 and those 65 years of age or older spent about 26 percent of their total expenses for medicines while persons 17-24 years reported approximately 13 percent. Also reporting relatively high expenditures for medicines were farm workers (23.8 percent) and persons whose family income was below \$2,000 (25.0 percent) while

those reporting the highest income spent a lower proportion (17.4 percent). With the above exceptions, the percentages spent for medicine varied only slightly around the averages.

As with medicines, the largest variation in expenditures for special and other expenses was found in the various age groups. Thus, those under age 6 and those between 17 and 44 years of age, as expected, had a much lower proportion of expenses in these categories. There was, however, a sizable increase in special expenses for those over 65 years who would be expected to have spent more for these types of services or health equipment. (See definition of inclusions of special and other category in Appendix II.) Farm workers also reported above average expenses in this category. On the other hand, persons who were nonwhite and members of the largest families spent a relatively lower proportion of their expenditures for special services and equipment. It should be noted that the low proportion of expense for this residual category may be markedly influenced by large expenditures for other types of service or care.

## POPULATION DATA

Tables 13-18 present data on population distribution by appropriate characteristics which may be useful in deriving expense aggregates.

Thus, by relating per capita expenses to the appropriate population data one can obtain useful estimates of total expenses for a variety of characteristics presented in this report.

## REFERENCES

<sup>1</sup>U.S. Public Health Service: Report of the U.S. National Committee on Vital and Health Statistics. *U.S. Statistics on Medical Economics*. PHS Pub. No. 1125. Public Health Service. Washington. U.S. Government Printing Office, Jan. 1964.

<sup>2</sup>National Center for Health Statistics: Personal health expenses, distribution of persons by amount and type of expense. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 10-No. 22. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1965.

<sup>3</sup>Falk, I.S., Klem, M.C., and Sinai, N.: *The Incidence of Illness and the Receipt and Costs of Medical Care Among Representative Families, Experiences in Twelve Consecutive Months During 1928-1931*. Chicago. University of Chicago Press, 1933.

<sup>4</sup>Anderson, O.W., Collette, P., and Feldman, J.J.: Family expenditure patterns for personal health services, 1953 and 1958, nationwide surveys. *Research Series No. 14*. Health Information Foundation, New York, 1960.

<sup>5</sup>Reed, L.S., and Rice, D.P.: Private consumer expenditures for medical care and voluntary health insurance, 1948-1962. *Social Security Bulletin*, Dec. 1963.



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Table 1. Health expenses per person per year, by type of expense, sex, and age: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Type of expense						
	Total	Hospital	Doctor	Dental	Medicine	Special and other	
<u>Both sexes</u>		Expense per person per year					
All ages-----	\$129	\$30	\$43	\$19	\$26	\$11	
Under 6 years-----	61	13	27	2	16	3	
6-16 years-----	64	9	20	18	11	6	
17-24 years-----	121	31	43	22	16	9	
25-44 years-----	144	35	51	24	25	9	
45-64 years-----	191	46	61	25	39	20	
65+ years-----	208	53	62	15	54	24	
<u>Male</u>							
All ages-----	111	25	37	17	22	10	
Under 6 years-----	64	15	28	2	16	3	
6-16 years-----	64	11	21	15	11	6	
17-24 years-----	78	14	24	20	12	3	
25-44 years-----	110	23	37	21	20	9	
45-64 years-----	180	44	58	24	35	19	
65+ years-----	203	57	62	15	48	21	
<u>Female</u>							
All ages-----	144	34	49	20	29	12	
Under 6 years-----	56	11	25	2	16	2	
6-16 years-----	65	8	19	20	12	6	
17-24 years-----	157	45	59	24	20	9	
25-44 years-----	175	46	64	26	29	10	
45-64 years-----	203	48	64	26	44	21	
65+ years-----	208	49	61	14	58	26	

Table 2. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, sex, and education of head of family: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population: The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and education of head of family	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>Both sexes</u> Expense per person per year						
All educational groups <sup>2</sup> -	\$129	\$30	\$43	\$19	\$26	\$11
Under 9 years-----	121	31	39	13	27	11
9-12 years-----	124	29	42	19	24	10
13+ years-----	155	30	54	30	27	14
<u>Male</u>						
All educational groups <sup>2</sup> -	111	25	37	17	22	10
Under 9 years-----	107	29	34	11	23	10
9-12 years-----	106	24	36	17	20	9
13+ years-----	135	23	46	28	25	13
<u>Female</u>						
All educational groups <sup>2</sup> -	144	34	49	20	29	12
Under 9 years-----	131	32	43	14	30	12
9-12 years-----	140	34	48	20	27	11
13+ years-----	175	38	61	32	30	14
<u>Both sexes</u> Age-adjusted expense per person per year						
All educational groups <sup>2</sup> -	\$129	\$30	\$43	\$19	\$26	\$11
Under 9 years-----	107	27	36	12	23	9
9-12 years-----	131	31	44	19	26	11
13+ years-----	161	32	55	30	29	15
<u>Male</u>						
All educational groups <sup>2</sup> -	114	26	38	17	22	11
Under 9 years-----	97	26	31	11	20	9
9-12 years-----	117	27	39	17	23	11
13+ years-----	144	26	49	29	26	14
<u>Female</u>						
All educational groups <sup>2</sup> -	142	34	48	20	28	12
Under 9 years-----	118	29	40	13	26	10
9-12 years-----	146	35	49	21	29	12
13+ years-----	178	38	61	32	31	16

<sup>1</sup>Adjusted to the age distribution of the total civilian, noninstitutional population of the United States.

<sup>2</sup>Includes unknown education.

Table 3. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, sex, and family income: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and family income	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>Both sexes</u>						
Expense per person per year						
All incomes <sup>2</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11
Under \$2,000-----	112	28	36	9	28	11
\$2,000-\$3,999-----	116	30	38	11	26	11
\$4,000-\$6,999-----	119	30	41	16	23	9
\$7,000-\$9,999-----	135	29	46	24	25	11
\$10,000+-----	178	34	60	37	31	16
<u>Male</u>						
All incomes <sup>2</sup> -----	111	25	37	17	22	10
Under \$2,000-----	101	28	31	8	24	10
\$2,000-\$3,999-----	99	27	31	10	22	9
\$4,000-\$6,999-----	102	24	34	15	20	9
\$7,000-\$9,999-----	117	23	39	22	22	11
\$10,000+-----	164	31	57	33	27	16
<u>Female</u>						
All incomes <sup>2</sup> -----	144	34	49	20	29	12
Under \$2,000-----	119	27	39	10	31	12
\$2,000-\$3,999-----	130	33	43	13	29	12
\$4,000-\$6,999-----	137	35	48	18	26	10
\$7,000-\$9,999-----	155	36	53	26	29	11
\$10,000+-----	190	37	63	40	34	16
<u>Both sexes</u>						
Age-adjusted expense per person per year						
All incomes <sup>2</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11
Under \$2,000-----	96	24	32	9	22	9
\$2,000-\$3,999-----	110	29	36	11	24	10
\$4,000-\$6,999-----	127	31	43	17	25	11
\$7,000-\$9,999-----	145	32	49	24	28	12
\$10,000+-----	178	35	61	35	31	16
<u>Male</u>						
All incomes <sup>2</sup> -----	114	26	38	17	22	11
Under \$2,000-----	89	24	29	8	19	9
\$2,000-\$3,999-----	96	26	31	9	21	9
\$4,000-\$6,999-----	108	26	36	15	21	10
\$7,000-\$9,999-----	125	26	42	22	24	11
\$10,000+-----	169	34	59	32	28	16
<u>Female</u>						
All incomes <sup>2</sup> -----	142	34	48	20	28	12
Under \$2,000-----	99	23	34	10	23	9
\$2,000-\$3,999-----	121	31	40	13	26	11
\$4,000-\$6,999-----	145	37	50	18	28	12
\$7,000-\$9,999-----	162	38	55	25	32	12
\$10,000+-----	186	36	62	38	34	16

<sup>1</sup>Adjusted to the age distribution of the total civilian, noninstitutional population of the United States.

<sup>2</sup>Includes unknown income.

Table 4. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, family income, and education of head of family: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Family income and education of head of family	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>All incomes</u>	Expense per person per year					
All educational groups <sup>2,3</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11
Under 9 years <sup>2</sup> -----	121	31	39	13	27	11
9-12 years <sup>2</sup> -----	124	29	42	19	24	10
13+ years <sup>2</sup> -----	155	30	54	30	27	14
<u>Under \$2,000</u>						
All educational groups <sup>3</sup> -----	112	28	36	9	28	11
Under 9 years-----	105	25	33	7	30	10
9-12 years-----	115	30	39	10	24	11
13+ years-----	160	42	49	26	26	17
<u>\$2,000-\$3,999</u>						
All educational groups <sup>3</sup> -----	116	30	38	11	26	11
Under 9 years-----	115	31	37	10	27	11
9-12 years-----	111	28	37	12	24	9
13+ years-----	147	39	45	18	30	15
<u>\$4,000-\$6,999</u>						
All educational groups <sup>3</sup> -----	119	30	41	16	23	9
Under 9 year -----	114	29	39	13	23	10
9-12 years-- -----	117	30	41	16	22	8
13+ years--- -----	136	29	48	23	24	12
<u>\$7,000-\$9,999</u>						
All educational groups <sup>3</sup> -----	135	29	46	24	25	11
Under 9 years-----	154	39	52	22	28	12
9-12 years-----	129	28	42	24	25	11
13+ years-----	138	26	50	26	25	10
<u>\$10,000+</u>						
All educational groups <sup>3</sup> -----	178	34	60	37	31	16
Under 9 years-----	171	40	53	31	32	15
9-12 years-----	170	34	57	33	30	16
13+ years-----	186	32	65	41	31	16

Table 4. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, family income, and education of head of family: United States, July-December 1962—Con.

