HEALTH · United States · 1976-1977

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE • Public Health Service • Health Resources Administration

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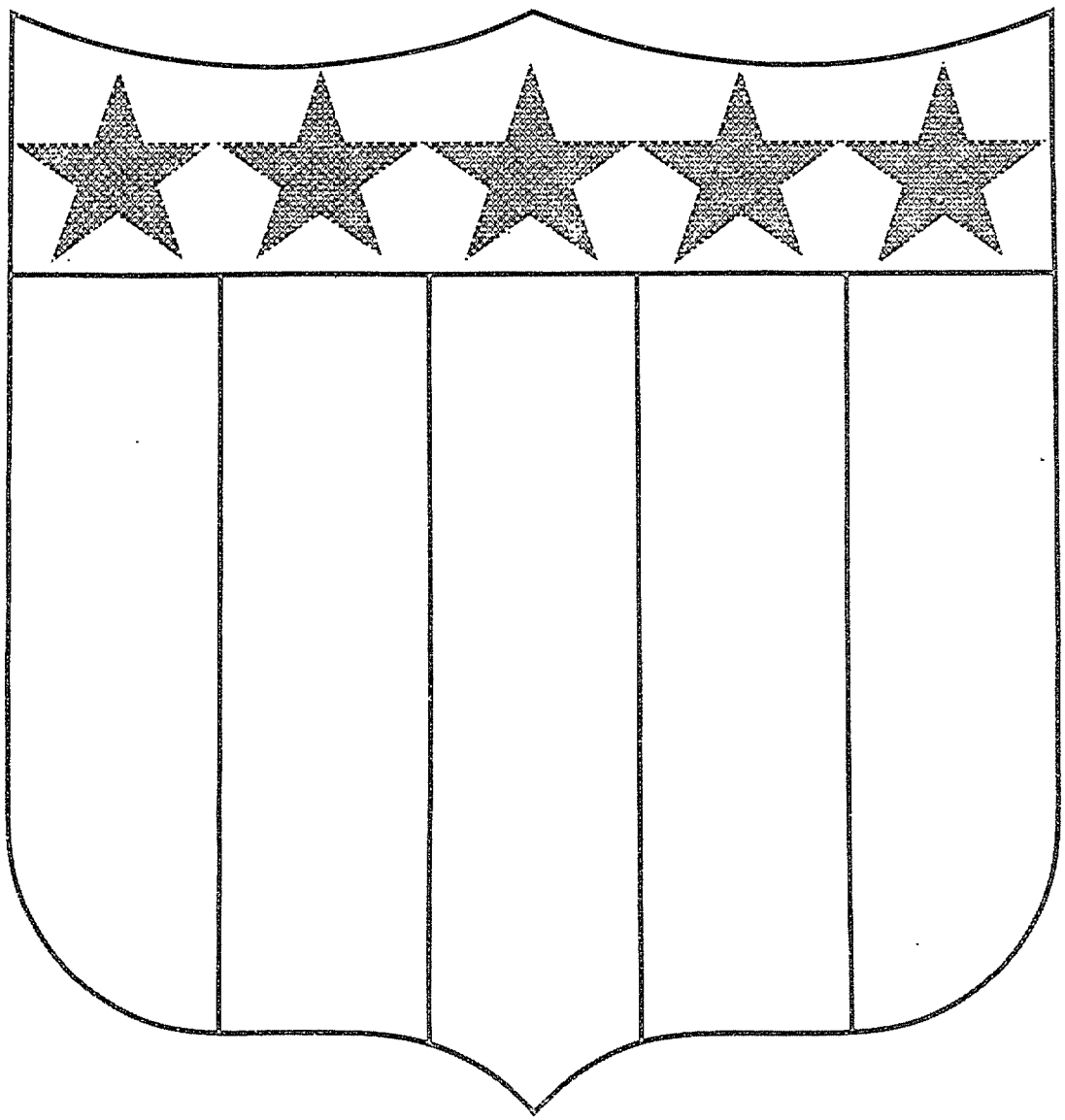

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FOREWORD

Health, United States, 1976-1977 is a report by the Secretary of Health, Education, and Welfare to the President and the Congress of the United States. The report is the second in the series mandated by Public Law 93-353, the Health Services Research, Health Statistics, and Medical Libraries Act of 1974.

This is a report in fulfillment of the statutory requirement that the Secretary, acting through the National Center for Health Services Research and the National Center for Health Statistics, and with the advice of the United States National Committee on Vital and Health Statistics, compile a report on health care costs and financing, health resources deployment, utilization of health services, and the health of the population. In selecting statistical information for inclusion in the joint report, the major criterion was relevance for policy and administrative decisions with respect to the allocation of resources.

With the rapid increase in expenditures for medical care and the increasing proportion paid for out of public funds, resource allocation decisions are critical. For many years, about 25 percent of the health expenditures came from public funds; with the implementation of Medicare the proportion started to rise reaching 42 percent in fiscal year 1976 or $269 for every person in the United States.

The expanding role of public funds raises issues of accountability. The thorough analysis of alternative policies and the evaluation of the impact of programs are imperative. This report is intended to provide a statistical basis for such analysis and evaluation.

Considerably greater attention has been devoted to the analysis and interpretation of the statistics in the present report as compared to the 1975 report. In response to feedback regarding the 1975 report, from both the Executive and Legislative Branches, analytical chapters have been added, data tabulated in ways not heretofore available, and a glossary and description of data sources incorporated. In every case, since an omnibus report can only touch the surface, there are references to sources where more extensive information can be found.

The report is divided into two parts. Part A consists of four analytical chapters that permit a more thorough examination of selected important and timely aspects of health and health care and an opportunity to delineate relationships not readily discernible in the detailed tables. Part B consists of 180 statistical tables with short expository text, brief descriptions of the data sources, a glossary, and a guide to the tables.

One chapter in Part A is devoted to a specific population, the elderly. People 65 years and over, as a group, are subject to high rates of illness and disability; they use health care services at a higher rate than any other age group. Projected growth of the elderly population will place heavy demands on our health care resources. Thus understanding of the need for care, utilization of health services, and financing of health care for this growing population group is critical.

Another analytical chapter deals with a specific disease, hypertension. Although effective therapy is available, hypertension remains a public health problem of considerable magnitude. Newly available data, some of it published for the first time in this report, may help to define more precisely the target population for control efforts.

Another chapter discusses geographic variations in health and health care resources within the United States. A traditional tool in epidemiologic studies of disease, geographic data are also needed for setting priorities for health programs in local areas. Included in this chapter are data developed specially for the 212 Health Systems Agencies which are responsible for health planning and resources development across the Nation.

The final chapter in Part A is devoted to our

current system of financing health care to highlight problems facing policymakers considering a national health insurance program.

The data presented in the tables in Part B were the latest available when this volume went to press. Many of the tables provide additional data on the topics discussed in the chapters. For example, there are tables of mortality rates, utilization rates, and manpower and facility levels by degree of urbanization which supplement the chapter on geographic variation. There are many tables where age is a variable; these supplement the chapter on the elderly. Other tables show updated or newly available data on a wide variety of other topics. Tables already available in *Health, United States, 1975* are not repeated. The "Guide to Tables" is designed to help the user find data on specific topics and includes references to the earlier volume when additional data on the topic are available there. This approach permits a wider range of data to be presented in these reports.

Much of the data presented are derived from the established data systems of the National Center for Health Statistics. Data from other government agencies, especially other components of the Public Health Service and the Health Care Financing Administration, and from private and professional organizations are also included. The chapter on issues in national health insurance draws heavily upon research conducted or supported by the National Center for Health Services Research.

Neither this report nor the companion chartbook of selected data include all measurements of health and health care that one might like to have. Certain types of potentially valuable statistics are not collected because of budgetary constraints, technical and methodological difficulties, and privacy considerations. Nevertheless, the statistical data assembled in this report provide considerable clarification in many important areas of concern.

HIGHLIGHTS

Health Status and Determinants

The total population of the United States in 1975 was 213.5 million having increased only 0.8 percent or 1.6 million from the previous year. The rate of natural increase in the 1970's is lower than it has ever been in the United States.

In 1975 there were 22.4 million people 65 years and over. By the year 2000 there will be 31.8 million, and by 2030, as the last of the World War II baby boom reaches age 65, there may be 55.0 million.

The birth rate continued its decline with the greatest decline among married women. Higher proportions of married couples were using contraception, and they are using effective methods with low failure rates.

The proportion of babies born to unmarried women has increased because of the decline in marital fertility. In 1975 there were about 450 thousand births to unmarried women. Over a quarter were to young women under age 18 who probably did not finish high school; half were to women under age 20.

The 1975 death rate of 8.9 deaths per 1,000 people was the lowest ever recorded in this country, having declined by 2.9 percent from 1974. The age-adjusted rate for men was 1.8 times that for women; for people other than white it was 1.4 times the white rate. Black children under age 5 had a death rate twice as high as white children.

The difference in life expectancy between men and women has continued to increase while the difference between whites and others has decreased. If 1975 death rates were to continue to prevail over their lifetimes, white female babies born in 1975 could expect to live 77.2 years, other females 72.3 years, white males 69.4 years, and other male babies 63.6 years.

About two-thirds of the deaths in 1975 were caused by heart disease, malignant neoplasms, or cerebrovascular disease. While death rates from heart disease and cerebrovascular disease have been declining, the death rate for cancer has continued to climb slowly.

About two-fifths of the deaths of small children aged 1-4 are caused by accidents; half of the deaths of children aged 5-14 and 15-19 are caused by accidents.

In 1975 approximately 32 percent of the children aged 1-4 were not protected against measles and 38 percent were not protected against rubella. About 25 percent were not protected against diphtheria-tetanus-pertussis and 35 percent had no protection against polio.

Four-fifths (87 percent) of the civilian noninstitutionalized population were reported to be in good or excellent health. Higher proportions of both the aged and the poor were reported to be in poorer health than the young and the more affluent.

In 1974 almost 7 million people or 3.3 percent of the noninstitutionalized population were unable to perform what they considered their major activity, 7.3 percent were limited in the kind or amount of major activity, and 3.5 percent were limited in other activities as a direct result of chronic diseases. In total, about 30 million persons had some degree of limitation of activity as a result of chronic diseases. Heart

conditions, arthritis and rheumatism, and orthopedic impairments were the major causes of limitation of activity.

More than 23 million (18 percent) of the adults in this country have hypertension. Only 45 percent of the people identified as being definite hypertensives reported that a physician had ever told them they had high blood pressure or hypertension.

Tuberculosis has dropped from one of the major diseases in the early 1900's to a relatively rare disease today. Still the rate of tuberculosis among blacks and other minorities is more than 4 times higher than among whites, and the rate in large metropolitan areas is more than twice that in small metropolitan and nonmetropolitan areas.

The venereal disease rate has been rising since 1960 and has reached epidemic proportions. The 1976 data indicate, however, that the rate for syphilis may have dropped a bit since the previous year, and the rate of increase in the gonorrhea cases may be less than previously.

At every age and for both sexes, death rates are higher for people who smoke or who have smoked in the past than for people who have never smoked. Smoking has decreased among adults and to some extent among teenaged boys; however, there has been an increase in smoking levels among teenaged girls.

According to skinfold measurement, about 13 percent of the men and 23 percent of the women aged 20-74 are obese. About twice as many people rate themselves as overweight when asked.

About 22 million persons or 10.4 percent of the population have experienced difficulty obtaining medical care, with the most common problem being trouble getting an appointment.

Utilization of Health Resources

Differences in the amount of utilization of health services between the poor and the nonpoor that existed a decade ago have diminished, disappeared, or actually reversed.

While the number of physicians per 100,000 people has been increasing, the number of physician contacts per person (excluding contacts while a hospital inpatient) has remained about the same. Three-quarters of the civilian noninstitutionalized population had at least one physician contact in 1975.

When physicians assessed the seriousness of the problem which caused the patient to visit them, almost half the visits were for problems rated as "not serious," and another third were considered only "slightly serious."

Proportionately fewer children other than white, children from low-income families, and children in nonmetropolitan areas saw a doctor at least once during the year than their white, higher income, and metropolitan counterparts.

Visits to emergency rooms accounted for 4.5 percent of all physician contacts in 1975 in contrast with 2.5 percent in 1971. In 1975, 11 percent of all physician contacts of children under age 15 in low-income (less than $5,000) families were emergency room visits in contrast with 5.7 percent in 1971.

Half of the population saw a dentist at least once in 1975. Only 35 percent of the people in low-income families (less than $5,000) had at least one dental visit during the year in contrast with 65 percent in high-income families ($15,000 or more), and the high-income persons reported twice as many visits per person, 2.2 vs. 1.1 visits per year.

People in families with low incomes are hospitalized more often, and once hospitalized they remain in the hospital longer than people in families with higher incomes.

The hospital discharge rates for people 65 years and over increased substantially from 1965 to 1975 (from 264 to 359 per 1,000).

In 1975 diseases of the circulatory system accounted for almost a third of the days elderly people spent in short-stay hospitals and 26 percent of their visits to physicians' offices.

Surgery was being performed at a higher rate in 1975 than in 1965. A rate of 9,584 operations per 100,000 persons of all ages occurred in 1975 in contrast with 7,735 in 1965, an increase of 24 percent.

The tonsillectomy rate (per 100,000 children under age 15) declined by 46 percent from 1,642 in 1965 to 879 in 1975.

Only 14 percent of the noninstitutionalized population are limited in activity because of chronic diseases, yet these people account for 27 percent of the visits to physicians and 41 percent of the days in the hospital.

By early 1974 over a million persons were residents of nursing homes or facilities that provide some level of nursing care. The vast majority were elderly people who utilized far more days of care in nursing homes than in short-stay hospitals.

The increase in the use of outpatient psychiatric services is associated with reductions in the use of inpatient psychiatric hospital services, increases in use of new drug therapies, and expansion of insurance benefits for outpatient psychiatric services.

In 1975 only 11 percent of abortions were for women who had to cross a State line to receive care in contrast with 13 percent in 1974, 25 percent in 1973, and 44 percent in 1972. About one-third of the abortions were for women under age 20.

Diazepam (Valium) was the single drug most often responsible for drug-related emergency room visits. Alcohol in combination with at least one other drug was the second most common reason for drug-related emergency room visits.

Health Care Resources

The number of physicians in the United States increased nearly 70 percent between 1950 and 1974; the ratio of physicians to population increased 22 percent over the same period.

A large portion of the increase in the number of physicians is due to the increasing number of foreign medical graduates (FMG's) practicing in the United States. Nearly 20 percent of all physicians were FMG's in 1973.

Metropolitan areas had larger physician-population ratios than nonmetropolitan areas (17.4 per 10,000 population vs. 7.4) and the largest differences were between the core counties of the largest SMSA's and the least populous counties that were adjacent to SMSA's (23.3 vs. 3.6).

In 1974 the number of active, non-Federal physicians per 10,000 population varied from 42.9 in the District of Columbia and 23.6 in New York to 8.5 in Alaska and 7.8 in South Dakota.

Dentists are more concentrated in metropolitan areas; the dentist-population ratio was 6.7 per 10,000 population in large metropolitan areas and 3.7 per 10,000 population in counties which were not adjacent to SMSA's. The highest dentist-population ratios were in those areas with the highest physician-population ratios.

In 1975 the number of civilian dentists per 10,000 population ranged from 8.5 in the District of Columbia and 7.6 in New York to 2.9 in South Carolina and 2.6 in Mississippi.

During the past 30 years over $50 billion were spent on health facilities construction and modernization. While only between $3 and $4 billion of this total were derived directly from the Hill-Burton Program, those funds appear to have been a factor in achieving a more equitable distribution of the short-stay hospital bed supply across the country.

The number of hospitals decreased from 7,845 to 7,438, and the number of hospital beds decreased from 1.6 million to 1.4 million from 1969 to 1973. The decline in hospital beds has been entirely within the specialty hospitals; there has been an increase in the number of general medical and surgical hospital beds.

One of the many factors related to the rising cost of hospital care is the increase in the number of hospital employees per patient. In 1974 there were 336 full-time equivalent employees for every 100 patients in non-Federal short-stay hospitals. This is about twice the number of employees per patient as 30 years ago.

In general, the number of short-stay hospital beds per 1,000 population was highest in the West North Central States (5.8) and lowest in the Pacific States (3.9).

Acute care hospital beds are not concentrated in large metropolitan areas the way physicians and dentists are. In 1974 there were 4.4 short-stay general hospital beds per 1,000 people in large metropolitan areas and 4.7 per 1,000 people in counties which were not adjacent to SMSA's.

The growth of the nursing home industry was one of the major health developments in the past decade. There were 3½ times as many beds in nursing care homes in 1973 as a decade earlier (1.1 million in 1973 compared with 0.3 million beds in 1963).

Nationally, there were 62 nursing home beds per 1,000 people 65 years and over in 1973. There were fewer than 30 per 1,000 people 65 years and over in Florida and West Virginia and more than 100 in Wisconsin and Minnesota.

Health Expenditures

During the fiscal year ending June 1976, the amount spent for health care in the United States totaled $139.3 billion or 8.6 percent of the gross national product. This total health expenditure was 14 percent greater than that in the previous year. The average expenditure of $638 per person was 13 percent more than in the previous year.

Between 1950 and 1976, total health expenditures rose at an average annual rate of 9.9 percent. Half of this increase was due to price increases.

Expenditures for hospital care rose more rapidly than those for services of physicans and dentists. Changes in the quantity and quality of services provided by hospitals, however, have accounted for a little less than half of the increased outlays for providing that care.

Between 1950 and 1976, an increasing proportion of total health expenditures were spent on inpatient care (i.e., hospital and nursing home care). In fiscal year 1976 hospital care alone accounted for 40 percent of national health expenditures. Expenditures for nursing home care have grown at a rate of 21 percent a year since enactment of Medicare and Medicaid in contrast to a 16-percent growth rate during the previous 10 years.

Between 1965 and 1976, public expenditures rose at nearly twice the rate of private expenditures. By 1976 they accounted for more than 42 percent of all spending for health care, up from a relatively stable 25-percent share during the years from 1950 to 1965.

Per capita public expenditures increased from $48 in 1965 just prior to implementation of the Medicare and Medicaid programs to $269 in 1976, while per capita spending from private sources during this period increased from $149 to $369.

In fiscal year 1976 public program expenditures (i.e., expenditures by Federal, State, and local governments) totaled $53.3 billion. Medicare and Medicaid together accounted for 62 percent of this total.

Nearly 60 percent of public program expenditures, $30.4 billion, were devoted to hospital care, with the largest amounts (both absolutely and proportionally) being paid by the Medicare program. Physicians' services accounted for $6.6 billion, or 12 percent of the total, followed closely by outlays for nursing home care of $5.9 billion (11 percent).

Per capita payments by the Medicare and Medicaid programs vary among geographic regions. In both 1971 and 1974 per capita payments for hospital care under Medicare were highest in the Northeast and lowest in the

South, while per capita payments under Medicare's supplementary medical insurance program were highest in the West and lowest in the North Central Region.

Per capita expenditures for personal health care services increase with age. In fiscal year 1976, $1,521 was spent for each person 65 years and over, $547 for those aged 19-64, and $249 for those under age 19.

The health expenditures for older people were publicly subsidized to a greater extent than those for the younger population. In fiscal year 1976 the public contribution varied from 68 percent for the elderly to 26 percent for people under 19 years of age.