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Family income and education of head of family	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>All incomes</u>						
Age-adjusted expense per person per year						
All educational groups <sup>2,3</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11
Under 9 years <sup>2</sup> -----	107	27	36	12	23	9
9-12 years <sup>2</sup> -----	131	31	44	19	26	11
13+ years <sup>2</sup> -----	161	32	55	30	29	15
<u>Under \$2,000</u>						
All educational groups <sup>3</sup> -----	96	24	32	9	22	9
Under 9 years-----	82	21	27	6	21	7
9-12 years-----	111	29	39	10	22	11
13+ years-----	141	37	42	23	24	14
<u>\$2,000-\$3,999</u>						
All educational groups <sup>3</sup> -----	110	29	36	11	24	10
Under 9 years-----	101	27	33	9	23	9
9-12 years-----	117	30	38	13	26	10
13+ years-----	137	36	42	18	28	13
<u>\$4,000-\$6,999</u>						
All educational groups <sup>3</sup> -----	127	31	43	17	25	11
Under 9 years-----	111	28	38	13	23	9
9-12 years-----	132	34	45	17	25	10
13+ years-----	143	29	48	25	27	14
<u>\$7,000-\$9,999</u>						
All educational groups <sup>3</sup> -----	145	32	49	24	28	12
Under 9 years-----	141	35	49	20	27	10
9-12 years-----	139	32	45	23	28	11
13+ years-----	158	34	56	27	29	12
<u>\$10,000+</u>						
All educational groups <sup>3</sup> -----	178	35	61	35	31	16
Under 9 years-----	145	32	46	27	28	12
9-12 years-----	172	35	60	30	31	17
13+ years-----	191	35	66	41	32	17

<sup>1</sup>Adjusted to the age distribution of the total civilian, noninstitutional population of the United States. <sup>2</sup>Includes unknown income. <sup>3</sup>Includes unknown education.

Table 5. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, sex, and color: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and color	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>Both sexes</u> Expense per person per year						
Total-----	\$129	\$30	\$43	\$19	\$26	\$11
White-----	135	31	45	20	27	12
Nonwhite-----	78	20	27	8	17	6
<u>Male</u>						
Total-----	111	25	37	17	22	10
White-----	117	26	39	18	23	11
Nonwhite-----	68	19	23	7	15	4
<u>Female</u>						
Total-----	144	34	49	20	29	12
White-----	151	36	51	22	30	12
Nonwhite-----	84	20	30	9	18	7
<u>Both sexes</u> Age-adjusted expense per person per year						
Total-----	\$129	\$30	\$43	\$19	\$26	\$11
White-----	134	31	45	20	26	12
Nonwhite-----	82	21	29	8	18	6
<u>Male</u>						
Total-----	114	26	38	17	22	11
White-----	117	26	39	18	23	11
Nonwhite-----	75	21	25	8	16	5
<u>Female</u>						
Total-----	142	34	48	20	28	12
White-----	147	35	50	21	29	12
Nonwhite-----	89	20	32	9	20	8

<sup>1</sup>Adjusted to the age distribution of the total civilian, noninstitutional population of the United States.

Table 6. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, family income, and color: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population: The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Family income and color	Type of expense						
	Total	Hospital	Doctor	Dental	Medicine	Special and other	
<u>All incomes</u>		Expense per person per year					
Total <sup>2</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11	
White <sup>2</sup> -----	135	31	45	20	27	12	
Nonwhite <sup>2</sup> -----	78	20	27	8	17	6	
<u>Under \$2,000</u>							
Total-----	112	28	36	9	28	11	
White-----	130	33	41	11	32	13	
Nonwhite-----	63	15	23	5	16	5	
<u>\$2,000-\$3,999</u>							
Total-----	116	30	38	11	26	11	
White-----	126	33	41	13	28	12	
Nonwhite-----	66	17	23	6	15	5	
<u>\$4,000-\$6,999</u>							
Total-----	119	30	41	16	23	9	
White-----	121	30	42	17	23	9	
Nonwhite-----	87	25	30	10	16	5	
<u>\$7,000-\$9,999</u>							
Total-----	135	29	46	24	25	11	
White-----	137	29	46	24	26	11	
Nonwhite-----	111	27	34	18	23	9	
<u>\$10,000+</u>							
Total-----	178	34	60	37	31	16	
White-----	179	34	61	37	31	16	
Nonwhite-----	133	34	50	19	23	8	

Table 6. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, family income, and color: United States, July-December 1962—Con.

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Family income and color	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>All incomes</u>						
Age-adjusted expense per person per year						
Total <sup>2</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11
White <sup>2</sup> -----	133	31	45	20	26	12
Nonwhite <sup>2</sup> -----	83	21	29	8	18	6
<u>Under \$2,000</u>						
Total-----	96	24	32	9	22	9
White-----	105	26	35	11	23	10
Nonwhite-----	67	16	24	5	17	5
<u>\$2,000-\$3,999</u>						
Total-----	110	29	36	11	24	10
White-----	116	30	38	12	25	10
Nonwhite-----	76	20	26	6	18	6
<u>\$4,000-\$6,999</u>						
Total-----	127	31	43	17	25	11
White-----	129	32	44	17	25	11
Nonwhite-----	92	26	32	10	18	6
<u>\$7,000-\$9,999</u>						
Total-----	145	32	49	24	28	12
White-----	145	32	49	24	28	11
Nonwhite-----	121	30	36	18	27	11
<u>\$10,000+</u>						
Total-----	178	35	61	35	31	16
White-----	178	35	61	35	31	16
Nonwhite-----	137	33	53	19	23	9

<sup>1</sup>Adjusted to the age distribution of the total civilian, noninstitutional population of the United States.

<sup>2</sup>Includes unknown income.

Table 7. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, education of head of family, and color: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Education of head of family and color	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>All educational groups</u>						
Expense per person per year						
Total <sup>2</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11
White <sup>2</sup> -----	135	31	45	20	27	12
Nonwhite <sup>2</sup> -----	78	20	27	8	17	6
<u>Under 9 years</u>						
Total-----	121	31	39	13	27	11
White-----	131	34	42	14	29	12
Nonwhite-----	67	16	23	7	16	5
<u>9-12 years</u>						
Total-----	124	29	42	19	24	10
White-----	128	30	44	20	25	10
Nonwhite-----	78	21	27	8	17	5
<u>13+ years</u>						
Total-----	155	30	54	30	27	14
White-----	155	30	54	30	28	13
Nonwhite-----	142	47	49	15	23	8
<u>All educational groups</u>						
Age-adjusted expense per person per year						
Total <sup>2</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11
White <sup>2</sup> -----	134	31	45	20	26	12
Nonwhite <sup>2</sup> -----	82	21	29	8	18	6
<u>Under 9 years</u>						
Total-----	107	27	36	12	23	9
White-----	114	29	38	13	24	10
Nonwhite-----	71	17	24	7	16	6
<u>9-12 years</u>						
Total-----	131	31	44	19	26	11
White-----	135	32	45	20	26	11
Nonwhite-----	97	27	32	10	21	8
<u>13+ years</u>						
Total-----	161	32	55	30	29	15
White-----	162	32	55	31	29	15
Nonwhite-----	138	43	48	15	24	8

<sup>1</sup>Adjusted to the age distribution of the total civilian, noninstitutional population of the United States.

<sup>2</sup>Includes unknown education.

Table 8. Health expenses per person per year, by type of expense, sex, and family size: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and family size	Type of expense						
	Total	Hospital	Doctor	Dental	Medicine	Special and other	
<u>Both sexes</u>		Expense per person per year					
Total-----	\$129	\$30	\$43	\$19	\$26	\$11	
1 member-----	178	39	56	24	37	22	
2 members-----	191	46	60	23	43	19	
3 members-----	149	35	51	22	29	12	
4 members-----	124	27	43	21	23	10	
5 members-----	100	22	35	17	19	7	
6 members-----	91	21	32	14	17	7	
7+ members-----	70	19	25	9	12	5	
<u>Male</u>							
Total-----	111	25	37	17	22	10	
1 member-----	165	41	54	23	29	18	
2 members-----	180	45	57	21	39	18	
3 members-----	128	28	43	20	25	12	
4 members-----	107	21	36	20	21	9	
5 members-----	88	19	30	15	17	7	
6 members-----	77	15	28	13	14	7	
7+ members-----	57	14	20	8	10	5	
<u>Female</u>							
Total-----	144	34	49	20	29	12	
1 member-----	187	39	58	24	42	24	
2 members-----	203	47	64	25	46	21	
3 members-----	170	41	60	23	33	13	
4 members-----	141	34	49	23	25	10	
5 members-----	112	26	40	19	20	7	
6 members-----	101	26	35	15	19	6	
7+ members-----	83	24	30	10	14	5	

Table 9. Health expenses per person per year, by type of expense, sex, and chronic activity limitation status: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population: The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and chronic activity limitation status	Type of expense						
	Total	Hospital	Doctor	Dental	Medicine	Special and other	
<u>Both sexes</u>		Expense per person per year					
All persons-----	\$129	\$30	\$43	\$19	\$26	\$11	
Persons with no chronic conditions-----	72	12	24	17	13	6	
Persons with 1+ chronic conditions-----	201	53	68	21	41	18	
Not limited in activity-----	164	38	57	23	32	14	
With limitation but not in major activity <sup>1</sup> -----	270	74	95	20	59	22	
With limitation in amount or kind of major activity <sup>1</sup> -----	267	77	88	16	62	24	
Unable to carry on major activity <sup>1</sup> -----	419	158	121	10	87	43	
<u>Male</u>							
All persons-----	111	25	37	17	22	10	
Persons with no chronic conditions-----	60	8	19	15	12	6	
Persons with 1+ chronic conditions-----	178	47	60	19	36	16	
Not limited in activity-----	142	31	49	21	27	14	
With limitation but not in major activity <sup>1</sup> -----	251	69	90	20	48	24	
With limitation in amount or kind of major activity <sup>1</sup> -----	233	69	77	15	51	21	
Unable to carry on major activity <sup>1</sup> -----	390	151	118	12	81	28	
<u>Female</u>							
All persons-----	144	34	49	20	29	12	
Persons with no chronic conditions-----	81	15	28	18	14	6	
Persons with 1+ chronic conditions-----	219	57	74	23	46	19	
Not limited in activity-----	183	45	64	24	36	14	
With limitation but not in major activity <sup>1</sup> -----	283	77	98	21	66	21	
With limitation in amount or kind of major activity <sup>1</sup> -----	299	85	98	18	72	26	
Unable to carry on major activity <sup>1</sup> -----	482	171	129	8	100	74	

<sup>1</sup>Major activity refers to ability to work, keep house, or engage in school or preschool activities.

Table 10. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, sex, and hospital insurance coverage: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and hospital insurance coverage	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>Both sexes</u> Expense per person per year						
All persons <sup>2</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11
Insured-----	143	34	48	22	27	12
Not insured-----	96	21	32	11	22	10
<u>Male</u>						
All persons <sup>2</sup> -----	111	25	37	17	22	10
Insured-----	124	29	41	20	23	11
Not insured-----	81	17	27	10	19	8
<u>Female</u>						
All persons <sup>2</sup> -----	144	34	49	20	29	12
Insured-----	158	39	54	23	30	12
Not insured-----	108	24	36	12	25	11
<u>Both sexes</u> Age-adjusted expense per person per year						
All persons <sup>2</sup> -----	\$129	\$30	\$43	\$19	\$26	\$11
Insured-----	142	34	48	21	27	12
Not insured-----	95	21	32	12	21	9
<u>Male</u>						
All persons <sup>2</sup> -----	114	26	38	17	22	11
Insured-----	127	29	42	20	24	12
Not insured-----	81	17	27	10	19	8
<u>Female</u>						
All persons <sup>2</sup> -----	142	34	48	20	28	12
Insured-----	156	38	53	23	30	12
Not insured-----	105	24	35	13	23	10

<sup>1</sup>Adjusted to the age distribution of the total civilian, noninstitutional population of the United States.

<sup>2</sup>Includes unknown insurance status.

Table 11. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, sex, and residence: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and residence	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>Both sexes</u>						
Expense per person per year						
All residences-----	\$129	\$30	\$43	\$19	\$26	\$11
Urban-----	139	32	47	21	27	12
Urbanized areas-1 million +-----	151	33	51	26	29	12
Urbanized areas-less than 1 million----	134	31	46	20	26	11
Other urban places-----	126	32	40	16	26	12
Rural nonfarm-----	110	27	37	13	23	10
Rural farm-----	91	21	30	11	19	10
<u>Male</u>						
All residences-----	111	25	37	17	22	10
Urban-----	122	27	41	20	23	11
Urbanized areas-1 million +-----	132	27	44	24	25	12
Urbanized areas-less than 1 million----	118	27	41	18	22	10
Other urban places-----	108	26	34	15	22	11
Rural nonfarm-----	98	24	32	12	21	9
Rural farm-----	79	17	27	10	17	8
<u>Female</u>						
All residences-----	144	34	49	20	29	12
Urban-----	155	37	53	23	30	12
Urbanized areas-1 million +-----	169	38	58	28	32	13
Urbanized areas-less than 1 million----	148	35	51	21	29	12
Other urban places-----	143	37	46	17	30	13
Rural nonfarm-----	123	30	42	15	26	10
Rural farm-----	105	25	34	13	22	11

Table 11. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, sex, and residence: United States, July-December 1962—Con.

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and residence	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>Both sexes</u>	Age-adjusted expense per person per year					
All residences-----	\$129	\$30	\$43	\$19	\$26	\$11
Urban-----	137	31	46	21	27	12
Urbanized areas-1 million +-----	147	32	50	25	28	12
Urbanized areas-less than 1 million----	134	31	46	20	26	11
Other urban places-----	123	31	40	16	25	11
Rural nonfarm-----	113	28	38	13	24	10
Rural farm-----	90	21	30	11	19	9
<u>Male</u>						
All residences-----	114	26	38	17	22	11
Urban-----	122	27	41	20	23	11
Urbanized areas-1 million +-----	132	27	44	24	25	12
Urbanized areas-less than 1 million----	120	28	41	18	23	10
Other urban places-----	108	26	34	15	22	11
Rural nonfarm-----	100	25	33	12	21	9
Rural farm-----	77	17	26	10	16	8
<u>Female</u>						
All residences-----	142	34	48	20	28	12
Urban-----	149	35	51	22	29	12
Urbanized areas-1 million +-----	162	36	56	27	31	12
Urbanized areas-less than 1 million----	145	34	50	21	28	12
Other urban places-----	138	36	45	17	28	12
Rural nonfarm-----	127	31	43	15	27	11
Rural farm-----	108	26	35	13	23	11

<sup>1</sup>Adjusted to the age distribution of the total civilian, noninstitutional population of the United States.

Table 12. Unadjusted and age-adjusted<sup>1</sup> health expenses per person per year, by type of expense, sex, and region: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and region	Type of expense					
	Total	Hospital	Doctor	Dental	Medicine	Special and other
<u>Both sexes</u>						
Expense per person per year						
All regions-----	\$129	\$30	\$43	\$19	\$26	\$11
Northeast-----	136	30	44	24	27	11
North Central-----	121	32	40	16	22	11
South-----	118	27	40	14	27	10
West-----	151	32	54	25	26	14
<u>Male</u>						
All regions-----	111	25	37	17	22	10
Northeast-----	122	26	39	22	24	11
North Central-----	104	27	34	14	19	10
South-----	104	24	35	13	23	9
West-----	127	24	44	22	23	14
<u>Female</u>						
All regions-----	144	34	49	20	29	12
Northeast-----	150	33	49	26	30	12
North Central-----	136	38	45	17	25	11
South-----	131	30	45	15	30	11
West-----	171	38	63	27	29	14
<u>Both sexes</u>						
Age-adjusted expense per person per year						
All regions-----	\$129	\$30	\$43	\$19	\$26	\$11
Northeast-----	133	29	43	24	26	11
North Central-----	121	32	40	16	22	11
South-----	118	27	40	14	27	10
West-----	153	32	55	25	27	14
<u>Male</u>						
All regions-----	114	26	38	17	22	11
Northeast-----	122	26	39	22	24	11
North Central-----	104	27	34	14	19	10
South-----	106	24	36	13	24	9
West-----	129	25	45	22	23	14
<u>Female</u>						
All regions-----	142	34	48	20	28	12
Northeast-----	143	31	47	25	29	11
North Central-----	135	37	45	17	25	11
South-----	129	29	44	15	30	11
West-----	174	39	63	27	30	15

<sup>1</sup>Adjusted to the age distribution of the total civilian, noninstitutional population of the United States.

Table 13. Population for use in estimating health expense totals, by family income, education of head of family, and age: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Family income and education of head of family	Total population	Age					
		Under 6 years	6-16 years	17-24 years	25-44 years	45-64 years	65+ years
<u>All incomes</u>		Population in thousands					
All educational groups <sup>1, 2</sup> ----	182,449	24,755	39,923	18,774	45,340	36,849	16,808
Under 9 years <sup>1</sup> -----	60,484	5,844	12,653	5,320	11,250	15,714	9,703
9-12 years <sup>1</sup> -----	83,965	13,086	19,389	9,477	23,075	14,257	4,681
13+ years <sup>1</sup> -----	34,489	5,428	7,262	3,657	10,362	5,921	1,859
<u>Under \$2,000</u>							
All educational groups <sup>2</sup> ----	23,093	2,484	3,559	2,968	3,117	4,852	6,113
Under 9 years-----	14,156	1,322	2,382	991	1,683	3,382	4,396
9-12 years-----	6,668	989	1,023	1,192	1,161	1,045	1,258
13+ years-----	1,569	92	50	753	190	237	248
<u>\$2,000-\$3,999</u>							
All educational groups <sup>2</sup> ----	32,418	4,588	6,589	3,870	6,664	6,249	4,458
Under 9 years-----	15,910	1,682	3,486	1,328	2,873	3,723	2,819
9-12 years-----	13,458	2,498	2,742	1,916	3,126	1,996	1,179
13+ years-----	2,419	326	249	557	559	379	349
<u>\$4,000-\$6,999</u>							
All educational groups <sup>2</sup> ----	63,069	10,473	14,698	6,029	17,859	11,052	2,959
Under 9 years-----	18,685	2,072	4,548	1,618	4,292	4,767	1,389
9-12 years-----	34,527	6,412	8,402	3,452	10,329	4,900	1,033
13+ years-----	8,941	1,889	1,583	880	3,018	1,117	453
<u>\$7,000-\$9,999</u>							
All educational groups <sup>2</sup> ----	31,453	4,193	7,749	2,708	9,448	6,246	1,108
Under 9 years-----	5,348	381	1,095	598	1,189	1,752	332
9-12 years-----	16,870	2,111	4,439	1,514	5,249	3,056	501
13+ years-----	8,974	1,677	2,163	567	2,960	1,364	243
<u>\$10,000+</u>							
All educational groups <sup>2</sup> ----	23,557	2,145	5,480	2,335	6,447	6,109	1,042
Under 9 years-----	3,205	154	536	503	649	1,112	251
9-12 years-----	8,660	656	1,933	987	2,362	2,376	346
13+ years-----	11,406	1,309	2,996	788	3,370	2,531	412

<sup>1</sup>Includes unknown income. <sup>2</sup>Includes unknown education.