The total economic cost of illness, taking into account the direct cost of treatment and the losses attributed to morbidity and mortality at a 4-percent discount rate was $189 billion in 1972. The major increase was in the direct cost of providing care. Direct costs accounted for 39.8 percent in 1972 in contrast to 24.1 percent in 1963. Diseases of the circulatory system accounted for the largest share of total costs of illness, one-fifth, in both years.

An estimated 163 million persons, or 78 percent of the Nation's civilian population, were protected by private health insurance against some portion of the cost of hospital care at the end of 1974.

Private health insurance paid for about one-quarter of all health care expenses in fiscal year 1976. The bulk of these payments were for hospital care (62 percent) and physicians' services (30 percent).

The proportion of people having private insurance coverage in 1974 increased with income, rising from 37 percent for the lowest income group (less than $3,000) to more than 90 percent among families with incomes of $15,000 or more.

Historically, medical care price increases have exceeded the increases registered by the total Consumer Price Index. Between 1950 and 1976 medical care prices increased 3.4 times while the Consumer Price Index increased 2.4 times.

The imposition of price and wage controls under the Economic Stabilization Program from August 1971 to April 1974 reduced the rate of health care inflation to less than two-thirds the rate of the previous 2 years. Large increases in medical care prices followed expiration of the program.

The 1972 average total cost per resident day in nursing homes was $15.63, about 59 percent of which was labor expenses. The Northeast Region averaged substantially higher costs and charges than other areas.

The average net income of dentists in 1972 was $34,455.

Between 1969 and 1974, physicians' net incomes rose at an average annual rate of 5.2 percent from $39,727 to $51,224; fees for an initial office visit rose an average 8.8 percent per year, and expenses rose 10.7 percent per year.

ACKNOWLEDGMENTS

This report is the result of the cooperation of many people, some working within the National Center for Health Statistics and the National Center for Health Services Research, some outside. These people gave generously of their time and knowledge—suggesting topics to be included, providing data from their surveys and programs, sometimes preparing data specially for this report, reviewing and commenting upon drafts. Their cooperation and assistance is gratefully acknowledged.

Special thanks go to the secretarial staffs of the Division of Analysis, NCHS, and the Office of Research Strategy, NCHRS, who furnished typing and other support services throughout the preparation period.

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SYMBOLS

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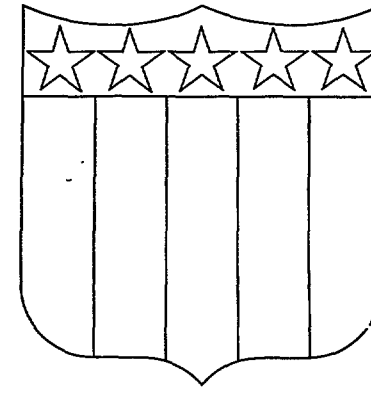
PART A

SELECTED HEALTH TOPICS



CONTENTS—Part A

CHAPTER I

Elderly People: The Population 65 Years and Over[a]

Americans are living longer today than ever before in history. Mortality rates among the elderly have been declining during the past several years. Even without further reductions in mortality, persons currently reaching their 65th birthday will, on the average, live 16 more years.

It would be a mistake to think of the elderly as a homogeneous population. As a group they are more likely than younger people to suffer from multiple, chronic, often permanent conditions that may be disabling. Despite that, the majority are living active lives and are able to remain in their own households. The proportion of the population with health problems increases with age and a minor health problem that might be quickly alleviated at younger ages tends to linger, but the range in health status is just as great in this group as in any other.

Aging is a process that continues over the entire lifespan at differing rates among different people. The rate of aging varies among populations and among individuals in the same population. It varies even within an individual because different body systems do not age at the same rate.

There are, therefore, no biological reasons for defining the "elderly" in terms of a specified calendar age. The reasons for using age 65 to mark the beginning of old age are mostly social and legislative. Private retirement plans, Social Security, and many other programs that affect a person's way of life take effect at age 65. This may change in the future in response to social pressures. At present, however, 65 years and over is generally accepted for use in programs relating to aging and is used to define the elderly population in this chapter.

Interest in how older people fare has grown in recent years, partly because of their rapid increase both in absolute numbers and in their proportion of the total population. Also, interest in their utilization of health services has mounted because of the escalating costs of medical care and the growing proportion of these costs paid out of public funds. As a result, awareness of their health status, needs for health care, and utilization of services has intensified.

POPULATION CHARACTERISTICS

Planning for the health needs of a large number of older people is a relatively recent concern that will remain with us in the foreseeable future. In 1900 there were only 3.1 million people

[a] Prepared by Mary Grace Kovar, Division of Analysis, National Center for Health Statistics.

NOTE: Unless otherwise noted, data in this chapter are from the ongoing data-collection systems of the National Center for Health Statistics (NCHS). This is the first publication of many recent statistics from NCHS; other data have been published in the *Vital and Health Statistics* series. Bibliographic citations are given for all publications which do not originate from NCHS.

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65 years and over in the United States. By 1940 the number had tripled to 9.0 million, and in the next 25 years it doubled. In 1965, just before Medicare was instituted, there were 18.5 million people 65 years and over in the United States, and by 1975 there were 22.4 million elderly people. According to the most recent population projections, there will be about 31.8 million elderly people by the year 2000, and by 2030, as the last of the post-World War II baby boom population attains age 65, there will be 55.0 million (Census Bureau, 1977). These projections may be underestimates. Since mortality rates are currently declining at all ages, the number of people surviving into old age could be greater.

Within the age group 65 years and over, the proportion of people aged 65-74 is getting smaller, while the proportion 75 years and over is getting larger. This trend is expected to continue at least until the end of the century. In 1900 the proportion of the elderly who were 75 years and over was 29 percent; by 1970 it was 38 percent. By the year 2000 it is expected that about 45 percent of the population 65 years and over will be 75 years and over (Census Bureau, 1977). The proportion of the elderly who are 75 years and over is tremendously important in evaluating health status and estimating needs for health care. The prevalence of chronic diseases and impairments and the utilization of medical services which increase with age increase more rapidly beginning at about age 75. Thus as a group the people 75 years and over need more medical care and home services if they are to continue to lead active lives.

The sex ratio (i.e., number of men per 100 women) is very low in the elderly population because death rates at every age are higher for men. For every 100 women, 105 men are born. Among people 65 years and over, however, there are only 69 men per 100 women. The ratio decreases from 77 men per 100 women at ages 65-74 to only 48 men per 100 women at 85 years and over.

The sex ratio among the elderly has changed radically within the last few decades. In 1960 the sex ratio for people 65 years and over was 83 men per 100 women (Census Bureau, 1976a). Since then, however, people who were part of the great immigration waves before World War I, in which the proportion of men relative to women was large, have mostly died. Additionally, the increase in life expectancy over the past decades has been greater for women than for men. The difference between the sexes in life expectancy at birth was only 2.0 years in 1900 but 7.8 years in 1975.

Many people in this age group rely on long-term institutional care at some point. According to the 1970 census, 5 percent of the people 65 years and over were residents of institutions, and by 85 years and over, 19 percent were residing in institutions at any given time (Census Bureau, 1973). The risk of being institutionalized at some point is high.

Still, at any given time the vast majority (95 percent) of the elderly are not in institutions. Most remain in their homes. In fact, in the past decade the proportion of the elderly maintaining their own household has increased and the proportion classified as living with "other relative" (i.e., residing in families of which they are neither the head nor the wife of the head) has decreased. Of the 21.3 million elderly not in institutions in 1975, some 5.8 million lived alone, 11.4 million were married and living with a spouse, and 4.1 million lived with other relatives or nonrelatives. The most common marital status among elderly men was to be married with the wife present (77 percent). The most common marital status among women was widowhood (51 percent); only 38 percent of elderly women were married with the husband present.

Elderly women were far more likely than elderly men to be living alone. Thirty-six percent of women 65 years and over and 41 percent of women 75 years and over were living alone in 1975, in contrast to 14 percent of men 65 years and over and 18 percent of men 75 years and over (Census Bureau, 1976a).

Financial difficulties also may beset elderly people. In 1974, men 65 years and over had a median income of about $4,500, which was nearly double the $2,400 median income of women the same age. Elderly people living alone or with nonrelatives had very low incomes; the median was $3,400 for men and $2,900 for women (Census Bureau, 1976b). Thus maintaining a household rather than moving in with relatives is often financially difficult even with Social Security benefits, the major source of cash for about 7 out of 10 elderly beneficiaries living

alone. Maintenance of a household is especially difficult for elderly women since they often have little income and are more likely than elderly men to live alone.

Finally, older people, like younger ones, are likely to be living in metropolitan areas. Two-thirds (68 percent) of the 21.3 million non-institutionalized elderly live in counties classified as metropolitan. Another 11 percent live in urbanized counties, and 21 percent live in counties which have an urban population of less than 20,000 people. The relative distribution is the same for those aged 65-74 and those 75 years and over.

This chapter focuses on three of the demographic characteristics discussed above—age, sex, and geographic distribution. Where needed, occasional references are made to other characteristics, such as income, but the Medicare and Medicaid programs along with coverage under private health insurance plans have decreased the financial barriers to many kinds of medical services. For those services, income no longer determines utilization. The change in utilization is documented where data are available.

Age and sex are biological characteristics associated with an individual's health, need for medical care, and utilization of services. Geographic area is associated with patterns of health care delivery and the availability of medical resources. Thus focusing on these three variables may throw some light on how characteristics of the individual and of the medical care system determine the older population's use of medical care.

TRENDS IN HEALTH

Mortality

Mortality rates, the oldest and still most widely available measure of health, have declined considerably for older people. From 1950 to 1975 the death rate for people 65 years and over declined by 13 percent. Most of this decline has been recent; the rate has decreased by 11 percent since 1965 (table A). In 1965 there were 6,118 deaths per 100,000 people 65 years and over; in 1975 there were 5,432.

The decline in death rates over the 25 years has actually been much greater for each 10-year age group. From 1950 to 1975 death rates for each age group declined by more than 20 percent. From 1965 to 1975 rates declined by 16 percent for people aged 65-74, by 10 percent for those aged 75-84, and by 25 percent for those 85 years and over. All of the decline in death rates for the oldest group has occurred since 1965.

Death rates have been consistently higher among elderly men than women, and the mortality differential is widening. At the turn of the century the death rate for men 65 years and over was 6 percent higher than that for women (Linder and Grove, 1943). By 1950 the death rate for elderly men was 27 percent higher than that for women. It was 41 percent higher by 1965 and 47 percent higher by 1975.

Life expectancy at age 65 increased more between 1950 and 1975 than during the first 50 years of this century. In 1900 people age 65 could expect to live 11.9 years longer; in 1950 they could expect to live 13.8 years longer. Expectation of life at age 65 increased by 0.8 years from 1950 to 1965 and by an additional 1.4 years from 1965 to 1975. Thus by 1975 a person could look forward to 16.0 more years of life after a 65th birthday.

The gain is not distributed equally; most of it is among women. Between 1965 and 1975 white women age 65 gained 1.8 years and other women 2.0 years. White men gained only 0.8 years and other men 1.1. In 1975 white women age 65 could expect to survive for another 18.1 years and other women for 17.5 years, but men, regardless of color, for only 13.7 more years.

Substantial declines in two of the three leading causes of death, heart disease and cerebrovascular disease, account for most of the decrease in mortality of the elderly (table B). The 1975 death rate for heart disease, the leading cause of death, was 84 percent of the rate 25 years before. The death rate for cerebrovascular disease was 79 percent of the 1950 rate. The decline in the death rate for heart disease alone accounted for 55 percent of the overall decline in mortality among the elderly from 1950 to 1975 and 61 percent of the decline from 1965 to 1975.

In contrast, the death rate for cancer, the second leading cause of death, has increased slowly over the years. In 1975 about 961 in every 100,000 people 65 years and over died from cancer. Ten years earlier the rate had been

Table A. Death rates for persons 65 years and over by sex, color, and age, and expectation of life at age 65 by sex and color: United States, 1950, 1965, and 1975

(Data are based on the National Vital Registration System)

Sex, color, and age	1950	1965	1975
	Deaths per 100,000 population 65 years and over		
Both sexes			
Total, 65 years and over	6,270.3	6,118.3	5,432.4
65-74 years	4,104.3	3,790.3	3,189.2
75-84 years	9,331.1	8,192.7	7,359.2
85 years and over	20,196.9	20,199.7	15,187.9
White, 65 years and over	6,260.1	6,106.8	5,442.7
65-74 years	4,023.1	3,667.1	3,107.2
75-84 years	9,416.5	8,287.0	7,384.0
85 years and over	20,678.6	20,982.5	15,707.5
All other, 65 years and over	6,414.6	6,261.0	5,323.6
65-74 years	5,205.0	5,257.0	3,970.7
75-84 years	8,039.7	7,019.5	7,076.1
85 years and over	14,473.6	12,345.3	10,102.9
Male			
Total, 65 years and over	7,053.3	7,316.1	6,702.7
65-74 years	4,931.4	5,046.4	4,414.5
75-84 years	10,426.0	9,823.2	9,519.4
85 years and over	21,636.0	21,278.9	17,572.6
White, 65 years and over	7,052.3	7,316.2	6,735.3
65-74 years	4,864.9	4,929.5	4,355.8
75-84 years	10,526.3	9,974.6	9,608.1
85 years and over	22,116.3	22,243.4	18,257.9
All other, 65 years and over	7,066.3	7,326.5	6,399.4
65-74 years	5,794.9	6,382.7	4,970.8
75-84 years	9,029.6	8,132.8	8,604.9
85 years and over	16,022.1	13,070.7	11,693.8
Female			
Total, 65 years and over	5,568.7	5,189.8	4,550.9
65-74 years	3,333.2	2,768.9	2,247.0
75-84 years	8,399.6	6,998.5	6,030.4
85 years and over	19,194.7	19,526.4	14,031.4
White, 65 years and over	5,554.9	5,175.4	4,554.6
65-74 years	3,242.8	2,644.3	2,152.8
75-84 years	8,481.5	7,064.7	6,034.7
85 years and over	19,679.5	20,213.2	14,494.1
All other, 65 years and over	5,769.1	5,362.2	4,511.3
65-74 years	4,610.7	4,291.0	3,172.0
75-84 years	7,064.7	6,092.5	5,978.5
85 years and over	13,366.8	11,794.4	9,177.3
	Expectation of life at age 65		
Total	13.8	14.6	16.0
White male	12.8	12.9	13.7
All other male	12.8	12.6	13.7
White female	15.0	16.3	18.1
All other female	14.5	15.5	17.5

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1950 and 1965, Washington, U.S. Government Printing Office; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table B. Death rates for the 10 leading causes of death among persons 65 years and over, by 1975 rank order for both sexes, and by sex for 1975: United States, 1950, 1965, and 1975

(Data are based on the National Vital Registration System)

Cause of death and ICDA code	1950	1965	1975		
			Both sexes	Male	Female
	Deaths per 100,000 resident population 65 years and over				
All causes	6,270.3	6,118.3	5,432.4	6,702.7	4,550.9
Diseases of heart 390-398, 402, 404, 410-429	2,860.9	2,823.9	2,403.9	2,933.0	2,036.7
Malignant neoplasms 140-209	856.5	901.4	961.1	1,301.1	725.2
Cerebrovascular diseases 430-438	923.8	901.0	729.7	740.5	722.1
Influenza and pneumonia 470-474, 480-486	191.3	213.7	187.1	239.2	150.9
Arteriosclerosis 440	—	—	123.0	119.8	125.2
Diabetes mellitus 250	121.1	122.9	112.9	102.8	119.9
Accidents E800-E949	210.8	155.0	109.6	140.6	88.1
Motor vehicle accidents E810-E823	43.1	38.9	25.3	38.7	16.0
All other accidents E800-E807, E825-E949	167.7	116.1	84.3	101.9	72.1
Bronchitis, emphysema, and asthma 490-493	—	—	80.5	152.5	30.5
Cirrhosis of liver 571	34.9	34.5	36.6	58.1	21.6
Nephritis and nephrosis 580-584	—	—	23.2	...	...
Suicide E950-E959	30.0	22.8	...	36.8	...
Hernia and intestinal obstruction 550-553, 560	37.6	35.6	...	...	20.5
All other causes	—	—	664.9	878.4	510.1

NOTE: Cause-of-death titles and numbers are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States. Because of decennial revisions in the classification and changes in rules of cause-of-death coding, there is lack of comparability for some causes from one revision to the next. In some instances data are omitted for earlier years because the appropriate subcategories are not available. Data for influenza and pneumonia should not be interpreted for trends since they are influenced by epidemics which cause large fluctuations in data for a single year.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1950 and 1965, Washington, U.S. Government Printing Office; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

901, and 25 years earlier it had been 857 per 100,000 people 65 years and over.

The death rate for accidents (excluding motor vehicle accidents) deserves mention, if only to point out the remarkable decline; the rate in 1975 was half the rate 25 years earlier. For those 85 years and over the rate was one-third the rate in 1950, about 293 in contrast with 928 deaths per 100,000 people.

Disability

Data on morbidity and disability are unfortunately not available for as many years as mortality data. It is possible to look at trends for only the past 10 years (1965-75), and then only for the noninstitutionalized population. The proportion of the elderly population in institutions increased somewhat over the 10 years, and the health characteristics of those in institutions may not be the same in 1975 as in 1965. Changes in the reason for institutionalizing elderly people would affect comparisons over time of disability and illness in the noninstitutionalized population.

Short-term disability is usually measured by the number of days during the year that people have to modify their usual behavior because of illness. Three measures are commonly used: days of restricted activity, days in bed, and days lost from work. There has been no change in the level of two of these measures over the 10 years. In 1965 the average number of days of restricted activity per year per elderly person was 39; in 1975 it was 38. The average number of days in bed was 14 in 1965 and 13 in 1975.

In contrast, the number of days lost from work by employed elderly decreased considerably over the past 10 years. Employed people 65 years and over lost about 8 days from work

per person in 1965 and about 4 days in 1975. The proportion of people 65 years and over in the labor force decreased during that time from 16 to 12 percent (Bureau of Labor Statistics, 1974; Bureau of Labor Statistics, 1976; Census Bureau, 1974). The concurrent decreases could mean that older people in relatively poor health are able to retire earlier as retirement benefits improve while those in better health continue to work.

Long-term disability can be measured by the proportion of people who are limited in amount or kind of usual activity or in mobility because of chronic conditions or impairments. The proportion of elderly people limited in activity appears to have increased very slowly from about 42 percent in 1965 to 47 percent in 1975 but all of the increase is due to the aging of the population; the age-specific rates are unchanged. That is, the larger proportion of the people 65 years and over was limited in activity in 1975 than in 1965 simply because a higher proportion was 75 years and over and thus more likely to be limited.

There was no change in the proportion of the elderly limited in mobility due to chronic conditions for the 2 years for which data are available, 1966 and 1972. In both years limitation of mobility was reported for about 20 percent of the elderly.

It has been suggested that prolonging the lives of older people will produce a dependent, badly impaired elderly population. However, death rates for people 65 years and over certainly declined from 1965 through 1975, but the limited data available do not indicate any increase in disability among noninstitutionalized elderly people. No more definitive evaluation can be made without information on the proportion of the elderly population residing in institutions and their levels of disability (information which is lacking, especially for the early years).

CURRENT MEASURES OF HEALTH

Mortality

The majority of deaths in the United States are deaths of elderly people. Of the 1.9 million people who died in 1975, 1.2 million (64 percent) died after their 65th birthday, 0.8 million (41 percent) after their 75th birthday, and 0.3 million (15 percent) after their 85th birthday.

If the 1975 mortality rates continued to prevail during their lifetimes, three-quarters of the babies born in the United States that year would reach their 65th birthday. Over half (53 percent) would reach their 75th birthday, and a quarter their 85th (table C).

Even though death rates are high among older people, a large proportion survive any 5-year period, at least until age 85. Of the people reaching their 65th birthday, 88 percent can expect to survive to their 70th if mortality rates remain at the 1975 level; 82 percent of those celebrating a 70th birthday can expect to celebrate their 75th.

The chances of surviving until a relatively late age are not the same for everyone. White women, by far, have the best chance. Their mortality rates are relatively low throughout life and remain low. If the 1975 rates were to prevail, over half (52 percent) of the white girl babies born in 1975 would survive until age 80. Three-quarters (78 percent) of the white women reaching their 75th birthday would survive until age 80. Other women also have low mortality rates although higher than white women.

Men have higher mortality rates than women throughout life and a much poorer chance of living to old age. Two-thirds (68 percent) of the boys born in 1975 would survive to age 65 if the 1975 rates prevailed and just over a quarter (28 percent) would reach their 80th birthday. White men have lower death rates than other men at young ages and thus a better chance of reaching age 65. For those who do reach retirement age, however, the chances of living to old age are close to the same.

The leading cause of death among the elderly is heart disease, which is responsible for 44 percent of the deaths of people 65 years and over. Malignant neoplasms account for another 18 percent of the deaths (19 percent for men and 16 percent for women). The third leading cause is cerebrovascular disease, which accounts for 13 percent of the deaths (11 percent for men and 16 percent for women). Together, these three account for 75 percent of all deaths of elderly people.

The fact that these three causes account for

Table C. Percent of all persons reaching specified age and percent surviving 5 years after specified age, by selected ages 65 years and over, sex, and color: United States, 1975

(Data are based on the National Vital Registration System)

Sex and color	Age in years				
	65	70	75	80	85
	Percent of all persons reaching specified age				
Both sexes					
Total	74.6	65.5	53.4	39.0	24.5
White	76.2	67.2	55.1	40.4	25.2
All other	63.0	53.9	40.8	28.8	19.9
Male					
Total	67.5	56.2	42.5	28.0	15.5
White	69.4	57.9	43.9	28.9	15.8
All other	54.3	44.4	31.9	21.0	13.2
Female					
Total	81.7	74.9	64.6	50.4	34.1
White	83.2	76.5	66.5	52.1	35.0
All other	71.5	63.6	50.2	37.4	27.4
	Percent surviving 5 years after specified age				
Both sexes					
Total	87.8	81.5	73.0	62.9	—
White	88.1	82.1	73.2	62.4	—
All other	85.6	75.7	70.7	69.0	—
Male					
Total	83.3	75.5	65.8	55.4	—
White	83.4	75.9	65.8	54.7	—
All other	81.6	71.8	65.9	63.0	—
Female					
Total	91.7	86.2	78.1	67.6	—
White	92.0	86.8	78.4	67.2	—
All other	89.0	78.9	74.5	73.2	—

SOURCE: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, 1975. Health Resources Administration, DHEW, Rockville, Md., to be published.

so many of the deaths of the elderly is not surprising. They also accounted for 53 percent of the deaths of people under 65 years in the United States in 1975. In childhood and early adulthood external events (accidents, suicides, and homicides) cause most of the deaths, with malignant neoplasms second. By ages 35-44 heart disease replaces malignant neoplasms as the second cause, and by ages 45-54 heart disease ranks first with malignant neoplasms second. They account for 32 and 28 percent of the deaths, respectively, while accidents account for only 12 percent. By ages 55-64 heart disease accounts for 38 percent of all deaths, malignant neoplasms for 29 percent, and cerebrovascular diseases for 6 percent. The high proportion of the deaths of elderly people due to these three causes is a continuation of trends begun much earlier.

Influenza and pneumonia, the fourth leading cause, account for 3 percent of the deaths of elderly men and women. For men, the fifth leading cause is a cluster of conditions grouped under bronchitis, emphysema, and asthma; accidents rank sixth. Arteriosclerosis is fifth for women, while diabetes is sixth.

Most of the deaths of elderly people result from disease conditions which have existed for many years or from personal habits or environmental conditions which may go back many years. Although good medical care for the elderly can delay death (and ameliorate suffering), preventing such deaths must start early in life.

A small proportion of the deaths, such as those from accidents, may be prevented at any age regardless of early life history by modifying living conditions and assuring prompt medical care if an accident occurs.

Chronic Conditions

At the beginning of 1974, 4 percent of the elderly people were in nursing homes. They were, on the average, older than elderly people living in the community; 83 percent were 75 years and over in contrast with 36 percent of the noninstitutionalized elderly.

In general, these elderly residents of nursing homes suffered from multiple chronic conditions and functional impairments. Almost two-thirds (63 percent) were senile, 36 percent had heart trouble, and 14 percent had diabetes. Orthopedic problems due to a variety of disease conditions were common. About a third (31 percent) were bedfast or chairfast and about a third (35 percent) were incontinent. Almost half (49 percent) of the elderly in nursing homes could not see well enough to read an ordinary newspaper regardless of whether they wore glasses; one-third (35 percent) could not hear a conversation on an ordinary telephone; and one-fourth (24 percent) had impaired speech.

The most common primary diagnoses were hardening of the arteries, senility, stroke, and mental disorders, all diagnoses likely to give rise to functional impairments.

Other elderly people are in psychiatric or other chronic disease hospitals, Veterans Administration hospitals, and other long-term care facilities. Data are not available on the prevalence of all the chronic conditions or impairments afflicting residents of these facilities, but it is reasonable to assume that they too have multiple chronic conditions and impairments.

The prevalence of chronic conditions among the elderly living in the community is higher than among younger people but far lower than among people in nursing homes. Some of the most frequently reported chronic conditions and impairments for elderly people living in the community are arthritis, vision and hearing impairments, heart conditions, and hypertension. The reported prevalence rate for each of these is 20 percent or higher; 38 percent have arthritis. Some of the people have more than one condition although multiple conditions are less common among community residents than among nursing home residents. Prevalence rates for all of these conditions are higher in nonmetropolitan than in metropolitan areas and higher in the South than in other regions.

Elderly women, who are on the average older than elderly men, have higher rates than men for arthritis, diabetes, hypertension, back impairments, and vision impairments. Men have higher rates of asthma and chronic bronchitis, hernias, ulcers, and hearing impairments.

A high prevalence of chronic conditions, however, does not necessarily mean a high prevalence of disabling conditions. The impact of chronic conditions varies markedly. For example, approximately equal numbers of elderly people were reported to have heart conditions and hypertensive disease without heart involvement. Yet 4 times as many people were limited in activity, 8 times as many had been hospitalized, and 9 times as many had more than 2 weeks of bed disability during the year because of heart conditions than because of hypertensive disease without heart involvement.

Loss of sensory ability frequently accompanies aging. It is well known that many elderly people have lost some of their ability to see or hear. About 92 percent of the elderly people living in the community wear glasses, and 5 percent wear hearing aids (Dickson, 1976). Much less widely known is that taste, smell, and adaptation to darkness also are altered by age (Busse, 1977). Complaints from older people that all food tastes bitter or sour may be due not to imagination but to physical loss of the ability to taste and smell. Thus older people may not enjoy food and may not fulfill their nutritional requirements. Loss of ability to adapt to light changes may lead to accidents.

Only 14 percent of the noninstitutionalized people 65 years and over have no chronic disease that they are aware of. However, some of them may have conditions that they do not know about. Laboratory findings have indicated significant pathology for many elderly people who were not aware that they had diabetes, hypertensive heart disease, or coronary heart disease (Lawrence, 1973).

Thus the prevalence of some chronic diseases must be higher than the estimates given here.

Prevalence estimates for other conditions such as rheumatoid arthritis and for many impairments appear to be reasonably accurate.

Long-Term Disability

The presence of a chronic condition is often not as important to people as the inability to carry out their usual activities. It is only when a condition causes interference with or restriction of activities that people feel impaired. In that context, people were asked whether they were limited in activity, that is, limited in ability to work or keep house because of a chronic condition. About 47 percent of the noninstitutionalized elderly people in 1975 were limited in activity due to chronic conditions. Six percent were limited but not in their major activity, 23 percent were limited in the amount or kind of major activity, and 17 percent were unable to carry on their major activity.

The proportions of elderly people with activity limitation differed with a number of demographic variables. Age was most important; only 42 percent of people aged 65-74 were limited, in contrast with 56 percent of those 75 years and over. Women were less likely to be limited than men (44 percent and 50 percent, respectively). Activity limitation was less common among elderly whites (46 percent) than among all other elderly people (55 percent). Limitation was reported less frequently as income or years of education increased. Those living alone or with their spouses were less likely to be limited (45 percent) than those living with nonrelatives or relatives other than their spouses (54 percent). Elderly people in the Northeast Region or in urban counties were less likely to be limited than those in the South Region or in less urbanized counties.

Two chronic conditions caused almost half the limitation. About 24 percent of the elderly who were limited in activity in 1974 were restricted by heart disease, and another 23 percent were limited by arthritis or rheumatism.

Other conditions reported as causing limitation of activity in the elderly population were orthopedic impairments (10 percent of those limited), visual impairments (10 percent), and hypertension (9 percent). Emphysema was reported as a cause for 8 percent of the men limited in activity but for only 2 percent of the women. The fact that over twice as many men 65 years and over as women of that age were current or former cigarette smokers may account for part of this difference.

A more rigorous measure of the impact of chronic conditions is whether the person is limited in mobility (i.e., the ability to move about freely). In 1972 about one-fifth (18 percent) of the elderly had some degree of mobility limitation due to chronic conditions or impairments. Five percent were confined to the house, 7 percent needed help in getting around, and 6 percent could get around alone but had trouble. If one assumes that residents of nursing homes are also limited in mobility, then 22 percent of the total elderly population were to some degree limited in mobility, and 16 percent were unable to get around alone.

Short-Term Disability

Elderly people, whether or not they were limited in activity or mobility by chronic conditions, were forced to restrict their usual activities an average of 5½ weeks per person in 1975. Approximately two-thirds of the days of restricted activity were accounted for by chronic conditions and one-third by acute illnesses or injuries.

Older people, like younger ones, have colds, flu, and other illnesses of short duration. They also suffer accidental injuries which, while not indicators of health *per se,* do cause short-term restriction of activity and require medical care. Injuries also may cause permanent limitation of activity or mobility and are one of the leading causes of death.

Accidential injuries were responsible for 101 million days of restricted activity, including 25 million days in bed, for elderly people living in the community in 1975. Older women were particularly susceptible. They had, on the average, almost twice as many injuries as men. People 75 years and over were more likely to suffer such injuries (0.26 per person per year) than those aged 65-74 (0.18 per person per year). About 40 percent of all injuries to the elderly were the result of falls and about two-thirds (68 percent) of all injuries occurred at home; 80 percent of the injuries to people 75 years and over were at home.

Self-Assessment of Health

Good health for people of any age does not necessarily imply the complete absence of impairments or disease conditions, but only that the conditions present do not significantly interfere with physical and social functioning. Illness is a social as well as a physical phenomenon, and the existence of a morbid condition does not predetermine a universal pattern of behavior. The individual's self-assessment of health may be as important as his actual medical status in predicting general emotional state and behavior (Maddox and Douglass, 1973).

The high prevalence of chronic conditions and impairments and the high levels of limitation of activity and mobility may give the impression that most elderly people view themselves as being in poor health and unable to function. Instead, the majority assess themselves as being in good health compared to other people their own age.

Two-thirds (69 percent) of the elderly noninstitutionalized people rated their health as good or excellent in 1975; poor health was reported for only 9 percent (table D). Poor health was somewhat more common among men than women and among those 75 years and over than among those aged 65-74 but the differences were not significant. However, the proportion assessing their health as poor was twice as large among elderly members of minority groups (16 percent) as among the elderly whites (8 percent). Poor health was reported more frequently

Table D. Percent distribution of assessment of health status as reported in health interviews for persons 65 years and over, according to selected demographic characteristics: United States, 1975

(Data are based on household interviews of the civilian noninstitutionalized population)

Demographic characteristic	Health status				
	All health statuses [1]	Excellent	Good	Fair	Poor
	Percent distribution				
Total	100.0	28.6	40.3	21.5	8.6
Sex and age					
Male	100.0	28.1	40.0	21.4	9.4
65-74 years	100.0	28.5	39.8	21.5	9.3
75 years and over	100.0	27.5	40.3	21.3	9.8
Female	100.0	28.9	40.6	21.6	8.0
65-74 years	100.0	29.2	41.4	21.5	7.2
75 years and over	100.0	28.6	39.3	21.8	9.4
Color					
White	100.0	29.4	40.8	21.0	7.8
All other	100.0	20.6	35.5	26.7	16.3
Region					
Northeast	100.0	27.3	44.4	21.2	6.2
North Central	100.0	27.1	43.2	21.6	7.1
South	100.0	27.6	35.4	23.5	12.4
West	100.0	35.3	38.4	18.0	7.5
Residence					
Metropolitan	100.0	30.6	40.5	20.1	7.8
Nonmetropolitan	100.0	24.4	40.0	24.7	10.3
Family income [2]					
Less than $5,000	100.0	23.3	38.7	24.9	12.2
$5,000-$9,999	100.0	29.8	41.3	21.4	6.8
$10,000-$14,999	100.0	31.6	42.7	19.9	5.1
$15,000 or more	100.0	38.7	40.3	13.9	5.8

[1] Includes unknown health status.
[2] Excludes unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics.

among elderly residents of nonmetropolitan areas than among those in the cities, and the proportion of the elderly with reported poor health increased as income diminished.

Self-assessment of health status by elderly people has been found to correspond with the results of medical examinations in about 70 percent of the cases (Maddox, 1964). Self-addressed health status also has been found to correlate highly with other measures of health status and utilization of health services. People who rate their health as poorer than others their age are more likely to suffer from activity-limiting chronic conditions and comparatively frequent acute conditions or disability days than those who rate their health as good or excellent. They also utilize more medical services (Kovar and Wilson, 1975).

Ninety percent of elderly people reported to be in poor health were limited in their major activity, in contrast to 15 percent of those in excellent health. People in poor health had twice as many acute conditions per person, 14 times as many days of restricted activity, and 27 times as many days in bed per person as those reporting excellent health.

UTILIZATION OF MEDICAL SERVICES

Levels of Health and Use of Medical Services

The relationship between morbidity or level of health and the utilization of medical services is complex. The presence of an impairment, a chronic condition, a limitation, or a self-assessment of poor health does not necessarily indicate a need for medical care. Medical care may not be able to change the situation. On the other hand, improvement may be possible but the individual, believing that nothing can be done, may fail to seek medical care.

In general, elderly people with chronic conditions are more likely to utilize medical services than those without; however, wide variations exist in the amount of medical care utilized for specific chronic conditions. For example, only two-fifths (43 percent) of the elderly reported to have arthritis had seen a doctor about this condition within a year. In contrast, four-fifths (81-82 percent) of those reported to have diabetes, a heart condition, or hypertensive disease without heart involvement had seen a doctor about the condition within a year.

The perception of poor health is also related to utilization of medical services. In 1975 noninstitutionalized elderly people in reported poor health were more than 3 times as likely to have been hospitalized during the preceding year as those in excellent health. They were 5 times as likely to have had 10 or more physician visits during the year. At the other end of the scale, 28 percent of those in excellent health did not visit a physician at all during the year, in contrast with 6 percent of those in poor health.

In 1974 less than half (46 percent) of the people 65 years and over were reported to have any degree of activity limitation due to chronic conditions. Yet this 46 percent of the elderly accounted for 63 percent of all physician visits, 72 percent of all short-stay hospital episodes, and 78 percent of all days in short-stay hospitals utilized by elderly people.

Similarly, Medicare data reveal that enrollees who are limited utilize more services than those who are not. Enrollees who were confined to bed had 79 physician services per person in 1973, while those with no limitation had 25. Enrollees who perceived their health as "worse than others" had 58 services, while those who perceived their health as "better than others" had 20. Only 7 percent of the enrollees were confined to bed or house, yet they utilized 14 percent of the physician services. Only 12 percent of the enrollees had health "worse than others," yet they utilized 22 percent of the services (Coulter, 1976).

With rising costs of medical care and concern about the possibility of overutilization, it is essential to recognize that medical services are being utilized to a greater extent by people in poor health than by those in relatively good health and that even people in good health require preventive care and care for acute illnesses. It is also important to remember that many elderly people have one or more chronic conditions and as a group utilize medical services at a higher rate than younger adults.

Elderly people in poor health were less likely to have seen a dentist, however, than those in

good health. Forty-four percent of those in excellent health but only 32 percent of those in poor health had seen a dentist during the previous 2 years. Dental services are usually more discretionary than medical services. Thus the higher utilization by those in excellent health may be associated with greater ability to pay for the care, greater mobility, or higher motivation to maintain their good health.

Trends

Despite the implementation of Medicare, there was no increase in the rate of utilization of physicians by older people from 1965 through 1975. The average number of physician contacts by persons 65 years and over living in the community (excluding contacts while a patient in a hospital) remained at approximately 6.6 visits per person during the 10 years. Medicare data confirm this. The percentage of Medicare enrollees using services covered by supplementary medical insurance and the average number of services per person showed no consistent increase from 1968 through 1974 (Gornick, 1976).

The lack of change for the entire elderly population hides shifts which appear to have taken place within the population. The number of physician contacts per person per year increased for the elderly poor and decreased for the nonpoor. (The poor are defined as persons with family income of under $3,000 in 1963 or under $6,000 in 1974.) The proportion who had not seen a physician for 2 years or more decreased for both groups (Wilson and White, 1977). Thus differences in the rate of physician utilization by the poor and the nonpoor elderly have been narrowed or eliminated with programs designed to reduce financial barriers to medical care.

The proportion of elderly people with no dental visits within 2 years also decreased a bit, especially among the nonpoor, and the number of visits increased somewhat from 0.8 to 1.2 visits per person per year. No change occurred in the general pattern of the elderly poor receiving less dental care than the nonpoor. Unlike medical care, dental care is seldom financed by public programs or private health insurance. Comparatively few programs have been designed to remove the financial barriers to dental care.

Utilization of short-stay hospitals by the elderly increased in the 10 years from 1965 to 1975 even though utilization by people under 65 years remained relatively constant and even declined in some age groups. In 1965 there were 264 discharges from short-stay hospitals for every 1,000 noninstitutionalized elderly people; in 1975 there were 359 discharges, an increase of 36 percent. In 1965 there were 3,447 days of care in short-stay hospitals per 1,000 elderly people; in 1975 there were 4,166 days, an increase of 21 percent. During the 10 years the average length of stay declined from 13.1 to 11.6 days per discharge. Thus the discharge rate increased more than the rate for days of care. Elderly people were more likely to be hospitalized in 1975 than 10 years earlier, but once in the hospital they did not stay as long.