NOTE: For official population estimates for more general use, see Bureau of the Census reports on the civilian population of the United States in Current Population Reports: Series P-20, P-25, and P-60.

Table 14. Population for use in estimating health expense totals, by family income, sex, and age: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Total population <sup>1</sup>	Family income				
		Under \$2,000	\$2,000-\$3,999	\$4,000-\$6,999	\$7,000-\$9,999	\$10,000+
<u>Both sexes</u>		Population in thousands				
All ages-----	182,449	23,093	32,418	63,069	31,453	23,557
Under 6 years-----	24,755	2,484	4,588	10,473	4,193	2,145
6-16 years-----	39,923	3,559	6,589	14,698	7,749	5,480
17-24 years-----	18,774	2,968	3,870	6,029	2,708	2,335
25-44 years-----	45,340	3,117	6,664	17,859	9,448	6,447
45-64 years-----	36,849	4,852	6,249	11,052	6,246	6,109
65+ years-----	16,808	6,113	4,458	2,959	1,108	1,042
<u>Male</u>						
All ages-----	88,485	10,086	15,513	31,177	15,648	11,897
Under 6 years-----	12,521	1,246	2,235	5,388	2,057	1,126
6-16 years-----	20,349	1,783	3,462	7,435	3,999	2,770
17-24 years-----	8,675	1,455	1,770	2,591	1,235	1,186
25-44 years-----	21,613	1,321	3,115	8,780	4,550	3,030
45-64 years-----	17,829	1,849	2,689	5,576	3,345	3,283
65+ years-----	7,499	2,432	2,242	1,407	462	501
<u>Female</u>						
All ages-----	93,964	13,007	16,906	31,892	15,805	11,660
Under 6 years-----	12,235	1,238	2,353	5,085	2,136	1,019
6-16 years-----	19,574	1,776	3,127	7,263	3,750	2,710
17-24 years-----	10,099	1,513	2,101	3,437	1,473	1,149
25-44 years-----	23,727	1,796	3,549	9,078	4,898	3,417
45-64 years-----	19,020	3,003	3,560	5,476	2,902	2,826
65+ years-----	9,309	3,681	2,216	1,553	646	541

<sup>1</sup>Includes unknown income.

NOTE: For official population estimates for more general use, see Bureau of the Census reports on the civilian population of the United States in Current Population Reports: Series P-20, P-25, and P-60.

Table 15. Population for use in estimating health expense totals, by family size, color, sex, and age: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Total population	Family size							Color	
		1 member	2 members	3 members	4 members	5 members	6 members	7+ members	White	Non-white
Population in thousands										
<u>Both sexes</u>										
All ages-----	182,449	11,598	32,007	28,281	36,614	29,207	18,906	25,837	161,176	21,273
Under 6 years-----	24,755	-	268	2,852	6,184	5,744	3,836	5,872	21,026	3,729
6-16 years-----	39,923	14	575	3,610	8,767	9,170	6,823	10,964	34,539	5,384
17-24 years-----	18,774	1,785	2,554	4,273	4,179	2,489	1,450	2,044	16,453	2,321
25-44 years-----	45,340	2,017	5,175	7,602	11,736	8,723	5,010	5,076	40,287	5,053
45-64 years-----	36,849	3,596	15,133	7,696	4,917	2,521	1,421	1,566	33,367	3,482
65+ years-----	16,808	4,186	8,302	2,248	832	559	366	315	15,504	1,304
<u>Male</u>										
All ages-----	88,485	4,525	15,089	13,726	18,166	14,701	9,385	12,894	78,305	10,180
Under 6 years-----	12,521	-	146	1,436	3,237	2,882	1,853	2,966	10,681	1,839
6-16 years-----	20,349	10	283	1,862	4,341	4,794	3,523	5,536	17,632	2,717
17-24 years-----	8,675	955	1,064	1,900	1,887	1,157	680	1,033	7,608	1,067
25-44 years-----	21,613	1,094	2,386	3,629	5,587	4,218	2,368	2,330	19,336	2,276
45-64 years-----	17,829	1,275	6,830	3,834	2,737	1,449	810	893	16,153	1,675
65+ years-----	7,499	1,192	4,381	1,064	378	200	150	136	6,894	605
<u>Female</u>										
All ages-----	93,964	7,073	16,918	14,556	18,448	14,506	9,521	12,943	82,870	11,093
Under 6 years-----	12,235	-	122	1,415	2,947	2,862	1,983	2,906	10,345	1,890
6-16 years-----	19,574	5	292	1,749	4,426	4,377	3,299	5,428	16,907	2,667
17-24 years-----	10,099	830	1,490	2,373	2,292	1,332	770	1,012	8,844	1,255
25-44 years-----	23,727	923	2,789	3,973	6,148	4,505	2,642	2,746	20,951	2,776
45-64 years-----	19,020	2,321	8,304	3,861	2,180	1,071	611	672	17,214	1,807
65+ years-----	9,309	2,994	3,922	1,184	454	359	216	179	8,610	699

NOTE: For official population estimates for more general use, see Bureau of the Census reports on the civilian population of the United States in Current Population Reports: Series P-20, P-25, and P-60.

Table 16. Population for use in estimating health expense totals, by chronic activity limitation status, sex, and age: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Total population	Persons with no chronic conditions	Persons with 1+ chronic conditions				
			Total	With no limitation of activity	With limitation but not in major activity	With limitation in amount or kind of major activity	Unable to carry on major activity
<u>Both sexes</u>		Population in thousands					
All ages-----	182,449	101,526	80,923	58,505	6,236	12,059	4,122
Under 6 years-----	24,755	20,798	3,957	3,695	36	196	30
6-16 years-----	39,923	31,008	8,915	7,798	735	306	76
17-24 years-----	18,774	11,724	7,050	6,045	430	532	43
25-44 years-----	45,340	21,776	23,563	19,271	1,603	2,338	351
45-64 years-----	36,849	13,078	23,771	16,201	2,219	4,312	1,040
65+ years-----	16,808	3,141	13,667	5,495	1,214	4,376	2,582
<u>Male</u>							
All ages-----	88,485	50,115	38,370	27,403	2,523	5,699	2,745
Under 6 years-----	12,521	10,262	2,259	2,112	15	122	10
6-16 years-----	20,349	15,471	4,878	4,227	423	186	42
17-24 years-----	8,675	5,468	3,207	2,699	202	280	27
25-44 years-----	21,613	10,791	10,822	8,783	645	1,146	248
45-64 years-----	17,829	6,584	11,245	7,511	874	2,070	790
65+ years-----	7,499	1,540	5,960	2,071	365	1,895	1,629
<u>Female</u>							
All ages-----	93,964	51,411	42,552	31,102	3,713	6,361	1,377
Under 6 years-----	12,235	10,536	1,698	1,583	21	74	20
6-16 years-----	19,574	15,537	4,037	3,571	312	120	34
17-24 years-----	10,099	6,257	3,842	3,346	229	251	16
25-44 years-----	23,727	10,985	12,742	10,488	958	1,193	103
45-64 years-----	19,020	6,495	12,526	8,689	1,345	2,241	250
65+ years-----	9,309	1,601	7,708	3,424	849	2,481	953

NOTE: For official population estimates for more general use, see Bureau of the Census reports on the civilian population of the United States in Current Population Reports: Series P-20, P-25, and P-60.

Table 17. Population for use in estimating health expense totals, by health insurance coverage, sex, and age: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Total population <sup>1</sup>	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured
<u>Both sexes</u>		Population in thousands			
All ages-----	182,449	128,012	53,303	117,941	61,528
Under 6 years-----	24,755	16,737	7,882	15,592	8,821
6-16 years-----	39,923	27,688	11,964	25,957	13,366
17-24 years-----	18,774	12,224	6,327	11,123	7,126
25-44 years-----	45,340	34,500	10,601	32,266	12,353
45-64 years-----	36,849	27,835	8,810	25,473	10,777
65+ years-----	16,808	9,028	7,719	7,531	9,085
<u>Male</u>					
All ages-----	88,485	62,611	25,233	57,874	29,032
Under 6 years-----	12,521	8,574	3,877	7,962	4,392
6-16 years-----	20,349	14,073	6,099	13,218	6,773
17-24 years-----	8,675	5,556	2,984	5,039	3,364
25-44 years-----	21,613	16,677	4,808	15,559	5,660
45-64 years-----	17,829	13,649	4,075	12,574	4,943
65+ years-----	7,499	4,082	3,391	3,522	3,900
<u>Female</u>					
All ages-----	93,964	65,401	28,070	60,067	32,495
Under 6 years-----	12,235	8,163	4,006	7,630	4,429
6-16 years-----	19,574	13,614	5,865	12,739	6,593
17-24 years-----	10,099	6,668	3,343	6,084	3,762
25-44 years-----	23,727	17,823	5,793	16,707	6,693
45-64 years-----	19,020	14,187	4,736	12,899	5,834
65+ years-----	9,309	4,945	4,328	4,008	5,184

<sup>1</sup>Includes unknown insurance status.

NOTE: For official population estimates for more general use, see Bureau of the Census reports on the civilian population of the United States in Current Population Reports: Series P-20, P-25, and P-60.

Table 18. Population for use in estimating health expense totals, by residence, geographic region, sex, and age: United States, July-December 1962

[Data are based on household interviews of the civilian, noninstitutional population. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Total population	Residence						Region			
		Urban				Rural		North-east	North Central	South	West
		Total	Urbanized area		Other urban places	Non-farm	Farm				
			1 mil- lion +	Less than 1 mil- lion							
<b>Both sexes</b>											
Population in thousands											
All ages----	182,449	127,205	53,508	45,069	28,629	41,514	13,729	45,633	52,727	54,931	29,158
Under 6 years-----	24,755	17,096	6,877	6,446	3,773	5,954	1,705	5,684	7,358	7,528	4,185
6-16 years-----	39,923	26,469	11,015	9,418	6,036	9,994	3,460	9,303	11,592	12,216	6,812
17-24 years-----	18,774	13,165	5,355	4,776	3,035	4,305	1,304	4,365	5,300	6,187	2,922
25-44 years-----	45,340	32,551	14,253	11,433	6,865	10,004	2,784	12,093	12,639	13,142	7,466
45-64 years-----	36,849	26,233	11,319	9,090	5,825	7,373	3,242	9,749	10,541	11,099	5,460
65+ years-----	16,808	11,690	4,688	3,907	3,095	3,883	1,235	4,439	5,297	4,758	2,314
<b>Male</b>											
All ages----	88,485	60,902	25,789	21,343	13,770	20,598	6,985	22,210	25,878	26,413	13,984
Under 6 years-----	12,521	8,698	3,553	3,244	1,901	3,021	802	2,874	3,751	3,766	2,130
6-16 years-----	20,349	13,452	5,572	4,780	3,100	5,152	1,744	4,826	5,954	6,267	3,302
17-24 years-----	8,675	5,889	2,352	2,038	1,499	2,094	692	2,015	2,505	2,865	1,291
25-44 years-----	21,613	15,440	6,791	5,366	3,282	4,836	1,337	5,852	6,084	6,159	3,517
45-64 years-----	17,829	12,488	5,529	4,286	2,672	3,633	1,708	4,703	5,186	5,248	2,692
65+ years-----	7,499	4,936	1,992	1,628	1,316	1,862	701	1,940	2,398	2,108	1,053
<b>Female</b>											
All ages----	93,964	66,303	27,718	23,726	14,859	20,916	6,744	23,423	26,849	28,518	15,174
Under 6 years-----	12,235	8,398	3,324	3,202	1,872	2,933	903	2,810	3,607	3,763	2,055
6-16 years-----	19,574	13,017	5,443	4,638	2,936	4,842	1,715	4,477	5,638	5,949	3,511
17-24 years-----	10,099	7,277	3,003	2,737	1,536	2,211	611	2,350	2,796	3,322	1,631
25-44 years-----	23,727	17,112	7,462	6,067	3,583	5,168	1,447	6,240	6,555	6,982	3,949
45-64 years-----	19,020	13,746	5,790	4,804	3,152	3,740	1,534	5,046	5,355	5,851	2,768
65+ years-----	9,309	6,754	2,696	2,279	1,780	2,021	533	2,499	2,898	2,650	1,261

NOTE: For official population estimates for more general use, see Bureau of the Census reports on the civilian population of the United States in Current Population Reports: Series P-20, P-25, and P-60.

## APPENDIX I

### TECHNICAL NOTES ON METHODS

#### Background of This Report

This report is one of a series of statistical reports prepared by the National Health Survey. It is based on information collected in a continuing nationwide sample of households in the Health Interview Survey, a major part of the program.

The Health Interview Survey utilizes a questionnaire which, in addition to personal and demographic characteristics, obtains information on illnesses, injuries, chronic conditions and impairments, and other health topics. As data relating to each of these various broad topics are tabulated and analyzed, separate reports are issued which cover one or more of the specific topics. The present report is based on the consolidated sample for 26 weeks of interviewing ending December 1962.

The population covered by the sample for the Health Interview Survey is the civilian, noninstitutional population of the United States living at the time of the interview. The sample does not include members of the Armed Forces, U.S. nationals living in foreign countries, or crews of vessels.

#### Statistical Design of the Health Interview Survey

*General plan.*—The sampling plan of the Survey follows a multistage probability design which permits a continuous sampling of the civilian population of the United States. The first stage of this design consists of drawing a sample of 357 from about 1,900 geographically defined primary sampling units (PSU's) into which the United States has been divided. A PSU is a county, a group of contiguous counties, or a standard metropolitan statistical area.

With no loss in general understanding, the remaining stages can be combined and treated in this discussion as an ultimate stage. Within PSU's, then, ultimate stage units called segments are defined in such a manner that each segment contains an expected nine households. A segment consists of a cluster of neighboring households or addresses. Two general types of segments are used: (1) area segments which are defined geographically, and (2) B segments which are defined from a list of ad-

resses from the Decennial Census and the Survey of Construction. Each week a random sample of about 90 segments is drawn. In the approximately 800 households in these segments, household members are interviewed concerning factors related to health.

Since the household members interviewed each week are a representative sample of the population, samples for successive weeks can be combined into larger samples. Thus, the design permits both continuous measurements of characteristics of high incidence or prevalence in the population and, through the larger consolidated samples, more detailed analysis of less common characteristics and smaller categories. The continuous collection has administrative and operational advantages as well as technical assets, since it permits field work to be handled with an experienced, stable staff.

*Sample size and geographic detail.*—The national sample plan for the 6-month period ending December 1962 included about 71,000 persons from 22,000 households.

The overall sample was designed in such a fashion that tabulations could be provided for each of the major geographic regions and for urban and rural sectors of the United States.

*Collection of data.*—Field operations for the household survey are performed by the U.S. Bureau of the Census under specifications established by the National Center for Health Statistics. In accordance with these specifications the Bureau of the Census selects the sample, conducts the field interviewing as an agent of the Center, and performs a manual edit and coding of the questionnaires. The Health Interview Survey, using Center electronic computers, carries out further editing and tabulates the edited data.

*Estimating methods.*—Each statistic produced by the Survey—for example, the percentage of the population with no expense in a specified period—is the result of two stages of ratio estimation. In the first of these the control factor is the ratio of the 1960 decennial population count to the 1960 estimated population in the National Health Survey's first-stage sample of PSU's. These factors are applied for some 25 color-residence classes.

Later, ratios of sample-produced estimates of the population to official Bureau of the Census figures for current population in about 60 age-sex-color classes are computed and serve as second-stage factors for ratio estimating.

The effect of the ratio-estimating process is to make the sample more closely representative of the population by age, sex, color, and residence, thus reducing sampling variance.

As noted, each week's sample represents the population living during that week and characteristics of that population. Consolidation of samples over a time period, say, a calendar quarter, produces estimates of average characteristics of the U.S. population for that calendar quarter. Similarly, population data for a year are averages of the four quarterly figures.

### General Qualifications

**Nonresponse.**—Data were adjusted for nonresponse by a procedure which imputes to persons in a household which was not interviewed the characteristics of persons in households in the same segment which were interviewed. The total noninterview rate was about 5 percent—1 percent was refusal, and the remainder was primarily due to the failure to find any eligible household respondent after repeated trials. The nonresponse rate for the mail-in supplement on medical expenditures was 6.5 percent. This questionnaire was used to shorten the interviewing time. In a study conducted by the National Opinion Research Center, University of Chicago, a mail-in supplement was found to be a reasonable substitute for direct interview. (See *Vital and Health Statistics*, Series 2, No. 2.)

After the household interview, the questionnaire with self-addressed envelope was handed to the respondent who was asked to complete and return it within 5 days. In the event of nonresponse, two mail follow-ups were made. Further follow-up was made by personal contact, usually by telephone. Telephone contact was also used to clarify inconsistent and missing entries, etc., on submitted forms.

**The interview process.**—The statistics presented in this report are based on replies secured in interviews of persons in the sampled households. Each person 19 years of age and over, available at the time of interview, was interviewed individually. Proxy respondents within the household were employed for children and for adults not available at the time of the interview, provided the respondent was closely related to the person about whom the information was being obtained.

**Rounding of numbers.**—The original tabulations on which the data in this report are based show all estimates to the nearest whole unit. All con-

solidations were made from the original tabulations using the estimates to the nearest unit. In the final published tables the figures are rounded to the nearest thousand, although these are not necessarily accurate to that detail. Devised statistics, such as rates and percent distributions, are computed after the estimates on which these are based have been rounded to the nearest thousand.

**Population figures.**—Some of the published tables include population figures for specified categories. Except for certain overall totals by age and sex, which are adjusted to independent estimates, these figures are based on the sample of households in the National Health Survey.

These are given primarily to provide denominators for rate computation and for this purpose are more appropriate for use with the accompanying measures of health characteristics than other population data that may be available. In some instances these will permit users to recombine published data into classes more suitable to their specific needs. With the exception of the overall totals by age and sex mentioned above, the population figures differ from corresponding figures (which are derived from different sources) published in reports of the Bureau of the Census. For population data for general use see the official estimates presented in Bureau of the Census reports in the P-20, P-25, and P-60 series.

### Reliability of Estimates

Since the estimates are based on a sample, they will differ somewhat from the figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and interviewing personnel and procedures. As in any survey the results are also subject to measurement error.