The great increase in hospital utilization was during the year that Medicare was implemented. It is estimated that between the year before Medicare and the first year of Medicare, the hospital discharge rate increased by 4.6-7.4 percent, average length of stay by 4.1-7.8 percent, and days of care per 1,000 elderly people by 8.9-16.0 percent (Pettengill, 1972). Since then, the increase in the discharge rate and the decrease in the average length of stay have tended to cancel one another so that the number of days of care per 1,000 elderly people has not increased substantially.

The increase in short-stay utilization was greater among the elderly poor than the nonpoor. From 1964 to 1975 discharge rates increased by 47 percent for the poor and by 18 percent for the nonpoor elderly (Wilson and White, 1977). Financial barriers appear to have been lifted for poor people who were unable to pay for inpatient hospital care before public programs were implemented.

The rate of surgery in hospitals also increased. In 1965 there were 7,554 operations for every 100,000 people 65 years and over; in 1975 there were 15,482 operations, an increase of 105 percent. Cataract surgery more than doubled, from 525 to 1,115 operations per 100,000 elderly people. Arthroplasty increased from 49 to 145 operations per 100,000 elderly people.

Change in the use of other technical innovations for treatment of the elderly in hospitals is not as well documented as change in surgery rates. Presumably, however, the new procedures, techniques, and facilities introduced in hospitals

over the 10 years are being used to treat elderly people as well as younger ones.

Changes in utilization of long-term care are much more difficult to document than trends in either ambulatory physician care or short-stay hospital care. The ongoing household surveys do not include residents of institutions. As a result, good estimates of the total number of elderly residents, the number in each kind of facility, and descriptions of the health characteristics of residents are not available over time.

Chronic disease hospitals, old people's homes, Veterans Administration hospitals, nursing homes, State and county mental hospitals, and private hospitals all provide long-term care of one kind or another. Whether the proportion of elderly people in these facilities has changed over the years is not known with any degree of certainty. There have not been State or national reporting systems which collect uniform data from all of these facilities, some of which are not even licensed as medical care facilities. Among the medical facilities which do report, methods of counting residents, patient days, and lengths of stay vary, and age is frequently not reported at all. The mechanisms to collect data, which should have been implemented 15 years ago if we were to have answers to today's questions, were not developed. As a result, the only trend data are those from the decennial censuses.

According to the 1960 census, about 4 percent of people 65 years and over resided in institutions; according to the 1970 census, 5 percent lived in such facilities. The definitions of facilities used in the two censuses may not be comparable, and facilities may have changed names over the period without changing in any other way. However, data from the two censuses make it clear that there were shifts in the type of institutions housing elderly people during that decade. In 1960, 29 percent of elderly residents of institutions were in mental hospitals and 63 percent were in homes for the aged and dependent. In 1970 the comparable figures were 12 percent and 83 percent, respectively.

Data which substantiate this shift from mental hospitals to nursing homes are available for State and county mental hospitals over a 20-year period and for nursing homes at three recent points in time. The number of elderly residents of State and county mental hospitals decreased from 773 per 100,000 people 65 years and over in 1965 (National Institute of Mental Health, 1975) to 242 in 1975 (National Institute of Mental Health, 1977). The number of elderly residents of nursing homes increased from 2,535 per 100,000 in 1964 to 4,454 per 100,000 at the beginning of 1974.

Part of the decline in the resident population of State and county mental hospitals is due to new methods of treatment, especially the introduction of psychotropic drugs, which freed people from the back wards. Part of the decline is due to the transfer of elderly people to nursing homes. In 1969, 37.7 percent of the 37,062 elderly patients released from State and county mental hospitals (29.1 percent of the men and 48.7 percent of the women) were released to nursing homes or homes for the aged. At the beginning of 1974, 5.5 percent of the elderly people then residents of nursing homes had been in a mental or other specialty hospital immediately before entering their current nursing home. The data are fragmentary but it is clear that some elderly people were transferred from one kind of facility to another. It is also likely that a proportion of the people in nursing homes would have been placed in mental hospitals if nursing homes had not been available.

CURRENT MEASURES OF UTILIZATION OF MEDICAL SERVICES

Ambulatory Care

In 1975 noninstitutionalized elderly people had a physician contact (other than visits to hospital inpatients) on an average of 6.6 times a year, in contrast to an average of 5.6 times for persons aged 45-64. About 79 percent had had a physician contact within the preceding year and 69 percent within 6 months. About 7 percent reportedly had not seen a physician for 5 years or more.

People 75 years and over were more likely to have had at least one physician contact within the year than those aged 65-74. However, people

in both groups had the same number of visits per person per year. Women were more likely than men to have had a physician contact and they had more contacts during the year than men of the same age.

The proportion of elderly people who had at least one physician contact during the year was high regardless of degree of urbanization. However, elderly residents of urban areas had, on the average, more contacts per year than residents of counties which are thinly populated or have at most a small town. For each age group and sex, residents of metropolitan counties had more physician contacts per person in 1975 than residents of counties with only a small town.

Elderly people in thinly populated counties made as many visits per person per year to a doctor's office as those in metropolitan counties. The higher number of contacts in metropolitan counties was entirely due to contacts outside a physician's office. Telephone calls, home visits, and visits to emergency rooms, clinics, and group practices accounted for 26 percent of physician contacts in metropolitan counties, in contrast to 17 percent in counties with at most one small town. Nine percent of contacts elderly people in metropolitan counties had with physicians were by phone in contrast with only 5 percent for elderly people in lightly populated counties.

When physicians in office-based practice themselves reported on visits of the elderly in 1975, it was apparent that these office visits were mostly for ongoing care; 92 percent of the visits were for patients who had been seen before. Almost half (46 percent) of the visits were for routine care of a chronic condition; another 16 percent were for flareups of chronic conditions. Almost three-quarters (70 percent) of the patients were given a definite return appointment. Very few visits resulted in referral to another physician or admission to a hospital. Thus the bulk of ambulatory care for the elderly was for followup and continuing care.

Forty-six percent of the visits were to physicians in general or family practice, and another 19 percent were to internists. One-quarter (26 percent) of the visits, regardless of the physician's specialty, were for diseases of the circulatory system. About 9 percent were for musculoskeletal conditions, and 9 percent for diseases of the nervous system and sense organs. The rest were for a wide variety of other diagnoses.

Dental Care

Dental care is an aspect on the health care of older people which is frequently overlooked. To many people dental care is something which can be postponed. It is not regarded as a necessity.

The elderly are less likely than younger adults to visit a dentist. In 1975 only 30 percent of people 65 years and over living in the community had visited a dentist within a year (about 35 percent of those aged 65-74 and 23 percent of those 75 years and over).

Unlike the proportion of the elderly visiting a physician, which by 1975 displayed little relationship with either family income or place of residence, the proportion seeing a dentist within a year was strongly correlated with both. In 1975 only 20 percent of the elderly with annual family incomes under $5,000 had visited a dentist within the year in contrast with 50 percent of those with incomes of $15,000 or more. Approximately 22 percent of elderly residents of thinly populated counties or those with only small towns had visited a dentist within the year in contrast with 30 percent of residents of metropolitan counties.

This lack of dental care is serious. Half of the elderly have no natural teeth. In 1971 about 6 percent of the edentulous elderly had no false teeth, 4 percent had an incomplete set, and 14 percent had a set but did not use it all the time. Even among those with false teeth who used them all the time, 28 percent reported that their dentures needed refitting or replacement. Thus 44 percent of the edentulous elderly had an obvious need of dental care in order to have properly fitting, useful dentures.

In 1960-62 a sizable proportion of persons aged 65-79 who were not edentulous (59 percent of the men and 36 percent of the women) had destructive periodontal disease and they had an average of 18.0 teeth missing. Dental services could improve the ability of the elderly to socialize as well as improve their nutritional levels by making it possible for them to eat a wider variety of foods.

Care in Short-Stay Hospitals

There were more than 4,000 days in non-Federal short-stay hospitals in 1975 for every

1,000 people 65 years and over. On the average, people 75 years and over were more likely to be hospitalized and to remain in the hospital longer than those aged 65-74. Men were more likely than women to be hospitalized and had more days of hospital care per person despite their somewhat shorter stays per hospitalization.

During the working years, men are less likely to be in the hospital than women, even when hospitalization for pregnancy and childbirth is excluded. Only early and late in life are males more likely to be in the hospital. No reason is immediately apparent for the relatively greater hospitalization of men beginning around age 55 and continuing through the older years. It is not due to higher death rates, as death rates are higher for men at every age. It does not appear to be due to increased medical contacts, as men make fewer physician visits than women at every age. And it does not appear to be due to delaying hospital care until after retirement, as the hospitalization rate for men is still higher 10 years after the usual retirement age.

However, the death rates for heart disease are 44 percent higher and for malignant neoplasms 79 percent higher among men than among women. Almost everyone dying of cancer and the majority of people dying of heart disease are hospitalized at some time during the last year of life; many people dying of cancer have multiple hospitalizations. Thus the higher hospitalization rate of older men may be due to their higher likelihood of having diseases for which the standard treatment is in hospitals.

Heart disease accounted for a fifth (18 percent) of the days that elderly people spent in the hospital. Chronic ischemic heart disease and acute myocardial infarction together accounted for 12 percent (485 days per 1,000 people 65 years and over).

Malignant neoplasms, the second leading cause of death, were responsible for 12 percent of the hospital days. Cerebrovascular disease, the third leading cause, accounted for an additional 7 percent (275 days per 1,000 elderly population). Both of these diagnoses accounted for a far larger proportion of the hospital care of the elderly than of their ambulatory care. Other diagnoses responsible for sizable amounts of hospital care of the elderly were diseases of the digestive system (510 days), accidental injuries (406 days), and diseases of the respiratory system (388 days per 1,000 persons 65 years and over).

The ranges of diagnoses, lengths of stay associated with them, and types of care were wide. Some hospital episodes were for cataract surgery and repair of fractures, procedures which may enable elderly people to return to active lives. Some were for illnesses which may strike at any age and from which people usually recover. Pneumonia and acute myocardial infarctions, for example, are serious but not necessarily fatal diseases among people 65 years and over. Conditions which may eventually be fatal accounted for another part of care, but this care might give the person a longer life. Such care may be very expensive regardless of the patient's age. Malignant neoplasms, for example, may be treated with surgery, radioactive or drug therapy, or other methods which often require multiple hospital episodes. Some of the hospital care was for terminal illnesses. The amount of hospital care is great in the last few months of life.

Discharge rates, average lengths of stay, and rates of days of care all vary enormously from region to region and State to State. They even vary from hospital to hospital and among areas within a State (Office of Research and Statistics, 1977). Some of the variation among hospitals and even some of the variation among small geographic areas is due to the patient mix. Hospitals with highly sophisticated technology or a staff specializing in certain kinds of care may draw seriously ill patients from outside the local area, while hospitals with lower levels of technology and less specialized staff may furnish care primarily to people within their own area. Variation among larger areas will be relatively uninfluenced by patient mix.

In an analysis of Medicare data from 1967 and 1973, the variation among the 4 geographic regions of the United States was striking and was the same in both 1967 and 1973. In both years discharge rates were lowest in the Northeast, but the average length of stay and the number of days of care per 1,000 enrollees were lowest in the West. In both years discharge rates were highest in the South, average length of stay longest in the Northeast, and rate of days of care highest in the North Central Region (Gornick, 1976). In 1973, for example, the number of days of care per 1,000 enrollees was 36 percent higher in the North Central Region than in the

West. There is no reason to believe that elderly people in the North Central Region are sicker and require more hospital care than elderly people in the West. In fact, mortality rates are relatively low in the North Central Region and have been for years. The persistent regional differences are due to patterns of providing care rather than biological needs for care. The North Central Region, for example, has a relatively high ratio of hospital beds to population and a relatively low ratio of physicians to population.

Although there is considerable variation among the States within each region, States within a region are more like one another than like States in other regions. For example, in 1974 the average length of stay in the Northeast Region ranged from 10.4 days in Maine to 15.1 days in New York. In the West, the range was from 7.6 days in Washington to 10.1 days in Arizona. There was no overlap. In the South Region patients in States in the South Atlantic Division tended to have stays longer than the regional average, similar to those in the Northeast, while those in the West South Central Division tended to have shorter stays, similar to those in the West (Office of Research and Statistics).

In summary, there is a great deal of variability in the probability of an elderly individual being hospitalized, in the amount of hospitalization, and in the treatment provided. Some of this variation is explainable by the characteristics of the individual. For example, people 75 years and over are more likely to be sick and to be hospitalized than those aged 65-74; people with cancer or heart disease are more likely to be hospitalized than those with arthritis or hypertension. This variation is to be expected.

Some of the variation, as demonstrated by the data on regional and State differences, appears to be related to patterns of medical practice and is therefore amenable to change especially since inpatient care is not always the best method of treatment. Some heart attack victims are better off at home. If the customary method of treatment in an area is 3 weeks of hospitalization, utilization rates will be high, cost of care will be high, and the patient may not benefit at all.

Reducing the amount of hospitalization where it can be done without harming the patient is critical if the cost of medical care is to be controlled. Hospital care is the largest component (45 percent) of the total amount spent for health care of the elderly.

Long-Term Care

Although the total number of elderly people in long-term institutions providing health care is unknown, there is reason to believe that the majority are in nursing homes. These are homes in which nursing care is the predominant function of the facility and excludes places which only provide living quarters and meals. Although nursing homes may accept patients of all ages, they are overwhelmingly providing care to the elderly; 89 percent of the residents at the beginning of 1974 were 65 years and over.

In 1973 there were 14,873 nursing care homes in the United States. These homes had 1,107,358 beds, or 52 beds for every 1,000 persons 65 years and over. They were relatively small; 41 percent had fewer than 50 beds, 76 percent had fewer than 100 beds. Three-quarters were proprietary homes.

At the beginning of 1974 about 961,500 people 65 years and over were in nursing homes or 44 residents for every 1,000 people 65 years and over. There were approximately 16,000 days of care per year in nursing homes for every 1,000 persons 65 years and over (4 times the number of days spent in short-stay hospitals). Utilization rates for nursing homes increased rapidly with age. There were only 12 residents of nursing homes for every 1,000 persons aged 65-74. At ages 75-84 there were 59 residents per 1,000 persons. Among people who had had their 85th birthday, 237 per 1,000 (almost a quarter) were in nursing homes. There were 86,400 days of care per year in nursing homes for every 1,000 people 85 years and over in 1973.

Almost three-quarters of the elderly nursing home residents (72 percent) were women. Elderly women are far more likely than elderly men to be living alone. Therefore, when they become seriously ill, they are less likely to have someone living with them who can care for them. Thus, of necessity, they may become residents of nursing homes.

Men aged 65-74 were almost as likely as women of the same age to be in nursing homes. By ages 75-84 there were 41 residents for every 1,000 men but 70 residents for every 1,000 women. From age 85 on, 170 out of every 1,000

men but 270 out of every 1,000 women were in nursing homes.

The best data on geographic variation in utilization come from the nursing care homes themselves. Age of the residents is not reported. Therefore, the number of residents per 1,000 persons 65 years and over is overestimated to the extent that people under 65 years are residents of nursing homes. The overestimate for the United States is about 3 residents per 1,000; there were 47 residents of nursing care homes per 1,000 persons 65 years and over according to facility reporting and 44 residents per 1,000 persons according to the survey data which were the basis for the previous discussion. If practices in individual States are such that higher or lower proportions of the residents are under 65 years, data for the States are not comparable.

However, lack of data comparability certainly does not account for all of the differences among regions and States. In 1973 there were 62 residents of nursing care homes per 1,000 persons in the North Central Region, 59 in the West, and 45 in the Northeast and the South. There were 82 residents of nursing care homes per 1,000 persons 65 years and over in Minnesota; at the other extreme, there were 16 per 1,000 in West Virginia. In 13 States there were at least 60 residents per 1,000 elderly people; in 8 States there were fewer than 30.

The consistent regional patterns found in utilization of short-stay hospitals do not exist for nursing home utilization. There is more variation within regions than among them. This is due, at least in part, to differences in State regulations. Even within a region, there is little uniformity among States in terminology, definitions, or licensure requirements. There is also little uniformity in the administration and eligibility requirements of Medicaid, which is the means of paying for a sizable portion of the care of elderly people in nursing homes.

Alternatives to Current Utilization of Medical Services

Home health programs offer one alternative to long-term institutionalization. At present, however, there are no good national estimates of the number of elderly people served by these programs nor of the number who could benefit if more programs were in operation. Certainly many residents of nursing homes need to be where care is available 24 hours a day. Others, however, could live outside the institution if they did not have to live alone or if professional help were provided regularly. Unknown numbers of the elderly now living alone could live more comfortably if they had home health care, and the lives of those living with relatives, as well as the lives of the relatives, could be eased were such care readily available.

Home health services also could help shorten the length of stay of some elderly people in hospitals. Day care services are another alternative to inpatient care for some elderly people.

Retirement, widowhood, and increasing inability to care for oneself without help are all stress-producing situations, yet admission rates to both inpatient and outpatient psychiatric facilities are lower in the age group 65 years and over than in any other group of adults. It is not known whether the elderly do not seek help or are unable to get it. It is known that admission rates to psychiatric facilities are low for the elderly, and half of the episodes reported for them are still in State or county mental hospitals. Only 4 percent of the new patients in community mental health centers in 1975 were people 65 years and over (NIMH, 1977). Easily available outpatient facilities that did not carry a stigma in the eyes of elderly people who grew up in an age when psychiatric help was less acceptable than it is now might reduce the amount of care in inpatient facilities. Such facilities might also make the lives of the elderly, and the lives of the people with whom they live, more comfortable.

EXPENDITURES FOR MEDICAL CARE

Trends

Over the decade covered by fiscal years (FY) 1966-76, years ending 6 months after the calendar years 1965-75, there have been major changes in expenditures for the medical care of elderly people. First, the amount spent has increased much more for elderly people than for younger ones. From FY 1966 to 1976, the average annual rate of increase in per capita expenditures for

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health care was 13 percent per year for people 65 years and over and 11 percent for people under 65. Second, the source of funds to pay for health care of the elderly changed dramatically. In FY 1966 only 30 percent of the funds were public; 10 years later 68 percent of the money came from public funds. In contrast, public funds still paid for only 29 percent of the medical care of people under 65 years in FY 1976. Third, a larger portion of the money went for inpatient care in FY 1976 than 10 years earlier. In FY 1966, 40 percent of the money went to hospitals and 15 percent to nursing homes, with these two types of facilities receiving 55 percent of all payments. By FY 1976 hospitals were receiving 45 percent and nursing homes 23 percent for a total of 68 percent of all money spent on health care of elderly people. People under 65 years seldom receive care in nursing homes, but the portion of the total bill for their care which was received by hospitals increased from 39 to 46 percent.

Over the decade the total amount spent on medical care for the elderly rose at an average annual rate of 15.5 percent from $8.2 billion in FY 1966 to $34.9 billion in FY 1976. The amount of money spent in FY 1976 was 4.2 times the amount 10 years earlier. About 50 percent of the increase was due to increases in the price of medical care, 36 percent to increases in services, and 14 percent to population increases.

At the beginning of Medicare, medical care expenditures for people 65 years and over rose rapidly, increasing by 16 percent from FY 1966 to 1967, 24 percent from FY 1967 to 1968, and 18 percent from FY 1968 to 1969. Expenditures continued to increase at 12-14 percent per year until the implementation of the Economic Stabilization Program in August 1971 slowed the rate of increase. In FY 1974, during 10 months of which prices were still controlled, the amount spent on medical care for the elderly increased by only 8 percent from the amount spent the previous year. Then, when price controls were removed and administrative procedures changed, medical care expenditures for the elderly increased by 23 percent from FY 1974 to 1975. From FY 1975 to 1976 the rate of increase again slowed to 17 percent.

Part of the increase in expenditures is due, of course, to the increasing number of elderly people; the rate of increase in per capita expenditures is always less than in aggregate expenditures. Still, per capita expenditures increased at an average annual rate of 13 percent over the decade, from $445.25 in FY 1966 to $1,521.36 in FY 1976 (table E). From FY 1974 to 1975 the per capita amount increased by 20 percent and from FY 1975 to 1976 by 14 percent.

Twice during the decade there has been a sudden and rapid increase in the amount spent on medical care for the elderly. The increase early in Medicare program operations was primarily due to increases in utilization as Medicare reduced the financial barriers to obtaining care. For example, the number of days of care in hospitals per elderly person probably increased between 9 and 16 percent in a single year. The price of medical care also rose, led by the increase in the cost of hospital care. From FY 1967 to 1968 the Consumer Price Index (CPI) for medical care services increased by 8 percent while the price of a semiprivate room in a hospital increased by 16 percent.

The recent increases in expenditures have been mainly due to price increases. The CPI for medical care services increased by 13.3 percent from FY 1974 to 1975 and by 10.6 percent from FY 1975 to 1976. The price of a semiprivate room in a hospital increased by 16.4 percent and then by another 15.2 percent. The CPI for hospital service charges, which was set at 100 in January 1972 when it was introduced, was at 147.1 at the end of FY 1976.

The amount spent on inpatient care accounted for most of the recent increase in expenditures for medical care of the elderly just as it accounted for the largest part of the increase over the decade. While per capita expenditures for hospital care increased at an average rate of 14.5 percent and expenditures for nursing home care increased at an average rate of 17.8 percent per year from FY 1966 to 1976, the average annual rate of increase for all other medical care services combined was 9.3 percent. As a result, the proportion of the total which was paid to inpatient facilities increased.

The amount spent on physicians' services for the elderly increased less over the decade but is now increasing as rapidly as hospital expenditures. From FY 1966 to 1976 per capita ex-

Table E. Estimated per capita personal health care expenditures for persons 65 years and over, by type of expenditure: United States, fiscal years 1966-76

(Data are compiled from a number of government and private sources)

Type of expenditure	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
	Expenditures per person										
Total	$445.25	$509.09	$617.72	$716.78	$790.84	$877.48	$966.92	$1,047.43	$1,109.54	$1,335.72	$1,521.36
Hospital care	177.84	197.63	258.20	313.46	340.17	378.28	416.91	451.03	485.04	605.09	688.59
Physician services	89.57	108.97	118.17	131.38	139.09	146.14	157.68	166.98	178.64	218.86	255.97
Dentist services	12.86	13.80	14.96	15.53	16.20	17.00	17.90	17.69	24.91	28.67	31.53
Other professional services	11.51	12.74	13.91	13.94	14.60	15.44	17.19	18.33	17.47	20.92	23.31
Drug and drug sundries	62.40	67.57	71.25	77.97	85.32	87.85	91.66	96.68	106.21	113.64	121.22
Eyeglasses and appliances	15.40	17.42	18.83	19.22	19.11	18.89	19.19	20.44	16.80	17.42	18.86
Nursing home care	68.39	84.94	113.56	133.18	162.76	202.39	237.79	264.38	261.53	308.54	350.61
Other health services	7.29	6.02	8.84	12.10	13.59	11.49	8.59	11.93	18.92	22.49	31.31

SOURCES: For data years 1966-72, Social Security Administration: Compendium of National Health Expenditures Data, DHEW Pub. No. (SSA) 76-11927, Social Security Administration, Washington, U.S. Government Printing Office, 1976; for data years 1973-75, Mueller, M. S., and Gibson, R. M.: Age differences in health care spending, fiscal year 1975, Social Security Bulletin, 39(6):18-31, June 1976; for data year 1976 (and revisions of previous years), Gibson, R. M., Mueller, M. S., and Fisher, C. R.: Age differences in health care spending, fiscal year 1976, Social Security Bulletin, 40(8):3-14, Aug. 1977.

penditures for physicians' services increased at an average annual rate of 11.1 percent. From FY 1974 to 1975 they increased by 23 percent and from FY 1975 to 1976 by 17 percent. Physicians' fees did not increase as much over the 10 years as hospital prices. The average annual rate of increase was 7.1 percent per year from FY 1966 to 1976 but from FY 1974 to 1975 physicians' fees rose by 12.8 percent and from FY 1975 to 1976 by 11.4 percent.

Part of the price increase has undoubtedly been due to catching up after the end of the Economic Stabilization Program which restrained the amount hospitals could charge patients without restraining the amount hospitals were charged for goods, services, and labor. Part was due to new services and newly introduced technology which are supported by everyone using the facility not just those patients using the new services or technology. That is true for services and technical equipment in a physician's office also. Equipment must be paid for by someone and the cost is passed on to all patients who have it available, not just those who use it.

One of the major shifts in expenditures has been the increased proportion of the bill paid for out of public funds. Concurrently, the proportion paid for out of the elderly individuals' own resources decreased from 53 to 27 percent. However, the actual amount paid directly increased over the 10 years from $236.72 per person in FY 1966 to $403.53 in FY 1976. The rate of increase in direct payments has been much greater in the past few years (13 percent from FY 1974 to 1975 and 15 percent from FY 1975 to 1976) than the rate of increase in the total CPI. Because this is money paid directly, people are intensely aware of it in the same way they are aware of increases in the price of food, clothing, and shelter.

Medicare

The Medicare and Medicaid programs strongly influence the manner in which medical care for the elderly is paid and the way in which services are utilized. Understanding of at least the Medicare program is essential to understanding the expenditures for medical care. In FY 1966, before the two programs went into operation, public funds financed 30 percent of medical care expenditures for the aged. In FY 1976 the public share was 68 percent; 43 percent of all medical care of the elderly was paid for by Medicare alone.

There was rapid growth in the proportion of the total bill paid out of Medicare at the beginning of the program. Then from FY 1969 to 1974 the Medicare share of the medical bill for people 65 years and over decreased from 45 percent to 41 percent for a number of reasons. The average length of hospital stay declined during much of the period 1969-1974. As a result, the patient's initial share of the hospital bill (a deductible roughly equivalent to the average cost nationally of a day of care) became a larger proportion of the total bill, and the Medicare proportion became smaller (Mueller and Gibson, 1976).

Additionally, the proportion of expenditures for outpatient hospital diagnostic and therapeutic services, which are included as hospital expenses but paid from the Medicare supplementary medical insurance trust fund, has been increasing. These expenses are reimbursed at a lower rate than those for inpatient hospital care, mainly because of the 20-percent coinsurance requirement.

Premiums paid by enrollees for supplementary medical insurance, Part B of the benefit package, also increased. When Medicare began, the monthly premium was $3.00. By July 1976 the premium was $7.20 per month.

The decline in Medicare's share of expenditures for physicians' services resulted partly from the increase in the deductible from $50 to $60 in 1973, but even more important was the decrease in the proportion of claims for which physicians accepted assignment. Physicians who do not accept assignment may bill patients for more than Medicare's "reasonable charges." In FY 1969 the net assignment rate (excluding hospital-based physicians) was 61 percent; in 1974 it was only 52 percent. As a result, a greater proportion of total charges was met through private insurance, Medicaid, or out-of-pocket payments by the patient, and a smaller proportion by Medicare (Mueller and Gibson, 1976).

Since 1974, Medicare's share of the bill for the elderly has risen again. Supplementary medical insurance benefits rose somewhat, largely because of catchup increases in physicians' fees

following the end of the Economic Stabilization Program. Medicare placed a limit of 55 percent on fee increases in determining its calendar-year base for FY 1974 payments. The amounts paid physicians in FY 1975, however, were based on prevailing and customary charges derived from actual charges in calendar year 1973. Increased utilization of medical services, increased charges for outpatient services, extension of Medicare coverage to services performed by independent physical therapists, and elimination of coinsurance payments for home health visits have all contributed to the sharp rise in supplementary medical insurance benefits. Another factor was submission of bills on a more frequent, "even flow" basis by physicians accepting assignment, a practice encouraged by the carriers. Beneficiaries, probably feeling the effects of the recession and the pinch of inflation on their incomes, also submitted their bills more frequently.

The Medicare program pays for care in nursing homes only under certain conditions and does not pay for dental care, out-of-hospital prescribed drugs, or eyeglasses. Because of these program limitations, Medicare's share in the financing of total health care for the aged has not been as great as its share in financing hospital and medical services.

The role of private health insurance with respect to expenditures for the aged diminished rapidly with the advent of the Medicare program. Insurance for this group now generally only supplements or complements the Medicare benefit structure. Although the number of aged persons who carry private insurance is now even larger than it was before Medicare, insurance payments make up only about 5 percent of the elderly's total outlays, compared with about 16 percent in 1966.

The Current Situation

In FY 1976, when $34.9 billion were spent on medical care of the elderly, the largest single item on the bill was hospital care which accounted for 45 percent of all personal health care expenditures for people 65 years and over. Hospital care alone cost $15.8 billion, or an average of $688.59 for each elderly person in the United States.

The amount spent on hospital care for the elderly is bound to increase if utilization continues at its current rate and prices continue to rise. Even during FY 1976 while the CPI for all items increased by 5.9 percent, hospital service charges increased by 12.2 percent, and semiprivate room charges by 13.9 percent and prices have continued to rise, although at a slower rate in FY 1977.

Fortunately for the elderly individual who is hospitalized, almost all of the bill is paid out of public funds. In FY 1976, 91 percent of the bill for hospital care of the elderly was met out of public funds; the Medicare program alone paid for 71 percent. The 9 percent not covered by public funds, which amounted to $1.4 billion, was not covered primarily because of the deductible under Medicare. That must be paid for by the patient out of his own resources or by private health insurance.

Several recent analyses of Medicare data reveal wide variation from area to area in the cost of hospital care for the elderly. Gornick (1976) pointed out that in 1973 the mean charge per day ranged from $90 in the South to $129 in the West. Mean charges per enrollee, which reflect the combined effect of the discharge rate, length of stay, and charge per day, ranged from $319 in the South to $450 in the Northeast.

Another study conducted by the Social Security Administration, based on a 20-percent sample of Medicare claims in 1974, compared utilization for selected diagnoses in 65 conditional Professional Standards Review Organizations (PSRO's) (Gaus, 1976). The daily charge varied from $75 in a Mississippi PSRO to $187 in a New York PSRO; the mean was $118. The average charge per hospital stay ranged from $652 to $2,486, with a mean of $1,234.

This geographic variation in the cost of hospital care is due to differences in room and service charges, differences in rates of surgery or use of other procedures, and differences in the length of time the patient remains in the hospital. In essence, geographic differentials reflect variations in medical care practice and charges rather than differences in the health of elderly people.

The second largest item on the medical care bill for the elderly in FY 1976 was care in nursing homes which accounted for 23 percent of the total. Nursing home care cost $8.0 billion or $350.61 for each elderly person.

Over half (54 percent) of the bill for care in nursing homes was paid out of public funds. Unlike the hospital bill, however, very little (4 percent) of the nursing home bill was paid for out of Medicare. Medicaid was the primary source of public funds, providing 48 percent of the money in FY 1976.

Thus $3.7 billion were paid for out of private funds in FY 1976. This was the largest item privately paid for, and almost all of it had to be paid for out of patient or family resources since private health insurance seldom covers care in a nursing home.

Medicaid will not pay for care in a nursing home as long as the patient has resources. While some families have current income to fund long-term care in a nursing home, many do not. Much of this private spending represents depletion of assets by patients ineligible for Medicaid.

More than half (61 percent) of the elderly residents in nursing homes at the beginning of 1974 had been in the home for a year or more at that time. Although relatively few people rely on nursing homes for care, many of those who do must finance costs over a long period of time without public funding, which helps pay such a large portion of hospital costs.

The third largest item in the bill for medical care of the elderly was for physicians' services. In FY 1976 physicians' services accounted for 17 percent of the bill for a total of $5.9 billion or $255.97 for each person 65 years and over.

Over half (59 percent) of the bill for physicians' services was paid out of public funds. Like the hospital bill, the major part (55 percent) of the bill for physicians' services was paid for out of Medicare. Other public funding paid only 4 percent of the bill in FY 1976. Ninety-three percent of the bill for physicians' services was for services which were covered by Medicare but beneficiary payments for deductibles, coinsurance, and liabilities for reasonable charges reduced the actual payments by Medicare from $5.4 billion to $3.2 billion.

Hospital care, nursing home care, and physicians' services together accounted for $29.7 billion or 85 percent of the $34.9 billion spent on health care of the elderly in FY 1976. They accounted for $22.1 billion or 94 percent of all public funds and for $14.7 billion or 98 percent of the Medicare expenditures for elderly people.

Other services, including dentists' services, accounted for $2.0 billion in FY 1976 or $86.15 for each elderly person.

Almost all of the $0.7 billion spent on dental services was privately financed; Medicare paid no part of the bill and Medicaid only 4 percent. Since private health insurance very seldom covers dental services, it can be assumed that on the average elderly people spent $29.66 out of pocket on dental services.

Other professional services cost $0.5 billion in FY 1976 and all other health services $0.7 billion. About 83 percent of the $1.3 billion spent on these services came from public funds; professional services were financed mostly by Medicare and other health services by Medicaid and other public funds. Thus the private cost of these services amounted to less than $10 per elderly person ($9.47).

In addition to health care and services, medical care involves supplies. Drugs, glasses, and orthopedic appliances are needed by elderly people with chronic conditions or impairments and for episodes of acute illness. In FY 1976, $3.2 billion were spent on drugs, eyeglasses, and appliances for elderly people. Only $0.4 billion or 12 percent of the expenditure was financed by public funds.

Drugs and drug sundries alone cost $2.8 billion or $121.22 for each elderly person. Medicaid paid for 14 percent of this bill, leaving $2.4 billion or $104.09 per person to be financed privately. Again, private health insurance seldom pays for drugs; they are paid for by the individual. For the elderly person with a chronic condition requiring ongoing drug therapy, the out-of-pocket cost can be enormous.

Drugs account for only 8 percent of the total medical bill of the elderly but for 21 percent of the private bill. Drugs are the largest out-of-pocket medical expense for elderly people living in the community.

Eyeglasses and appliances cost $0.4 billion in FY 1976, almost all of which (98 percent) had to be paid for privately. These aids are a very small item on the total bill (only 1 percent), or on the privately funded bill (4 percent), but there is some evidence that expenditures for these items are low because elderly people are going without them. Costs have been rising faster than expenditures, indicating decreasing utilization.

CONCLUSION

Increased prevalence of chronic conditions and longer duration of acute conditions frequently accompany aging. Stress due to changing life conditions such as retirement, inability to live independently, or death of family members and friends may also occur more frequently as people age. Thus the needs for many kinds of care are great in old age. Care should be provided with dignity and made accessible so that elderly people can live to their capacity. Old age should not be a burden on the individual or on society.

Fortunately, research on aging is focusing on comprehensive investigations of the normal physiological changes with age; the behavioral constitution of the aged; the social, cultural, and economic environment in which the elderly live; and the means of delivering needed health services to the elderly.

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CHAPTER II

Hypertension[a]

INTRODUCTION

High blood pressure is relatively common in the United States today. It is found more frequently among black than white people and more frequently among older than younger adults.

A number of studies demonstrated that people with high blood pressure are much more likely than others to acquire or die from cardiovascular disease (Kannel, Gordon, 1974). Other studies have demonstrated that, particularly when the initial blood pressure is very high, the risks of stroke and congestive heart failure are reduced if the blood pressure is lowered (Veterans Administration, 1967 and 1970).

Since high blood pressure increases the risk of developing heart disease, the leading cause of death in the United States, and since effective management of the problem is possible, locating people with high blood pressure and helping them obtain continuing treatment should receive high priority. Neither is as simple as it seems.

People may be unaware that they have high blood pressure. There are no distinctive physical or psychological symptoms to alert the person to seek medical care (NCHS, 1967). As a result the blood pressure may be at a level high enough to cause serious damage before the individual is aware of a problem.

The level at which blood pressure is considered "high" varies to some extent depending upon the expert consulted and the patient's circumstances. Blood pressures vary from person to person and from time to time in the same way that weight does. The point at which someone is considered "hypertensive" is as arbitrary as is the point at which someone is diagnosed as being "overweight." To further complicate the issue, blood pressure varies considerably depending on the circumstances under which it is measured. Unless the blood pressure is critically high, a number of measurements over a period of time may be required before an individual is identified as suffering from hypertension.

Finally, although management is certainly possible, it is complex. Good management frequently depends upon using a number of techniques including, but not restricted to, altering dietary and living habits as well as drug treatment.

Research on the causes of high blood pressure and on effective treatment of a symptom that may result from one or a constellation of causes is still underway; more is needed. Additional research is required to determine better methods of locating people in need of care. However, enough is known now to identify high blood pressure as a major problem which can be treated. Interventions on individual, local, and national levels should not wait until all of the research is completed.

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NOTE: Unless otherwise noted, data in this chapter are from the ongoing data-collection systems of the National Center for Health Statistics (NCHS). This is the first publication of many recent statistics from NCHS; other data have been published in the *Vital and Health Statistics* series.

This paper does not attempt to deal with issues of the clinical management of patients with high blood pressure nor does it atempt to disentangle the causal patterns associated with high blood pressure. It is instead a presentation of data, mostly from two national surveys, to provide a basis for understanding the extent of the problem and to indicate the groups of people at greatest risk of having high blood pressure. The two surveys share a common strength; they are both national probability samples of the civilian noninstitutionalized population. Individuals are included in the survey because of their selection on the basis of a scientific statistical design and not just because they volunteered to take part in one of the surveys. Aside from that, each survey has individual strengths and limitations.

In the Health and Nutrition Examination Survey (HANES), actual blood pressure measurements were taken in a standard setting. The definition of hypertension is a systolic blood pressure reading of at least 160 millimeters or a diastolic pressure of at least 95 millimeters on the first reading taken as part of a medical examination. In the Health Interview Survey, respondents reported whether they had ever been told they had "hypertension" or "high blood pressure." They also reported on other items, such as whether they were overweight, whether they smoked, and the type of advice they had received from physicians.

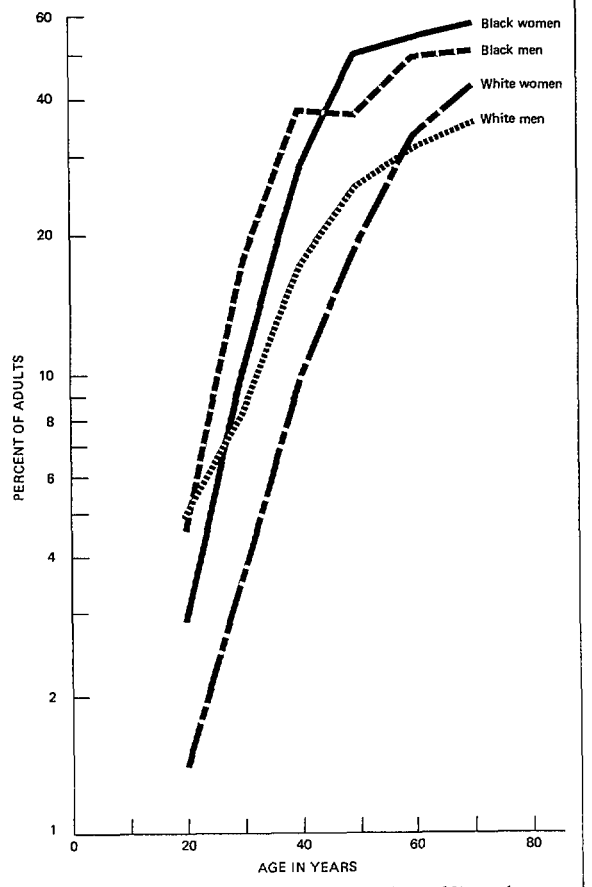
Data from other studies are presented to supplement these two national surveys. Data on children are not included as the problems of diagnosing and treating children are different from those of adults. (Blood pressures were taken on children ages 6-17 as a part of HANES.)