The standard error is primarily a measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the standard error also reflects part of the variation which arises in the measurement process. It does not include estimates of any biases which might lie in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error and about 99 out of 100 that it would be less than 2½ times as large.

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. Included in this appendix are charts from which the relative standard errors

can be determined for estimates shown in this report. In order to derive relative errors which would be applicable to a wide variety of health statistics and which could be prepared at a moderate cost, a number of approximations were required. As a result, the charts provide an estimate of the approximate relative standard error rather than the precise error for any specific aggregate or percentage.

Three classes of statistics for the health survey are identified for purposes of estimating variances.

**Narrow range.**—This class consists of (1) statistics which estimate a population attribute, e.g., the number of persons in a particular income group, and (2) statistics for which the measure for a single individual for the period of reference is usually either 0 or 1, on occasion may take on the value 2, and very rarely, 3.

**Medium range.**—This class consists of other statistics for which the measure for a single individual for the period of reference will rarely lie outside the range 0 to 5.

**Wide range.**—This class consists of statistics for which the measure for a single individual for the period of reference frequently will range from 0 to a number in excess of 5, e.g., the number of days of bed disability experienced during the year.

In addition to classifying variables according to whether they are narrow-, medium-, or wide-range, statistics in the Survey are further defined as:

Type A—Statistics on prevalence and incidence data for which the period of reference in the questionnaire is 12 months.

Type B—Incidence-type statistics for which the period of reference in the questionnaire is 2 weeks.

Only the charts on sampling error applicable to data contained in this report are presented.

**General rules for determining relative sampling errors.**—The "guide" on page 44, together with the following rules, will enable the reader to determine approximate relative standard errors from the charts for estimates presented in this report.

Rule 1.—*Estimates of aggregates:* Approximate relative standard errors for estimates of aggregates, such as the number of persons with an annual family income of \$10,000 or more, are obtained from appropriate curves on page 45. The number of persons in the total U.S. population or in an age-sex class of the

total population is adjusted to official Bureau of the Census figures and is not subject to sampling error.

Rule 2.—*Estimates of percentages in a percent distribution:* Relative standard errors for percentages in a percent distribution of a total are obtained from appropriate curves on page 46. For values which do not fall on one of the curves presented in the chart, visual interpolation will provide a satisfactory approximation.

Rule 3.—*Estimates of rates where the numerator is a subclass of the denominator:* (Not required for statistics presented in this report.)

Rule 4.—*Estimates of rates where the numerator is not a subclass of the denominator:* This rule applies where a unit of the numerator often occurs more than once for any one unit in the denominator. For example, in the computation of the number of persons injured per 100 currently employed persons per year, it is possible that a person in the denominator could have sustained more than one of the injuries included in the numerator. Approximate relative standard errors for rates of this kind may be computed as follows:

- (a) Where the denominator is the total U.S. population, or includes all persons in one or more of the age-sex groups of the total population, the relative error of the rate is equivalent to the relative error of the numerator which can be obtained directly from the appropriate chart.
- (b) In other cases, obtain the relative standard error of the numerator and of the denominator from the appropriate curve. Square each of these relative errors, add the resulting values, and extract the square root of the sum. This procedure will result in an upper bound and often will overstate the error. Table I shows approximate relative standard errors for selected levels of per capita health expense.

Table I. Relative standard errors<sup>1</sup> for selected s of per capita health expense per year

Size of population estimate in thousands	Per capita health expense per year in dollars				
	10	25	50	75	100
	Percent				
100-----	22	21	21	20	20
500-----	11	11	11	11	11
1,000-----	8	8	8	8	8
2,500-----	6	6	6	6	6
5,000-----	5	5	5	5	5
10,000-----	4	4	4	4	4
25,000-----	3	3	3	3	3
50,000-----	3	3	3	3	3
100,000-----	3	3	3	3	3

<sup>1</sup>For example, the relative standard error of 8 percent for a per capita expense of \$10 for a population group consisting of 1,000,000 persons can be obtained by the use of Rule 4 (b) described on page 43 and the values read from Curves A2AW and A2AN on page 45.

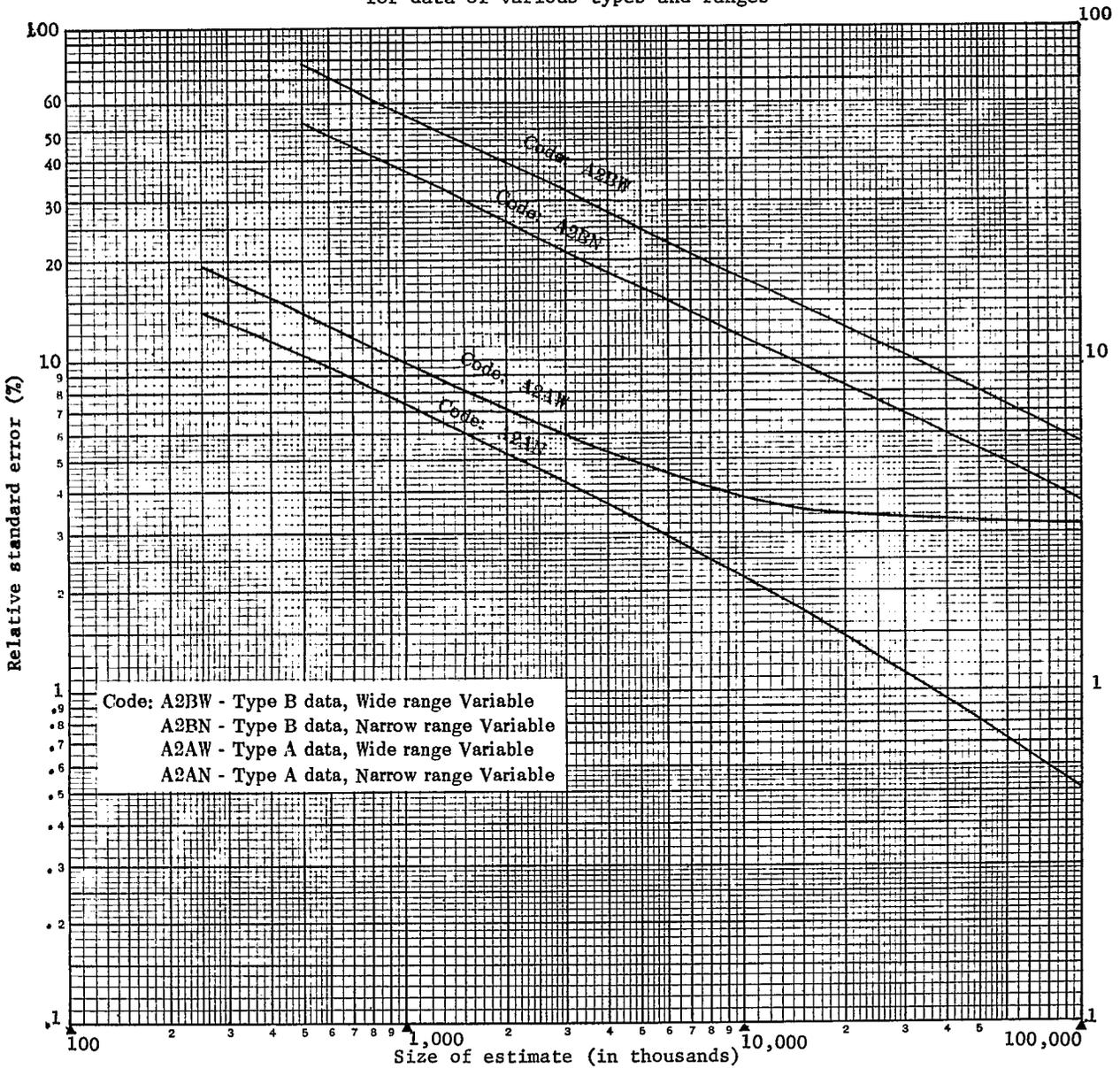
### Guide to Use of Relative Standard Error Charts

The code shown below identifies the appropriate curve to be used in estimating the relative standard error of the statistic described. The four components of each code describe the statistics as follows: (1)

A=aggregate, P=percentage; (2) the number of calendar quarters of data collection; (3) the type of the statistic as described on page 43; and (4) the range of the statistics as described on page 43.