PREVALENCE OF HYPERTENSION

The prevalence of hypertension was determined for a national probability sample of the U.S. population during the period 1971-74 as part of the Health and Nutrition Examination Survey. In the sample were nearly 14,000 civilians ages 18-74 who were not living in institutions (NCHS, 1973a). The prevalence rates from this survey are based on a single blood pressure reading of at least 160 mm Hg (systolic) or 95 mm Hg (diastolic) taken by a physician who was part of a specially trained survey team.

Figure 1 shows the prevalence rates of men and women for hypertension by age and race (NCHS, 1977). Overall, 23.2 million adults, or

Figure 1. PERCENT OF ADULTS WITH DEFINITE HYPERTENSION BY AGE, RACE, AND SEX: UNITED STATES, 1971-74



SOURCE National Center for Health Statistics Blood pressure of persons 6 74 years of age in the United States *Advance Data*, No 1 DHEW Pub No. (HRA) 77-1250. Health Resources Administration Washington U.S Government Printing Office, Oct. 18, 1976.

18.1 percent of adults aged 18-74, were estimated to have hypertension. The rates varied from 16 percent for white women to 29 percent for black women. The prevalence for black men and women was substantially higher than that for whites in each age group except the youngest, in which white men had a higher rate than black men. Rates increased rapidly with age, par-

ticularly for women. Up to age 44 men had more hypertension than women, but after age 65 women had much higher rates.

Prevalence figures from HANES also are available for more severe hypertension (i.e., diastolic pressure of 105 mm Hg or above) and for borderline hypertension (i.e., systolic between 140 and 160 or diastolic between 90 and 95). The prevalence of severe hypertension was 4.1 percent for whites and 11.1 percent for blacks. Thus about one-fourth of the whites and two-fifths of the blacks with definite hypertension had these very high blood pressures. Borderline hypertension was present in 18.7 percent of the whites and 15.8 percent of the blacks, a reversal of the rates for definite hypertension. Table A summarizes these rates for persons aged 18-74.

Table A. Percent of examinees 18-74 years with hypertension, by race, sex, and type of hypertension: United States, 1971-74

Type of hypertension	White		Black	
	Male	Female	Male	Female
	Percent			
Definite	18.5	15.7	27.8	28.6
Severe	4.9	3.4	11.2	11.1
Borderline	21.9	15.7	17.6	14.3

SOURCE: Health and Nutrition Examination Survey, National Center for Health Statistics.

Accuracy of Rates

Not included in the estimate of 23.2 million adults with definite hypertension were an estimated 3.8 million people with normal or borderline blood pressure readings who were taking drugs for hypertension. This estimate was obtained from asking HANES examinees whether they had taken such medication regularly during the past 6 months. Thus there may be as many as 27 million hypertensive adults in the United States.

On the other hand, the survey estimate of 23.2 million is based on the first blood pressure reading during the medical examination, which is usually higher than subsequent readings. Using the average of three readings rather than the first could reduce the prevalence rate by 3 percentage points and the number to 19.5 million (NCHS, 1966 and 1977). These estimates of possible undercounts or overcounts of hypertensives nearly cancel each other out.

It is possible that in a reexamination of the same sample of people a week or so later the prevalence rates would have changed. In longitudinal studies in which measurements were repeated annually or biannually, average blood pressures and prevalence rates were lower in the second and third examinations than in the first. Whether this would occur in a resurvey of a national sample is not clear. However, studies showing an increased risk of cardiovascular disease among people with high blood pressure have usually been based on readings from a single examination. Thus it seems reasonable to accept the prevalence rate of 18 percent, or 23.2 million adults, as a fair estimate of the number of people with high blood pressure.

Characteristics of Adults With High Blood Pressure

Data from HANES describing detailed characteristics of adults with definite hypertension are not yet available. However, relationships between all blood pressure readings and a number of other factors are known from HANES (NCHS, 1977).

As family income rose and education increased, systolic and diastolic blood pressures in adults decreased significantly. Systolic blood pressures decreased as population density increased, but this relationship was not as strong for diastolic blood pressures. Systolic blood pressures were higher in the South than in other regions of the United States, but again diastolic blood pressures did not show much variation.

It is not clear whether these associations would be shown for persons with definite hypertension. In the National Health Examination Survey (HES) conducted in 1960-62 (NCHS, 1966) prevalence rates for definite hypertension in the Northeast were higher than expected for whites and lower than expected for blacks. Rates in rural areas were not much higher than expected except for blacks. Higher rates tended to occur for people with less education; this was especially evident for white women. Among

blacks, those with the lowest income and schooling had higher than expected rates. These findings are somewhat different from the associations found in the 1971-74 survey, but only the regional differentials are markedly divergent.

The reasons for the much higher rates of hypertension for blacks than whites are unknown. However, the higher than expected rates for persons of low income and education are consonant with the high prevalence among blacks. The 1960-62 survey showed evidence that the stress of the examination itself might account for a small part of the black-white differential. Diet, other living habits, and stress, both psychological and environmental, may all account in part for the high black rates. Neither survey provided information about the possible role of genetic factors in differences in hypertension rates between blacks and whites.

Comparisons With Other Surveys

The hypertension prevalence rate of 18.1 percent found in HANES during 1971-74 is very close to the rate of 18.2 percent found in the 1960-62 Health Examination Survey (NCHS, 1966). In both surveys the rates for blacks were much higher than those for whites, and the rates for men and women showed the same changes with age. In the 1960-62 period only an estimated 2.6 million people without definite hypertension were currently taking medication for their hypertension (NCHS, 1977). That was a slightly smaller proportion of people without hypertension on medication than in 1971-74 (3.0 percent vs. 3.6 percent). This is not surprising since wide use of antihypertensive drugs did not occur until the middle to late 1960's.

In a number of community screening programs for high blood pressure, the Community Hypertension Evaluation Clinic (CHEC) program, over 1 million people throughout the United States had their blood pressures measured in the period 1973-75 (Stamler, Stamler, Riedlinger, Algera, and Roberts, 1976). The prevalence rates at two levels of elevated diastolic blood pressures (over 90 mm Hg and over 110 mm Hg) were very close to estimates from HANES in 1971-74 (NCHS, 1977). In the CHEC survey, as in the national survey, blacks had higher prevalence rates than whites. Men in the CHEC survey had higher rates of hypertension than women at all ages; women did not experience a more rapid rate of increase with age than men as in HANES. This difference may result from the CHEC survey's use of high diastolic pressures only to define hypertension, or it may result from the different ways of selecting people for the two studies.

In the CHEC screening programs the number of people with normal blood pressure and taking medication for hypertension was proportionately larger than in the 1971-74 HANES (10.7 percent vs. 4.1 percent). This may reflect the self-selection of people who choose to participate in screening programs.

IDENTIFYING HYPERTENSIVE INDIVIDUALS

The asymptomatic nature of hypertension has led to increased efforts directed toward programs to identify hypertensive individuals. This section discusses some of the problems inherent in these efforts and presents data on persons who reported having hypertension.

Data from HANES indicated that only 45 percent of those persons identified as definite hypertensives reported being previously diagnosed as having hypertension. Males were considerably less likely to have known about their hypertension than were females (i.e., 37 percent vs. 53 percent). However, the group of persons identified as hypertensive based on elevated blood pressure levels at the time of the survey examination excluded persons whose blood pressure had been reduced to borderline or normal levels at the time of the examination as the result of regular medication. When these persons are included in the category of hypertensive people aware of their condition, the proportion rises to 53 percent. However the level of awareness is measured, men tend to be less aware of their hypertension than women, with the differences increasing with age. Table B illustrates these differences in awareness among persons who were definite hypertensives, borderline hypertensives, or normotensive but taking medication regularly (NCHS, 1977).

Table B. Percent of examinees with hypertension[1] who had been previously diagnosed as hypertensive, by sex and age: United States, 1971-74

Age	Male	Female
	Percent	
All ages 18-74 years	44	61
18-24 years	32	35
25-34 years	34	46
35-44 years	42	55
45-54 years	41	54
55-64 years	50	68
65-74 years	49	67

[1] Definite hypertension and borderline hypertension or normotension with regular medication.

SOURCE: Health and Nutrition Examination Survey, National Center for Health Statistics.

If a more rigorous definition of hypertension is used (e.g., diastolic blood pressure of 105 mm Hg or greater), 56 percent of these persons reported a previous diagnosis of hypertension. If those with blood pressures below 105 mm Hg taking medication regularly are also included, the proportion reporting a previous knowledge of their condition rises to 80 percent.

While many methodological issues are involved in the definition and measurement of hypertension that will not be discussed in this presentation, two issues are critical to the measuring of a person's awareness of his hypertension. The first issue is the clinical definition of hypertension and the procedure for measuring the phenomenon (i.e., the critical diastolic and systolic levels, the number of readings taken, and the time period over which they are taken). Although differences may exist between studies in the clinical definitions, these definitions can be described precisely and taken into consideration when comparing data across studies.

The second, and more difficult, problem deals with how the respondents, or patients or subjects, decide whether they have been previously diagnosed as hypertensive. In other words, is being told that you have "high blood pressure" or an elevated reading on a blood pressure test the same as being told that you have "hypertension"? Do people who have their blood pressure under control through the use of medication still report that they have high blood pressure or hypertension? Health surveys and medical histories (i.e., either self-administered or administered by a physician or nurse) must rely on the respondents' interpretations of the questions, and without an extensive battery of questions it is very difficult to know just how the questions are interpreted. Thus data from any single study are hard to interpret and the comparison of data from the same questions over time or from different studies are even more difficult to understand.

Not only are there complex methodological problems in identifying hypertensive persons from interview surveys, but several changes in the attitudes and practices of physicians, although not easy to document, also have had an impact in more recent studies on the number of people reporting hypertension. One change is the physician's increasing awareness of the relationship between hypertension and other diseases, based on the Framingham Study (Kannel and Gordon, 1974) and other longitudinal studies. Just the awareness of this relationship, even though its nature may not be understood, probably results in increased diagnosis of hypertension.

Another factor is the physicians' increased understanding of how to reduce and control blood pressure levels through the use of medication and changes in dietary habits. A patient will be more aware of a diagnosis if the physician prescribed some form of treatment, regardless of the patient's ability to follow the treatment (NCHS, 1973c). In addition, doctors are probably more likely to diagnose a condition, or at least more likely to communicate the diagnosis to the patient, if they know the significance of the condition and how to treat it.

A third factor, and the most difficult to document, could be referred to as a reconceptualization of hypertension, which is based in part on the two factors mentioned above. Because of this reconceptualization physicians are diagnosing and treating hypertension at a lower critical blood pressure level than in the past. Furthermore, new public health programs for hypertension screening and education have been established. Thus, while trend data on prevalence of hypertension from such studies as the Health Examination Survey show no marked changes over time, the number of people who have been diagnosed or are under treatment for hypertension has increased. Each of these factors

can have an influence on the public's awareness of hypertension independent of the validity of current medical knowledge about hypertension or the efficacy of current treatment patterns. Thus, even if the relationship between hypertension and other diseases is a spurious one, the belief in the relationship or in a given treatment pattern alone will tend to increase awareness of hypertension.

Data from the 1974 Health Interview Survey provide some information about the types of persons who have their blood pressure checked (NCHS, 1975; NCHS, 1976b). For simplicity of presentation, when findings from the Health Interview Survey are discussed in the text, people who reported that they had been told by a medical doctor at least once that they had either hypertension or high blood pressure, and also reported that they still had hypertension (or high blood pressure) at the time of the interview, that it was under control, or that they were taking medication prescribed by a doctor for it, will be referred to as persons with hypertension. Persons who report never having been told they have hypertension will be referred to as "nonhypertensive." (See *Advance Data* (HRA) 77-1250, No. 2 for a more detailed description of the survey.)

About 86 percent of the persons over 17 years who reported that they presently had hypertension also reported having had their blood pressure checked within the last year. However, in terms of identifying new cases of hypertension, it is the experience of the population who do not know whether they have hypertension that is important. Among this group approximately 64 percent reported having their blood pressure tested within the past year. Females were more likely to have been tested than males were as shown in table C. The larger differences between females and males in the age group under 35 years probably reflected the increased utilization of medical services among women related to childbearing. The differences by race are not as clear as those by sex. Younger black females were more likely to have been tested recently than younger white females, and older white males were more likely to have been tested than their black counterparts.

Table C. Percent of nonhypertensive persons who reported having their blood pressure checked in past year, by sex, race, and age: United States, 1974

Age	Male		Female	
	White	Black	White	Black
	Percent			
All ages 17 years and over	58	59	70	76
17-34 years	57	61	73	78
35-49 years	58	62	68	78
50-64 years	58	46	68	68
65 years and over	62	57	63	62

SOURCE: Health Interview Statistics, National Center for Health Statistics.

A higher proportion of nonhypertensive persons with a history of diabetes, heart trouble, or stroke reported having had their blood pressure tested in the past year than was found with other nonhypertensives. A greater proportion of people who use emergency and outpatient departments of hospitals for their usual place of care had been tested in the past year than persons whose usual source of care was a general practitioner (75 percent vs. 70 percent). Persons who had no one regular source of medical care were the least likely to have been tested for high blood pressure in the recent past. An estimated 25 million adults had no one regular source of care, and one-half of these had not had their blood pressure tested within the past year. In total an estimated 50 million adults had not had their blood pressure tested within the past year, most of whom had never been diagnosed as hypertensive. Data on utilization of health services for hypertension can be found in Part B of this report.

Little information is known about the characteristics of persons who take advantage of public hypertension screening programs, such as those conducted at shopping centers. Do these programs attract people who do not normally seek other medical attention during the year or persons whose blood pressure was not checked during their recent routine medical care? Data from the Health Interview Survey indicate that between 75 and 80 percent of all adults saw a doctor one or more times within the year prior to interview. The data further indicate that a little over half (52 percent) of all doctor visits for adults, excluding telephone contacts, involved the taking of a blood pressure test. For a third of these visits, the respondents said they were not told whether their pressure was nor-

mal, high, or low, and only a quarter were given an actual numerical reading.

Reporting a blood pressure test within the past year does not necessarily mean that a person underwent a formal procedure for diagnosing hypertension. In most cases it probably indicates that they had a single blood pressure test as a part of their routine health care. Diagnosing hypertension from a single reading may result in error since blood pressure may be labile, changing on successive readings. The amount or degree of followup that occurs after an initial reading, particularly for a positive finding, is unknown. Some data on the accuracy of blood pressure tests are available from the first cycle of the Health Examination Survey.

In a special evaluation study to assist in the design of the survey instruments (NCHS, 1961), it was found that 19.3 percent of the people studied were diagnosed as hypertensive (diastolic pressure of 95 mm Hg or greater) based on the first reading, while only 13.9 percent were diagnosed using the lowest of four successive readings. The criteria finally developed for the study—lowest of four readings—identified about the same number of hypertensives as were identified in a clinical examination by a team of physicians (46 and 45 cases, respectively). However, only 26 cases were identified by both techniques. One-third of the persons identified as hypertensive by the clinical examination were not identified as hypertensive using the lowest of four successive blood pressure readings; about 40 percent of persons identified as hypertensive by the blood pressure readings were diagnosed as nonhypertensive in the clinical examination. (See table D.)

These results indicate that blood pressure readings by screening alone may not assure adequate identification of hypertensive persons. Special hypertension screening programs may have their primary value for the 25 percent of the population not seeing a physician each year, but such programs do not substitute for the continuity of medical care necessary for proper diagnosis and treatment of hypertension.

ANTIHYPERTENSIVE MEDICATION

One of the major achievements of the past 20 years is the development of drugs for the treatment of hypertension, demonstration of their optimal usage (often in combination) and their efficacy in preventing morbidity (NHLI, 1973a). This section presents characteristics of those who are on antihypertensive medication, those who have their hypertension under control, and those who have stopped taking antihypertensive drugs. Also included are possible reasons for stopping or otherwise not being able to adequately lower blood pressure with medication.

Who Is On Medication?

Although the value of antihypertensive drug therapy is well documented, the proportion of persons with hypertension on medication is surprisingly small. HANES data showed that slightly over one-third of all hypertensive adults aged 18-74 had used medication during the past 6 months. These hypertensives included those found to be definitely hypertensive in the examination as well as others who were not hypertensive on examination but had taken antihypertensive drugs in the past 6 months. Unless other-

Table D. Number of persons identified as positive, suspect, and nonhypertensive, by blood pressure readings and physician examination

Physician examination	Blood pressure (lowest of four)			
	Total	Positive	Suspect	Negative
Total	296	46	8	242
Positive	45	26	4	15
Suspect	6	2	0	4
Negative	245	18	4	223

SOURCE: (NCHS, 1961).

Table E. Percent distribution of hypertensive persons 18-74 years by hypertension and medication status, according to sex, whether previously diagnosed, and whether they report still having hypertension: United States, 1971-74

Sex, hypertension status, and medication status	All hypertensives	Previously diagnosed hypertensives	
		Report still have or do not know if they have	Report do not have now
	Percent distribution		
Hypertensive males	100	100	100
Hypertensive on exam; no drugs	67	26	58
Hypertensive on exam; on drugs	20	48	6
Not hypertensive on exam; on drugs	13	26	36
Hypertensive females	100	100	100
Hypertensive on exam; no drugs	52	21	68
Hypertensive on exam; on drugs	28	48	15
Not hypertensive on exam; on drugs	20	31	17

SOURCE: Health and Nutrition Examination Survey, National Center for Health Statistics.

wise stated, data on hypertensives from HANES in the remaining sections include both persons found on examination to be definitely hypertensive and others who reported taking antihypertensive medication during the 6 months prior to the survey. Data from HANES showed that the proportion of previously diagnosed hypertensives using medication in the past 6 months was about 7 in 10 for both sexes. Among previously diagnosed hypertensives who reported they still had the condition, the proportion using drugs in the past 6 months rose to over three-quarters. Data on medication status are shown in table E.

More detailed Health Interview Survey data showed that the proportion of people who reported they currently had hypertension and were on medication increased substantially with age. The proportion of blacks reporting hypertension and currently taking medication was somewhat less than the proportion of whites, although medication had been prescribed at least once for practically the same proportions of blacks and whites. Medication had been prescribed for a slightly larger proportion of females who reported hypertension than males.

Whose Hypertension Is Under Control?

People taking medication but not found in HANES to have an elevated reading were keeping their blood pressure below the level of 160/95. HANES data indicate that more than half the people taking antihypertensive medication did not have their blood pressures under this level. Of all persons being treated by medication, including those persons taking medication occasionally as well as those taking it regularly, about 6 in 10 were found to have elevated readings at the time of the survey (table F).

An important element in the effectiveness of medication is the extent to which drug treatment may be lowering blood pressure, but not below the critical level. This element is easily overlooked when hypertension is operationally defined at over a certain number of millimeters of mercury. Data from the Veterans Administration Cooperative Study (Veterans Administration, 1967 and 1970) show an average reduction of about 30 mm Hg systolic and 16 mm Hg dia-

Table F. Percent distribution of persons 18-74 years taking antihypertensive medication by hypertension status: United States, 1971-74

Hypertension status	Percent distribution
Total on medication	100.0
Definite hypertensive	57.2
Borderline hypertensive	23.9
Normotensive	19.0

SOURCE: Health and Nutrition Examination Survey, National Center for Health Statistics.

stolic in men whose average diastolic pressures were in the range 90 to 114 at the beginning of the study. Even greater average declines were shown for men with severe hypertension (i.e., average diastolic pressures of 115-129 mm Hg at the beginning of the program). While persons may have their blood pressure significantly lowered by medication, they may still fit the definition of a hypertensive. HANES data provide no information on relative lowering of blood pressure.

Who Has Stopped Taking Medication, Why, and What Can Be Done About It?

Health Interview Survey data indicated that about three-quarters of the persons who reported that they currently had high blood pressure had been prescribed antihypertensive medication at least once. Among all those for whom medication was prescribed, one-quarter had stopped taking it. About one-third of blacks had stopped taking it. Of all people who had stopped, two-thirds had acted without a doctor's advice; among blacks, almost 4 in 5 had stopped taking medication without a doctor's advice. Therefore, the importance of regular, sustained, long-term drug therapy has not been fully communicated to all persons with hypertension.

Most people who decided to stop on their own believed that they no longer had hypertension. Other people believed that medication was no longer needed or had undesirable side effects. The cost of the medication and the inconvenience of daily drug ingestion also took their toll.

Many reasons for stopping might be eliminated through education and continuous supervision of patients, as shown in the Baldwin County, Georgia, study in the mid-1960's (NHLI, 1973a). Eighty percent of hypertensives in that study were under good control (i.e., defined as diastolic pressure under 95 mm Hg) as a result of the steady persuasion and education of home visiting nurses. Having proved its effectiveness, the program was discontinued. Two years later, both treatment status and effectiveness of control had regressed.

According to a survey conducted in 1973 for the National Heart and Lung Institute (NHLI) (NHLI, 1973b), the public has misconceptions about hypertension that could affect motivation to start or continue antihypertensive medication. Half the respondents with hypertension and 6 in 10 respondents who had never been told they had hypertension were not convinced that the disease could have no symptoms. Coupled with this mistaken notion was the belief of a majority of respondents that hypertension caused dizziness, headaches, and nosebleeds. Findings from the Health Examination Survey of adults conducted in 1960-62 showed that the frequency of reported headaches and nosebleeds was not associated with blood pressure levels; the prevalence of dizziness was increased only among persons with very high diastolic pressure, and then only slightly (Weiss, 1972).

Respondents in the NHLI Survey were somewhat vague, until given choices, about the actual effects of sustained high blood pressure. They made little connection between controlling high blood pressure and reducing the possibility of heart trouble or stroke (NHLI, 1973b). If people do not appreciate the direct connection between hypertension and the diseases it causes, and if they do not know that hypertension is usually asymptomatic, then the motivation to keep blood pressure under control may be weak.

Other reasons for stopping may be combatted by changes in individual prescriptions. The presence of side effects could play an important underlying role in many of the reasons given for discontinuing medication. Although only 6.6 percent of hypertensives who had stopped medication stated that they stopped mainly because of side effects, about 1 in 10 people currently on medication reported the presence of side effects, and 1 in 5 people no longer taking medication for hypertension reported there had been side effects. (See table G.)

Table G. Percent of persons 17 years and over for whom antihypertension medication was ever prescribed who had side effects, by whether or not presently taking medication and race: United States, 1974

Race	Medication ever prescribed	Medication presently taken	Medication not presently taken
	Percent with side effects		
Total	14.9	11.4	21.4
White	13.8	10.3	20.6
Black	21.0	18.8	24.3

SOURCE: Health Interview Statistics, National Center for Health Statistics.

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Most of the side effects of antihypertensive medication can be reduced or eliminated by either discontinuing the administration of the drug causing the effect or using it in combination with other drugs. Not only can proper combinations of two or more drugs reduce or eliminate side effects, but they can often improve overall effectiveness as well.

Some data suggest that progress is being made in both public education and prescription practices. Data based on the *National Disease and Therapeutic Index* indicate that since 1971 there has been a 38-percent increase in the number of initial patient visits to physicians for hypertension and hypertensive heart disease, and total patient visits for these conditions increased more than 40 percent. Both have increased to a much greater extent than have initial and total physician visits for all causes, which are up only about 17 percent (Stamler, Stamler, Riedlinger, Algera, and Roberts, 1976). The National High Blood Pressure Education Program, begun in early 1973, may have had an effect in this area.

Progress has been made in the effort to bring hypertensive people under care, as shown by data on the number of prescriptions written for antihypertensive drugs (Stamler, Stamler, Riedlinger, Algera, and Roberts, 1976). From 1965 to 1975, the number of new and refilled prescriptions more than doubled.

RISK FACTORS RELATED TO HYPERTENSION

Although the underlying causes of essential hypertension have not been established, several factors are known to sustain elevation of the blood pressure. Among these are emotional stress, obesity, dietary salt, and smoking. The Health Interview Survey (HIS) asked questions about weight, use of salt, and smoking habits. The same types of measures also were collected in the Health and Nutrition Examination Survey and are currently being analyzed, and could either confirm or contradict the HIS findings presented here.

Weight and Hypertension

Obesity aggravates hypertension, probably increasing blood pressure at least in part from a mechanical standpoint, though the process remains a mystery. Over and over again, studies have shown the relationship between relative weight and risk of hypertension (NHLI, 1973a). Both the prevalence and incidence of hypertension increase as weight increases (Chiang, Perlman, and Epstein, 1969, and Kannel, Brand, Skinner, Dawber, and McNamera, 1967). That is, more fat people than thin people get high blood pressure and the greater the weight gain, regardless of initial weight, the greater the tendency to high blood pressure. Data also show that if overweight people reduce, their blood pressures go down. Thus avoidance of obesity, or its correction if already present, is important to prevent or lower high blood pressure.

Table H. Percent of persons 17 years and over by weight status, hypertension status, and sex: United States, 1974

Hypertension status and sex	Persons considering themselves:	
	Overweight	About right
	Percent	
Hypertensive		
Both sexes	55.2	38.4
Male	45.6	47.3
Female	60.9	33.0
Not hypertensive		
Both sexes	39.4	51.5
Male	30.7	57.6
Female	47.3	45.9

SOURCE: Health Interview Statistics, National Center for Health Statistics.

Health Interview Survey data presented in table H show that over 5 in 10 hypertensives considered themselves to be overweight compared to about 4 in 10 nonhypertensives (NCHS, 1974.)

Health Interview Survey data show that among persons reporting they were overweight, proportionately more hypertensives than people who had never been told they had hypertension were trying to lose weight (table J). Hypertensive men were more likely to attempt to control their weight than nonhypertensive men were, and women in general, whether hypertensive or not, appeared to maintain a higher level of weight-consciousness than men.

Among people reporting their weight to be "about right," almost half the hypertensives were actively trying to maintain their weight,

Table J. Percent of persons 17 years and over considering themselves overweight who are trying to lose weight and percent of persons 17 years and over weighing "about right" who are trying to maintain their weight, by hypertension status and sex: United States, 1974

Hypertension status and sex	Persons considering themselves overweight who are trying to lose weight	Persons considering their weight "about right" who are trying to maintain present weight
	Percent	
Hypertensive		
Both sexes	69.7	45.5
Male	[1]66.5	43.2
Female	71.2	47.5
Not hypertensive		
Both sexes	61.8	34.0
Male	52.5	26.3
Female	67.3	42.7

[1] E.g., of male hypertensives who consider themselves overweight, 66.5 percent are trying to lose weight.

SOURCE: Health Interview Statistics, National Center for Health Statistics.

compared with only one-third of the nonhypertensives. It is a distinct possibility that the people with hypertension were more overweight initially. The proportion of hypertensive males trying to maintain their weight was substantially larger than the proportion of men never told they had hypertension. Among persons trying to do something about their weight, almost 3 times as many hypertensives as nonhypertensives reported they were following medical advice.

Salt and Hypertension

As with obesity, medical research has yet to determine whether excess salt (sodium) ingestion causes the development of high blood pressure, but it is known that people with hypertension do not tolerate dietary salt in the same way as people with normal blood pressure do. In a hypertensive person, excessive salt intake tends to increase the blood pressure level (Freis, 1976). In contrast, restriction of salt intake acts to lower blood pressure (Freis, 1976 and Dahl, 1967).

About half of the adults in the 1974 Health Interview Survey reporting they had hypertension had been advised by their physicians to decrease their use of salt. About 6 in 10 black hypertensives had been told to cut down on salt, while less than half of white hypertensives were told to restrict their salt intake. Only about 4 in 10 men, compared to half the women, were advised to decrease their salt consumption (table K).

About half of all hypertensives had reduced their salt intake (table L). Three-quarters of these people had been advised to cut down, and one-quarter had cut down on their own. Among hypertensives who had not been advised to use less salt, over one-third of the blacks had decreased their salt intake, compared to one-quarter of the whites.

Among all hypertensives, the use of salt decreased as age increased; approximately 4 in 10 persons aged 17-44 used less salt, whereas almost 6 in 10 persons 65 years and over used less salt. Among those people advised to cut down, responsiveness to the advice increased as age increased. Men and women were equally responsive, as were blacks and whites. Among people not advised to use less salt, older people, women, and blacks cut down the most.

Smoking and Hypertension

Like elevated blood pressure, cigarette smoking alone increases the risk of mortality. The risk of death is much greater for a hypertensive person who smokes than for a hypertensive person who does not smoke.

Table K. Percent of hypertensives 17 years and over who had been advised by their physicians to use less salt, by sex and race: United States, 1974

Sex and race	Persons advised to use less salt
All hypertensives	49.2
Sex	
Male	43.3
Female	52.8
Race	
White	46.7
Black	63.2

SOURCE: Health Interview Statistics, National Center for Health Statistics.

Table L. Percent of hypertensives 17 years and over who use less or the same amount of salt and whether or not their physician had advised them to use less salt, by age, sex, and race: United States, 1974

Age, sex, and race	All hypertensives		Advised to use less		Not advised to use less	
	Same	Less	Same	Less	Same	Less
	Percent					
Total	47.2	51.3	21.8	76.9	72.6	25.7
Age						
17-44 years	58.2	39.7	32.8	65.3	77.1	21.0
45-64 years	45.3	53.3	20.0	79.1	71.1	27.0
65 years and over	41.2	57.7	17.5	81.4	70.3	28.5
Sex						
Male	51.5	46.8	21.4	77.2	75.3	22.8
Female	44.6	54.0	22.0	76.8	70.6	27.8
Race						
White	49.7	49.2	23.0	76.1	73.8	24.8
Black	33.2	63.4	17.7	79.6	60.2	35.2

SOURCE: Health Interview Statistics, National Center for Health Statistics.

Proportionately fewer persons reporting hypertension currently smoked than did those not reporting hypertension (table M). Health Interview Survey (HIS) data show that 3 in 10 hypertensives currently smoked compared with 4 in 10 nonhypertensives.

The proportions of former smokers among all hypertensives and among all people who were never told if they had hypertension were very similar, about 2 in 10 of both groups. Among women, the proportions in both groups were the same, about 12 percent. The major difference was among men, where about one-third of the hypertensive males compared to about one-quarter of the nonhypertensive males were former smokers.

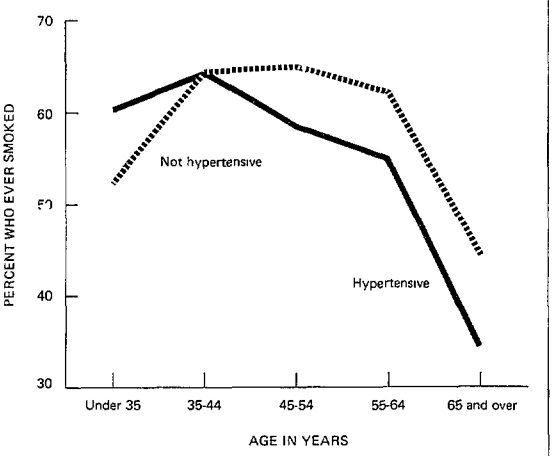
The proportion of people who had ever smoked, both current and former smokers, decreased with age regardless of hypertension. The percent of hypertensives who had ever smoked decreased substantially faster with age than the percent of nonhypertensives. This pattern generally holds for both men and women, though males smoke substantially more than females do. The difference in these proportions in the older age groups (figure 2) probably indicates that people with hypertension who ever smoked die

Table M. Percent of persons 17 years and over, by smoking status, hypertension status, and sex: United States, 1974

Hypertension status and sex	Current smoker	Former smoker
	Percent	
Hypertensive		
Both sexes	30.6	20.3
Male	37.7	33.9
Female	26.3	12.2
Not hypertensive		
Both sexes	38.0	18.5
Male	43.5	25.5
Female	33.0	12.3

SOURCE: Health Interview Statistics, National Center for Health Statistics.

Figure 2. PERCENT OF PEOPLE WHO HAVE EVER SMOKED BY HYPERTENSION STATUS AND AGE



SOURCE: Health Interview Statistics, National Center for Health Statistics

earlier than people without hypertension who ever smoked.

Data from HIS indicate that more hypertensive smokers than nonhypertensive smokers have been advised by their doctors to stop smoking (i.e., 1 in 3 hypertensives compared with 1 in 5 nonhypertensives). These proportions were roughly the same for both sexes and for whites but not for blacks. Slightly over 1 in 4 black hypertensive smokers had been advised to stop smoking, compared with 1 in 7 black nonhypertensive smokers.

About one-third of all hypertensives advised to stop smoking quit (table N). Compliance among women and blacks was less, only about 1 in 5 quit. Slightly over 4 in 10 hypertensives who were not advised to stop smoking quit on their own. Of particular interest, there were more former smokers in the group not advised to stop smoking. The proportions of hypertensive smokers who stopped smoking on their own were highest for men (about one-half) and lowest for women (about one-third) and blacks (under one-quarter). Among nonhypertensives who had quit smoking either on the advice of a doctor or on their own, the lowest proportions were again among women and blacks.

Table N. Smoking cessation and physicians' advice by hypertension status, sex, and race: United States, 1974

Hypertension status, sex, and race	Percent of persons who have ever smoked who were advised to stop	Percent of persons advised to stop smoking who actually stopped smoking	Percent of persons not advised to stop smoking who stopped smoking
		Percent	
HYPERTENSIVE			
Total	34.0	31.8	43.0
Sex			
Male	35.3	39.9	50.1
Female	32.6	22.1	35.4
Race			
White	35.4	33.3	46.8
Black	26.9	19.4	22.7
NOT HYPERTENSIVE			
Total	21.1	28.7	33.1
Sex			
Male	20.4	35.1	36.5
Female	22.1	20.6	28.3
Race			
White	21.9	29.1	34.9
Black	14.4	20.7	16.6

SOURCE: Health Interview Statistics, National Center for Health Statistics.

Table O. Percent of current smokers 17 years and over who ever tried to quit smoking, by hypertension status and race: United States, 1974

Hypertension status and race	Current smokers who ever tried to quit smoking
	Percent
Hypertensive	
Total	64.6
White	65.5
Black	60.7
Not hypertensive	
Total	64.3
White	65.5
Black	55.3

SOURCE: Health Interview Statistics, National Center for Health Statistics.

The proportion of current smokers who had ever tried to quit smoking was the same for both those with hypertension and those without—about 65 percent, with relatively few differences between men and women. The proportion among blacks was somewhat lower, about 6 in 10 of those with hypertension and 55 percent of those without hypertension (table O).

SUMMARY

In the early 1970's about 18 percent of adults in the United States had hypertension, nearly the same proportion as in 1960-62. In both periods the rates of hypertension increased greatly with age and were much higher for blacks than for whites. The causes of hypertension are not yet known, but medical knowledge of hypertension as a potentially serious condition that can be controlled by medication and altered living habits has increased in the past 15 years.

Although more people were aware of their own hypertensive status in 1970 than in 1960, about 50 percent of hypertensives were not aware of their condition according to the 1971-74 HANES data. Some of these people may have had blood pressure levels that their physicians did not consider high enough to warrant a diagnosis. The question of diagnosis is not resolved

by one blood pressure reading, and the physician also must consider the possible social and financial effects of labeling someone as hypertensive.

Hypertensives who do not know about their condition may not receive the medical care that would lead to proper diagnosis and treatment. They either do not see physicians or go to clinics, or do not have their blood pressure checked when they do go. Again, one blood pressure reading does not necessarily determine hypertensive status.

Data from the national studies reviewed here would seem to indicate that people who have been told they have hypertension do make efforts to decrease their salt intake, weight, and cigarette smoking. Their actual success in doing so and the effect upon their blood pressure can only be surmised from these data. Clinical studies indicate that for many people it is difficult to maintain weight loss and to stop smoking permanently. Nonetheless, such changes in living habits are effective to some extent in lowering blood pressure and should be encouraged.

The effect of antihypertensive medication on lowering blood pressure is fairly certain and widely known among physicians. The problems in maintaining daily medication for a condition that may have no symptoms are obvious. Some reports have suggested that one-half of hypertensives who have had medication prescribed do not take their drugs. In the Health Interview Survey, 1 in 6 people who reported they had been prescribed antihypertensive medication said they had stopped taking it without a physician's advice. Whatever the true number on medication, many hypertensives do not regularly take the drugs that could lower their blood pressure. The reasons include various combinations of the drug's side effects and costs, the patient's knowledge of what to do and why, and the physician's guidance.

Efforts to educate the public and physicians about the prevalence, complications, and treatment of hypertension have increased. Because hypertension affects a large number of people and can be effectively controlled in many instances before it leads to illness or death, the importance of identifying, diagnosing, and treating it is apparent. The information in this chapter indicates some of the problems in doing so and suggests that, as with most chronic diseases, the skill, patience, and perseverance of physician and patient are all necessary.

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CHAPTER III

Geographic Variation: Measures of Health, Utilization, Resources, and Expenditures [a]

The investigation of geographic differences in health and health care phenomena has a long tradition. It has provided valuable epidemiological hypotheses as to disease causes and the relative effectiveness of various approaches to disease control. Setting of priorities in the geographic allocation of resources in terms of equity and potential benefits also depends on such investigations. Recently, the National Health Planning and Resources Development Act of 1974 (Public Law 93-641) has brought into sharp focus the need to examine and understand the wide disparities in health status and health resources which exist within the United States from one geographic area to another. The act has also established new statutory and operational needs for gathering and evaluating localized, area-specific health data.

A total of 212 health systems agencies have been created under the act to undertake health planning and review the allocation of Federal health funds. Each health systems agency is responsible for a defined geographic area, a Health Service Area (HSA). (See figures 1, 2, and 3.) Section 1511 of the act describes how HSA's are to be designated, the aim being to create geographical units appropriate for health planning. While a variety of criteria are involved in the process of area delineation, geographic patterns of medical care utilization are generally taken into account. An attempt was made to include within each HSA the catchment or service areas of its facilities, analogously to the way Rand-McNally trade areas were designated. Despite the paucity of patient origin data for facilities and for medical, dental, and related practices, it is believed that in general the people residing in an HSA get the major part of their health care from providers located within the same HSA.