Statistic	Use:		
	Rule	Code	on page
Number of: Persons in the U.S. population or any age-sex category thereof-----	Not subject to sampling error		
Persons in any other population group-----	1	A2AN	45
Health expense, by type-----	1	A2AW	45
Per capita health expense: In total U.S. population or total number in any age-sex category thereof-----	4(a)	A2AW	45
In any other population group-----	4(b)	{ Numer: A2AW Denom: A2AN	45 45
Percent distribution of: Per capita health expense, by type-----	2	P2AW	46

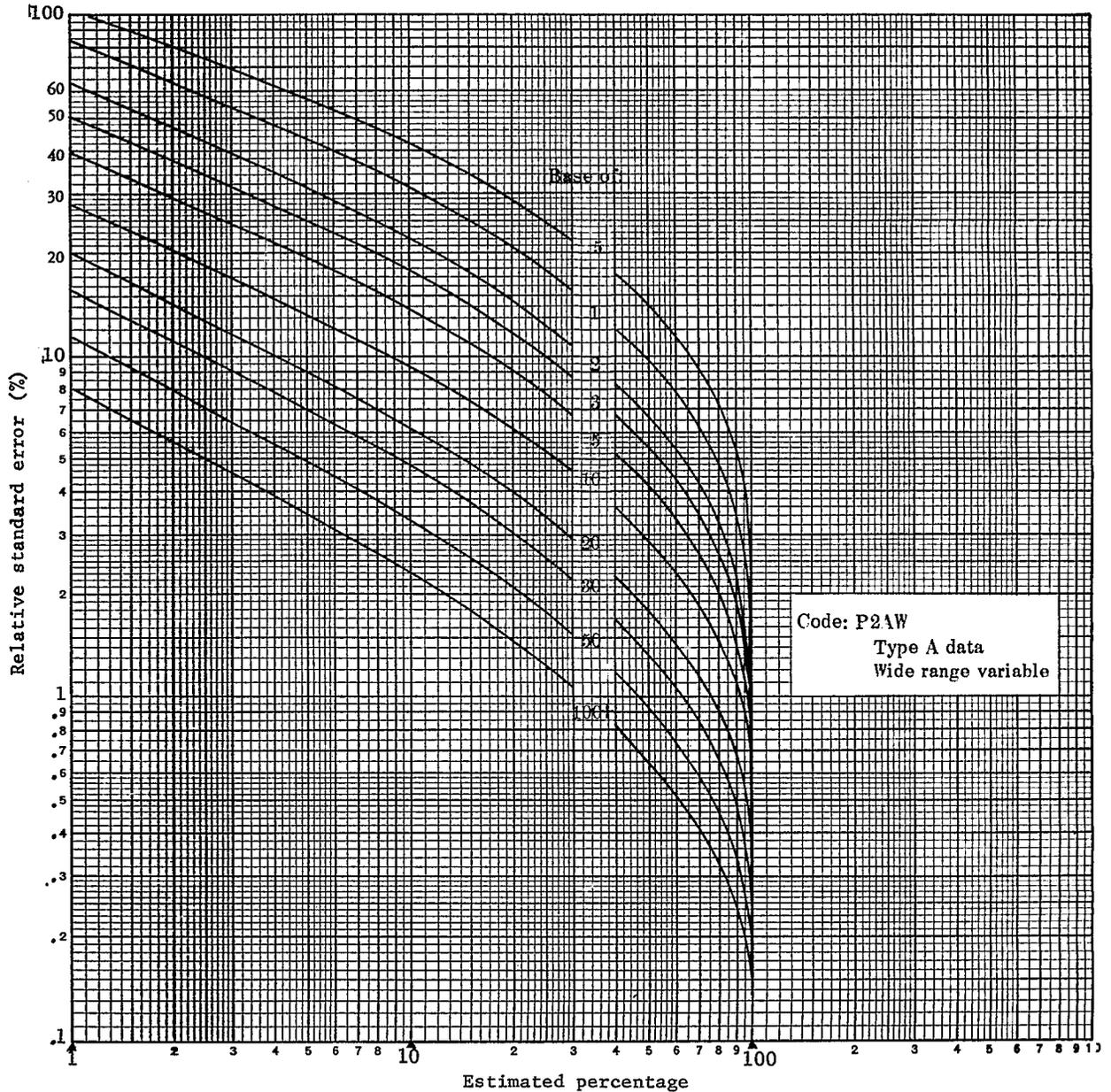
Relative standard errors for aggregates based on two quarters of data collection for data of various types and ranges



Example of use of chart: An aggregate of 2,000,000 (on scale at bottom of chart) for a Narrow range Type A statistic (code: A2AN) has a relative standard error of 5.2 percent, read from scale at left side of chart, or a standard error of 104,000 (5.2 percent of 2,000,000). For a Wide range Type B statistic (code: A2BW), an aggregate of 6,000,000 has a relative error of 22.2 percent or a standard error of 1,332,000 (22.2 percent of 6,000,000).

Relative standard errors for percentages based on two quarters of data collection  
for type A data, Wide range

(Base of percentage shown on curves in millions)



Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of 10,000,000 has a relative standard error of 6.2 percent (read from scale at the left side of the chart), the point at which the curve for a base of 10,000,000 intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent X 6.2 percent or 1.2 percentage points.

## APPENDIX II

### DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

#### Terms Relating to

#### Personal Health Expenses

*Personal health expenses.*—These are the total personal health expenses for medical and dental care during a specified 12-month period. The National Health Survey collects data for each related member of a household in the Survey sample during the specified 12-month period. The total expenditures are defined as all bills paid (or to be paid) for medical and dental care by the person himself, his family, or friends and also any part paid by insurance whether paid directly to the hospital or doctor, to the person himself, or to his family. If a respondent does not know the exact amount paid by insurance, he is requested to estimate it and include it in the total bill.

For the National Health Survey, personal health expenses exclude amounts paid (or to be paid) by workmen's compensation, charitable or welfare organizations, Federal, State, or local governmental programs, or other free care. Also excluded are expenses of persons residing in institutions at the time of interview.

If a baby is born in the household during the specified 12-month period, the hospital and doctor bills relating to the baby's birth are counted in medical expenditures for the mother. However, all other medical expenditures relating to the baby's health are counted in the medical expenditures for the baby.

There are six categories of expenditures for health care and services as follows:

1. *Doctors' bills.*—Doctors' bills are defined as total bills paid (or to be paid) for medical care to doctors, including surgeons, for a person during the specified 12-month period. Such bills include costs of operations, treatments, checkups, deliveries, pregnancy care, X-rays, laboratory fees, eye examinations, immunizations or shots, and any other doctors' services provided for the patient.
2. *Hospital bills.*—Hospital bills are the total expenditures paid (or to be paid) for hospitalizations of a person during the specified 12-month period. Only hospitalizations for overnight or longer in a hospital (nursing

home, rest home, sanitarium, etc.) are counted. Hospital bills include costs of room and board, operating and delivery room, anesthesia, special treatments, X-rays, tests, and any other hospital services provided for the hospitalized patient.

3. *Medicine costs.*—Medicine costs are total expenditures paid (or to be paid) for medicine for a person during the specified 12-month period. The total expenditures for medicine include the costs of all kinds of medicine whether or not prescribed by a doctor, such as tonics, pills, prescriptions, salves, ointments, vitamins, and any other medicine.
4. *Dentists' bills.*—Dentists' bills are defined as the total bills paid (or to be paid) for dental care for a person during the specified 12-month period. Dentists' bills include costs of fillings, extractions, cleanings, X-rays, bridgework, dental plates, straightening of teeth, and any other dental services provided for the dental patient.
5. *Special medical expenses.*—Special medical expenses paid (or to be paid) for a person during the specified 12-month period include costs of the following: eye glasses, hearing aids, special nursing, physical therapy, speech therapy, corrective shoes, chiropractors' fees, and special braces or trusses, wheel chairs, or artificial limbs.
6. *Other medical expenses.*—All medical expenses for a person during the specified 12-month period not included above are classified as "other." For example, emergency or outpatient treatment in a hospital or clinic would be classified as "other."

#### Demographic Terms

*Age.*—The age recorded for each person is his age at last birthday. Age is recorded in single years and combined into groups suitable for the purpose of the table.

*Income of family or of unrelated individuals.*—Each member of a family is classified according to the total income of the family of which he is a member. Within the household all persons related to each

other by blood, marriage, or adoption constitute a family. Unrelated individuals are classified according to their own income.

The income recorded is the total of all income received by members of the family (or by an unrelated individual) in the 12-month period ending with the week of interview. Income from all sources is included, e.g., wages, salaries, rents from property, pensions, help from relatives, and so forth.

*Education of head of family.*—Each member of a family is classified according to the education of the head of the family of which he is a member. Within the household all persons related to each other by blood, marriage, or adoption constitute a family. Unrelated individuals are classified according to their own education.

The categories of educational status show the highest grade of school completed. Only grades completed in regular schools, where persons are given a formal education, are included. A "regular" school is one which advances a person toward an elementary or high school diploma or a college, university, or professional school degree. Thus, education in vocational, trade, or business schools outside the regular school system is not counted in determining the highest grade of school completed.

*Color.*—In this report, the population has been subdivided into two groups according to "White" and "Nonwhite." "Nonwhite" includes Negro, American Indian, Chinese, Japanese, and so forth. Mexican persons are included with "White" unless definitely known to be Indian or of another nonwhite race.

*Region.*—For the purpose of classifying the population by geographic area, the States are grouped into four regions. These regions, which correspond to those used by the Bureau of the Census, are as follows:

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

*Residence.*—The definition of urban-rural areas used in the National Health Survey is the same as that used in the 1960 census. The urban population comprises all persons living in (a) places of 2,500 inhabitants or more incorporated as cities, boroughs, villages, and towns (except towns in New England, New York, and Wisconsin); (b) the densely settled urban fringe, whether incorporated or unincorporated, of urbanized areas (see below); (c) towns in New England and townships in New Jersey and Pennsylvania which contain no incorporated municipalities as subdivisions and have either 25,000 inhabitants or more or a population of 2,500 to 25,000 and a density of 1,500 persons or more per square mile; (d) counties in States other than the New England States, New Jersey, and Pennsylvania that have no incorporated municipalities within their boundaries and have a density of 1,500 persons or more per square mile; and (e) unincorporated places of 2,500 inhabitants or more not included in any urban fringe. The remaining population is classified as rural.

*Size of place.*—All persons residing in an urbanized area are included in the urban population. An urbanized area, according to the 1960 census definition, contains at least one city which had 50,000 inhabitants or more in 1960, as well as the surrounding closely settled incorporated places and unincorporated areas.

The remaining urban population is classified as living in urban places outside urbanized areas. These urban places are grouped according to size.

*Farm and nonfarm residence.*—The rural population is subdivided into the rural-farm population which comprises all rural residents living on farms, and the rural-nonfarm population which comprises the remaining rural population. The farm population includes persons living in rural territory on places of 10 or more acres from which sales of farm products amounted to \$50 or more during the previous 12 months or on places of less than 10 acres from which sales of farm products amounted to \$250 or more during the preceding 12 months. Other persons living in rural territory were classified as nonfarm. Persons were also classified as nonfarm if their household paid rent for the house but their rent did not include any land used for farming.

Sales of farm products refer to the gross receipts from the sale of field crops, vegetables, fruits, nuts, livestock and livestock products (milk, wool, etc.), poultry and poultry products, and nursery and forest products produced on the place and sold at any time during the preceding 12 months.

#### Terms Relating to Disability

*Chronic activity limitation.*—Persons with chronic conditions are classified into four categories according to the extent to which their activities are limited at present as a result of these conditions. Since

the usual activities of preschool children, school-age children, housewives, and workers and other persons differ, a different set of criteria is used for each group. There is a general similarity between them, however, as will be seen in the descriptions of the four categories below. In some of the reports of the Health Interview Survey, various combinations of the categories have been made to serve different purposes.

1. *Persons unable to carry on major activity for their group* (major activity refers to ability to work, keep house, or go to school).  
 Preschool children: inability to take part in ordinary play with other children.

School-age children: inability to go to school.

Housewives: inability to do any housework.

Workers and all other persons: inability to work at a job or business.

2. *Persons limited in the amount or kind of major activity performed* (major activity refers to ability to work, keep house, or go to school).  
 Preschool children: limited in the amount or kind of play with other children, e.g., need special rest periods, cannot play strenuous games, cannot play for long periods at a time.

School-age children: limited to certain types of schools or in school attendance, e.g., need special schools or special teaching, cannot go to school full time or for long periods at a time.

Housewives: limited in amount or kind of housework, e.g., cannot lift children, wash or iron, or do housework for long periods at a time.

Workers and all other persons: limited in amount or kind of work, e.g., need special working aids or special rest periods at work, cannot work full time or for long periods at a time, cannot do strenuous work.

3. *Persons not limited in major activity but otherwise limited* (major activity refers to ability to work, keep house, or go to school).  
 Preschool children: not classified in this category.

School-age children: not limited in going to school but limited in participation in athletics or other extracurricular activities.

Housewives: not limited in housework but limited in other activities, such as church, clubs, hobbies, civic projects, or shopping.

Workers and all other persons: not limited in regular work activities but limited in other activities, such as church, clubs, hobbies, civic projects, sports, or games.

4. *Persons not limited in activities*  
 Includes persons with chronic conditions whose activities are not limited in any of the ways described above.

#### Family and Related Terms

The definitions of families and unrelated individuals are the same as those used in the 1960 Census.

*Family* refers to a group of two or more persons related by blood, marriage, or adoption who are living together in the same household. Although the usual household contains only the primary family, a household can contain secondary families as well as individuals unrelated to the family. A lodger and his family who are not related to the head of the household, or a resident employee and his wife living in are considered as a secondary family and not as part of the primary family. However, if the son of the head of the household and the son's wife and children are members of the household, this subfamily is treated as part of the primary family.

*Individuals* are persons (other than inmates of institutions) who are not living with any relatives. An unrelated individual can be (a) a household head living alone or with nonrelatives, (b) a lodger or resident employee with no relatives in the household, (c) a staff member of an institution who has no relatives living with him, or (d) a resident of a dormitory, lodging house, or other shared-residence facility who has no relative living with him.

## Kind of Insurance Coverage

*Hospital.*—Insurance which pays all or part of the hospital bill for the hospitalized person. Hospital bill refers only to the bill submitted by the hospital itself, not the doctor's or surgeon's bill or the bill for special nurses. Such a bill always includes the cost of room and meals and may also include the

costs of other services such as operating room, laboratory tests, and X-rays.

*Surgical.*—Insurance which pays in whole or part the bill of the doctor or surgeon for an operation whether performed in a hospital or in the doctor's office. Insurance which pays the costs of visits to a doctor's office for postoperative care is included as surgical insurance.

— ○ ○ ○ —

# APPENDIX III

## QUESTIONNAIRE

OFFICE OF  
THE DIRECTOR

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS  
WASHINGTON 25, D.C.

Budget Bureau No. 68-R620.6  
Approval Expires July 15, 1963

FORM NHS-6(a)  
(4-2-62)

Dear Friend:

The Bureau of the Census, as collecting agent for the U.S. Public Health Service, is conducting a special survey on the cost of medical care. This study, when combined with other information, will serve to answer important questions about health and medical care costs in our Nation.

The Census interviewer who called at your household was asked to leave this form in order that all of the family members can take part in answering these questions, and that bills, receipts, and other records can be consulted. If you cannot supply exact amounts from bills or records, please give the best estimate you can.

We would appreciate your completing this form and mailing it back to us within five days. A self-addressed envelope which requires no postage has been provided for your convenience.

Your cooperation in answering these questions will be a definite public service. The information will be given confidential treatment by the Bureau of the Census and the U.S. Public Health Service. Nothing will be published except statistical summaries.

Thank you.

Sincerely yours,



Please return completed  
form to:

U.S. Bureau of the Census  
1st Fl. NW Section  
536 S. Clark Street  
Chicago 5, Illinois  
Phone: Harrison 7-7523, Ext. 523

Richard M. Scammon  
Director  
Bureau of the Census

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

USCOMM-DC 11711 P-62

## GENERAL INSTRUCTIONS

1. The name of each related member of the household has been entered on a separate page of this form. Please fill all sections of each page for each person listed.
  
2. The specific period we are asking about is the 12 month period from \_\_\_\_\_ to \_\_\_\_\_.
  
3. In entering the total medical expenditures, count all bills paid (or to be paid) by the person himself, his family or friends and also any part paid by insurance, whether paid directly to the hospital or doctor, or paid to the person himself, or to his family. If you do not know exactly the amount paid by insurance, estimate it, and include it in the total bill.
  
4. Please do not count any amounts paid (or to be paid) by:
  - Workmen's compensation
  - Non-profit organizations such as the "Polio Foundation"
  - Charitable or Welfare Organizations
  - Military Services, including Medicare
  - Veterans Administration
  - Federal, State, City, or County Government
  
5. If there are any babies in the household who were born during the past 12 months, the hospital and doctor bills relating to the baby's birth should be reported on the page for the mother. All other medical expenditures relating to the baby's health should be reported on the page for the baby.
  
6. After completing all sections of this form for each person in the household, please indicate below the name of the person or persons who filled it out.

Name \_\_\_\_\_

Name \_\_\_\_\_

<b>FOR OFFICE USE ONLY</b>	1	2	3	4

FORM NHS-6(a) (4-2-62)

## COSTS FOR MEDICAL AND DENTAL CARE DURING THE PAST 12 MONTHS

**FROM:** \_\_\_\_\_ **TO:** \_\_\_\_\_

*PLEASE ANSWER THE QUESTIONS IN EACH SECTION BELOW FOR:*

Name of person \_\_\_\_\_

*IF EXACT AMOUNTS ARE NOT KNOWN, PLEASE ENTER YOUR BEST ESTIMATE.*

### DOCTORS' BILLS

**1. How much did all of the doctors' (including surgeons') bills for this person come to during the past 12 months?**

*Be sure to count all doctors' bills for:*

Operations	Check-ups	Pregnancy care	Laboratory fees	Immunizations or shots
Treatments	Deliveries	X-rays	Eye examinations	Any other doctors' services

No doctors' bills

\$ \_\_\_\_\_

### HOSPITAL BILLS

**2. (a) Was this person in a hospital (nursing home, rest home, sanitarium, etc.) overnight or longer during the past 12 months?**

Yes  No (Go to Question 3)

**(b) How much did all of the hospital bills come to for this person for the past 12 months?**

*Be sure to count all hospital bills for:*

Room and board	Operating and delivery room	Anesthesia	X-rays	Any other hospital services
		Special treatments	Tests	

\$ \_\_\_\_\_

### MEDICINE COSTS

**3. About how much was spent for medicine for this person during the past 12 months?**

*Be sure to count costs for all kinds of medicine whether or not prescribed by a doctor, such as:*

Tonics	Prescriptions	Ointments	Any other medicine
Pills	Salves	Vitamins	

No costs for medicine

\$ \_\_\_\_\_

### DENTISTS' BILLS

**4. How much did all of the dentists' bills for this person come to for the past 12 months?**

*Be sure to count all dental bills for:*

Fillings	Cleanings	Bridgework	Straightening of teeth	Any other dental services
Extractions	X-rays	Dental plates		

No dentists' bills

\$ \_\_\_\_\_

### SPECIAL MEDICAL EXPENSES

**5. How much did the bills come to for this person during the past 12 months for:**

<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None	
Eye glasses? \$ _____	Special Nursing, Physical therapy, Speech therapy? \$ _____	Chiropractors' fees? \$ _____	
<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None	
Hearing Aids? \$ _____	Corrective shoes? \$ _____	Special braces or trusses, wheel chairs or artificial limbs? \$ _____	

### OTHER MEDICAL EXPENSES

**6. Enter any other medical expenses incurred during the past 12 months which are not included above, showing the kind and amount of expenditure (for example, emergency or outpatient treatment in a hospital or clinic). (If no other medical expenses, check the "None" box.)**

None

Kind: \_\_\_\_\_ \$ \_\_\_\_\_

<b>FOR OFFICE USE ONLY</b>	PSU No.	Segment No.	Serial No.	Column No.	

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