About 15 percent of the HSA's are predominantly rural, a slightly larger percentage are urban, and the rest are mixed. In size they range from Alaska HSA 3, which encompasses about 320,000 square miles, to New Jersey HSA 3 (Hudson County), which is 46 square miles in area.

The population requirement established by the law set limits for HSA's between 500,000 and 3,000,000 with certain exceptions. All but 58 HSA's have been established within these limits. Of the exceptions, 5 have populations greater than 3,000,000 and 53 have populations under 500,000; 5 have populations under 200,000 (table A).

This chapter summarizes the current status of health and health systems from the perspective of these HSA's. In addition to the specific data, hypotheses regarding the cause of some of the differences among areas are presented, and

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NOTE: Unless otherwise noted, data in this chapter are from the ongoing data-collection systems of the National Center for Health Statistics (NCHS). This is the first publication of many recent statistics from NCHS; other data have been published in the *Vital and Health Statistics* series. Bibliographic citations are given for all publications which do not originate from NCHS.

Figure 1. Health service areas in the eastern United States

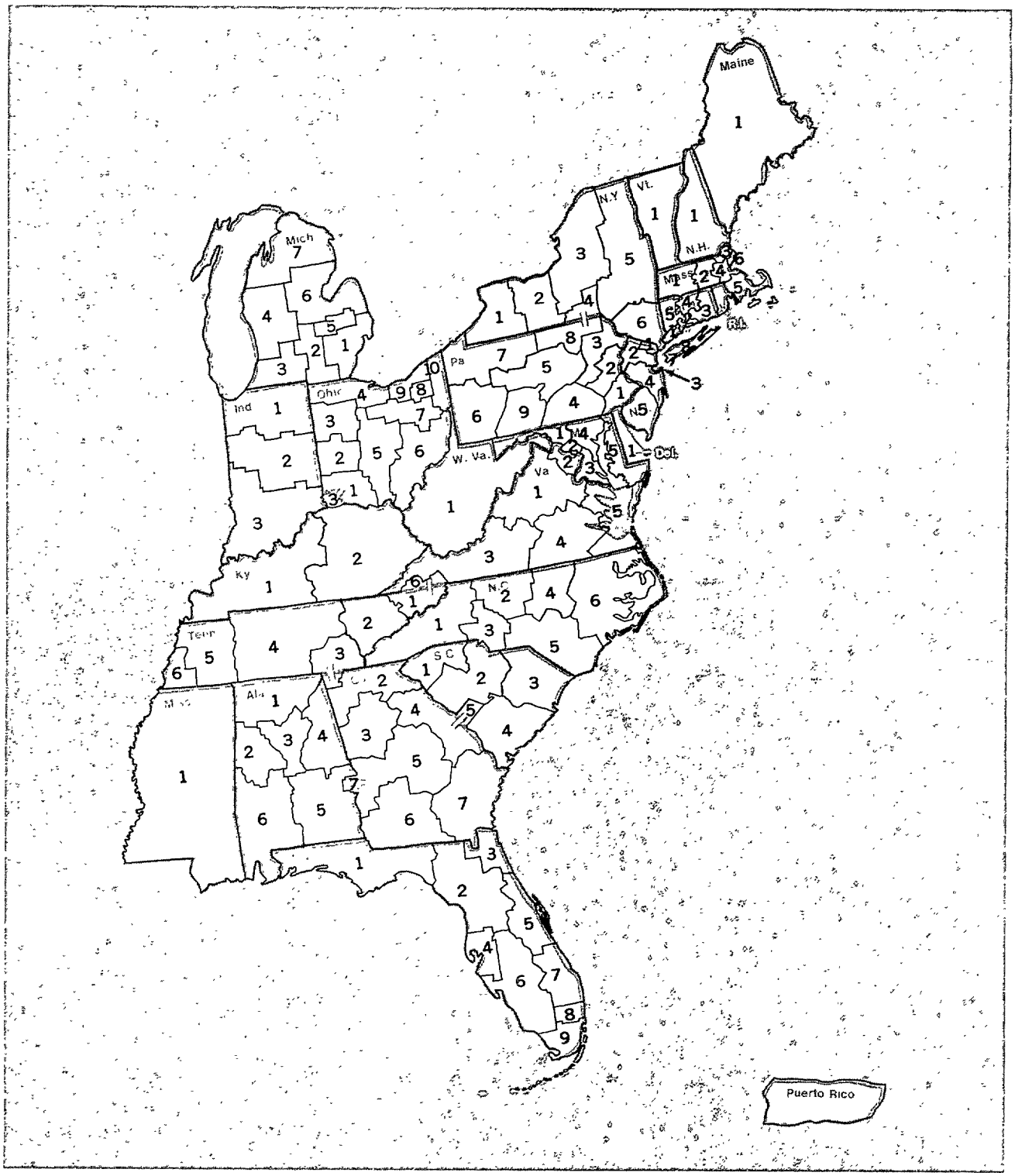


Figure 2. Health service areas in the midwestern United States

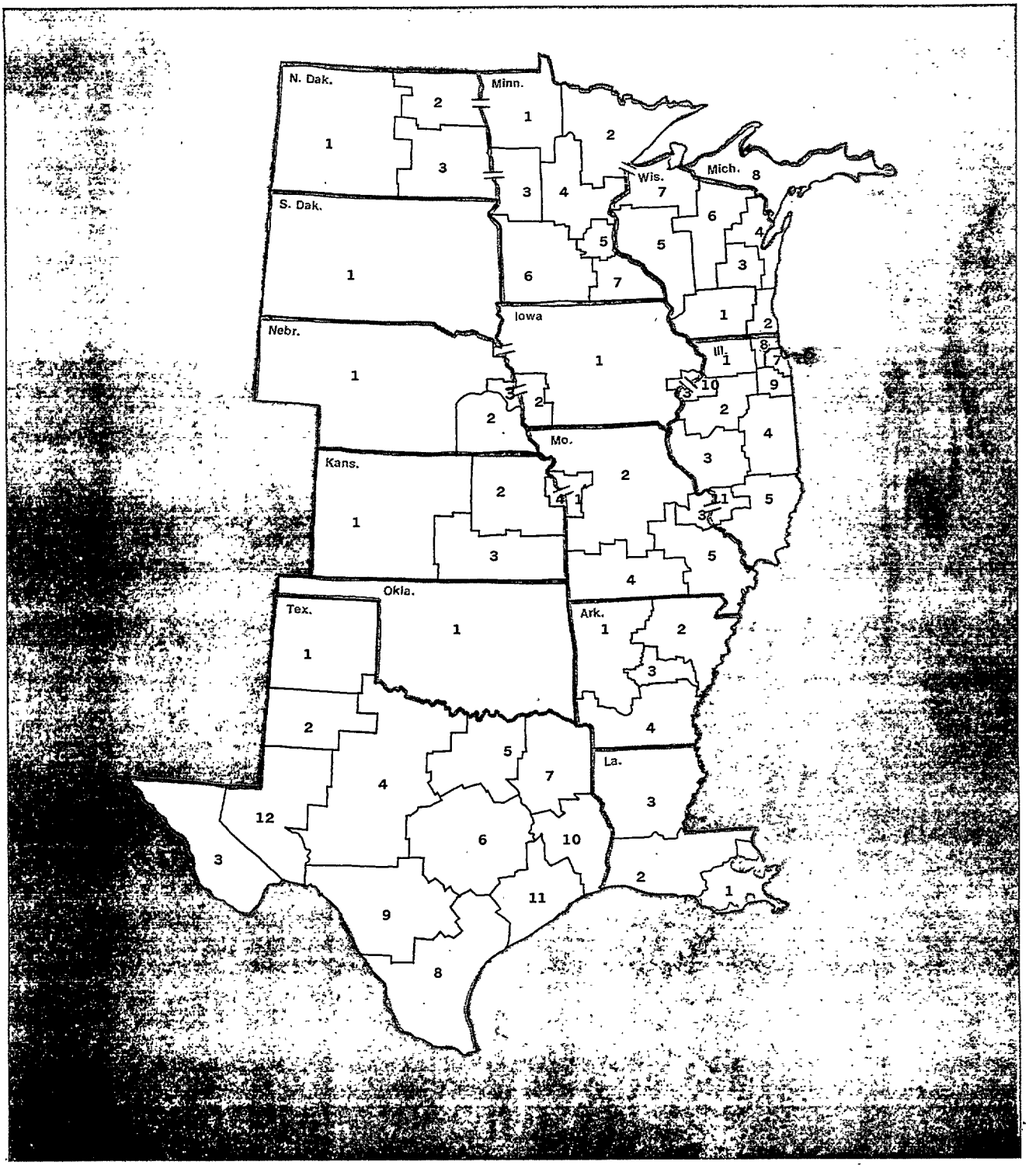
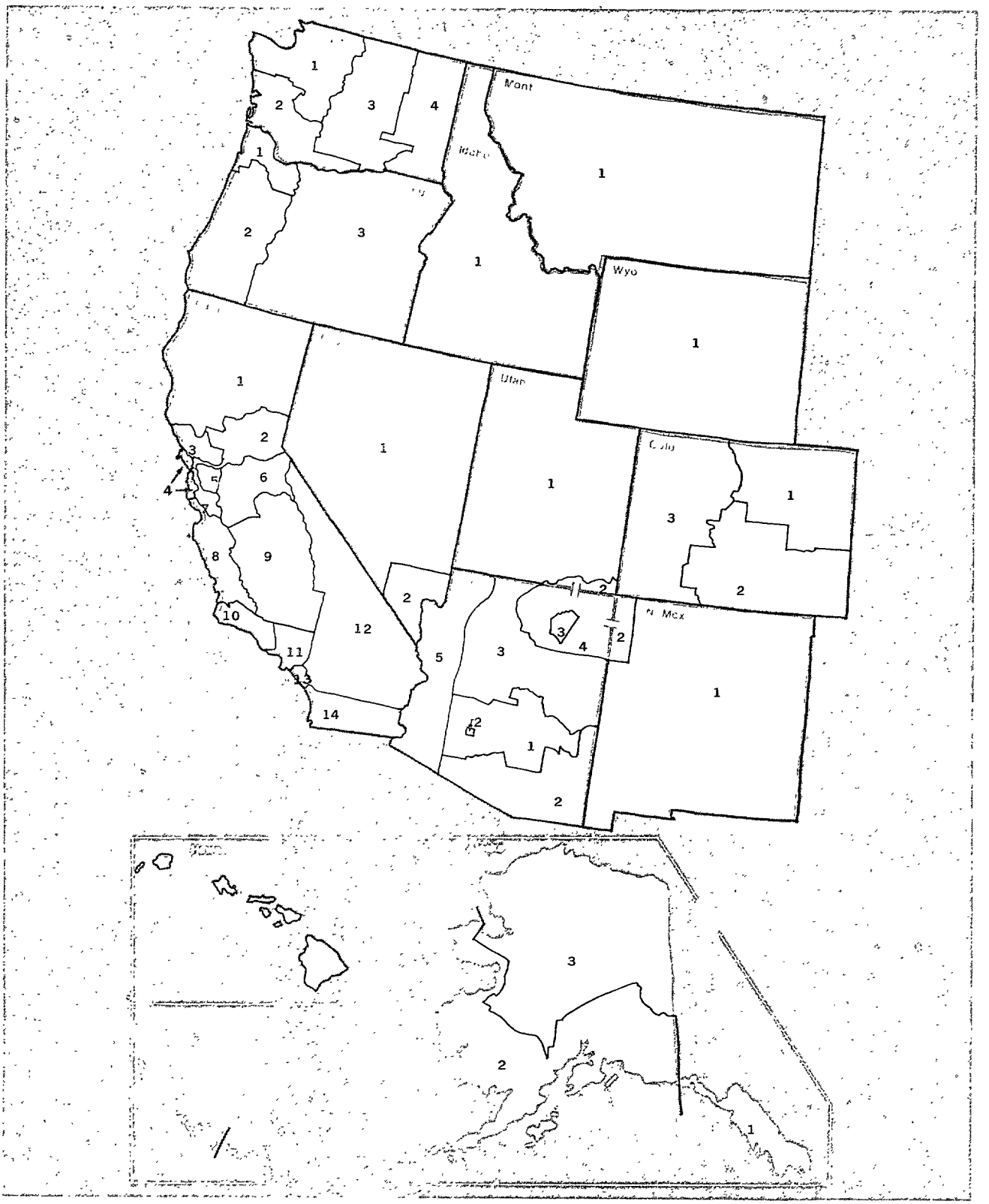


Figure 3. Health service areas in the western United States



possible implications for policy are considered. Wherever possible, information is provided for specific Health Service Areas. In other cases, data are presented by State.

Localized data are essential for professional health planners and community leaders. Such data are also required by anyone who seeks an informed understanding of the health and health care situation in the United States as a whole. The differences among areas are in many cases of appreciable magnitude.

The areas for which tabulations are presented here are somewhat different from the officially designated HSA's. This is principally because information on population and health is generally tabulated by county, and the boundaries of 16 HSA's cross county lines. Therefore, the tabulations show fewer than 212 HSA's.

Details of the discrepancies between tabulation units and HSA boundaries are in the notes accompanying the tables.

Measures of Health Status

There is no universally accepted "index of health status." Health is a difficult concept to define and to measure, and no one definition is adequate for the many different types of decisions which must be made about programs and resources. In addition, the differences among areas within the United States are so great that an index suitable for the country would not be useful for all areas.

There are a number of individual measures, however, that can be used to set goals and standards and to assess the effectiveness of health services. Some are measures of mortality and illness based on utilization of health services and resources; still others may be derived from population and other data. The basic information sources used here are the continuing and special studies of the National Center for Health Statistics, supplemented by data from other sources shown in the table footnotes.

Population Characteristics

The age distribution is one characteristic which can be used to assess the need for health services in one population as compared to another. In general, older people are less healthy and tend to utilize health services more frequently than younger ones. Approximately 10.5 percent of the U.S. population in 1975 was 65 years and over and approximately 4 percent was 75 years and over. These proportions may be much higher in areas with high inmigration of retired persons or high outmigration of young people. Such areas are likely to have higher death rates, greater prevalence of chronic conditions, and greater utilization of health services, especially long-term care services, than areas with relatively few old people.

Conversely, where a population includes a high proportion of children, there is likely to be a greater incidence of acute or short-term conditions as children are particularly subject to upper respiratory conditions and contagious diseases. Where a population includes a high proportion of women of childbearing age, birth rates will be relatively high, with an accompanying need for more prenatal and postnatal care, obstetric units in hospitals, well-baby services, and immunization programs.

Death rates are different for different racial groups, for men and women, and for people living in different parts of the country. The types of illness and disabilities and the needs for curative and preventive care for each of these population groups also tend to be different.

Mortality

The most widely available indicators of health status are derived from death rates. Deaths have been registered in all States since 1933 and in some States for even longer. These data make it possible to compare geographic areas and different periods of time and to make at least short-term projections for purposes of standard-setting and evaluation.

Both unadjusted and age-adjusted death rates are given in this chapter as they serve different purposes. Unadjusted, or crude, rates are useful for planning in a specific area; adjusted, or standardized, rates are needed for comparisons over time or between areas.

In 1975, 1,892,879 deaths were registered in the United States, 888.5 deaths per 100,000 persons. This was lower than the death rate in any previous year despite an older population.

The rates in 1975 were lower than those in 1974 for each age group. In 1975, as in previous years, the lowest rate (35.7 per 100,000) was for children aged 5-14. The rates increased steadily with increasing age, reaching 15,187.9 per 100,000 for those 85 years and over. Death rates for males were higher than those for females in each age group. At some ages they were 2 to 3 times as high (at ages 15-34 largely because of violent deaths and at ages 55-69 largely because of deaths from diseases of heart).

Rates for the white population were lower than those for the black population at all ages until 80, when the rates reversed.

Diseases of heart accounted for 38 percent of the deaths in the United States and were the leading cause of death. Next were malignant neoplasms (19 percent) and cerebrovascular diseases (10 percent). Because these three categories account for more than two-thirds of all deaths, the crude death rate from all causes combined is not greatly affected by changes in death rates from other causes such as motor vehicle accidents, which in 1975 accounted for only 2 percent of all deaths.

The decline in overall mortality in recent years has been due primarily to a decline in the death rates from heart disease and cerebrovascular disease. Age-adjusted (to the 1940 population) death rates show that the death rate for ischemic heart disease declined 19 percent from 1968 to 1975 and the rate for cerebrovascular disease 24 percent. Unfortunately, the age-adjusted death rate for malignant neoplasms did not decline. It was 130.2 per 100,000 persons in 1968 and 130.9 in 1975.

Substantial variation in death rates exists across the Nation among States and regions and even among small areas of large cities. The crude death rate for the 50 States and the District of Columbia ranged from a low of 418.9 to a high of 1,087.2 per 100,000 persons in 1975. Seven areas had rates of 1,000 or higher and 9 had rates lower than 800 per 100,000 persons (table B).

There is also wide variation in rates for individual causes of death. The U.S. death rate for heart disease was 336.2 per 100,000 persons. Unadjusted death rates for heart disease ranged from 73.9 to 430.4 among the States—from 78 percent lower to 28 percent higher than the U.S. rate. (The rate for Alaska, 73.9, was very low and distinctly different from the rest; the next lowest rate was 162.0.)

The U.S. death rate from malignant neoplasms in 1975 was 171.7 per 100,000 persons. In the lowest State it was 60.5 (the next lowest rate was 95.0); in the highest it was 218.3. Generally rates were highest in the Northeast and lowest in the West.

Motor vehicle accidents accounted for 21.5 deaths per 100,000 persons in 1975 (32.4 per 100,000 males and 11.2 per 100,000 females). The lowest death rate for any State was 13.1 (New York), the highest 43.9 (Wyoming). This is one of the few cases where a causative ecological factor can be clearly demonstrated and quantified. Areas where people drive long distances or at high speeds can anticipate high rates of death and disability from this cause. While mortality rates also are known to vary in response to such factors as exposure to occupational hazards and pollutants, those effects are more difficult to quantify.

Using relative mortality ratios for specific causes of death (age-adjusted by the direct method to the U.S. population in 1940) eliminates the effect of age differences among the State populations. The relative mortality ratios for selected causes are shown in table C. Relative mortality ratios for heart disease in 1969-71 ranged from 26 percent lower to 21 percent higher than the national level. For malignant neoplasms they ranged from 27 percent lower to 30 percent higher and for motor vehicle accidents the range was from 47 percent lower to 99 percent higher.

In part, but not entirely, the variation among the States is due to the differing racial composition of the States. As can be seen in table D, a great deal of variability still exists when only the white population is considered. The variability in the population classified as "other than white" (table E) involves at least two factors. One is geographic. The other is that in most areas this population is black, in a few it is American Indian, and in others it is Oriental. These population subgroups differ from one another in death rates and in the relative importance of specific causes of death.

Even within States there is variation in death rates among geographic areas. Twenty-five of the States have four or more HSA's; thus it is reasonable to look at the variation among HSA's

in those States. Standardized mortality ratios for all causes in 1969-71 have been computed for the HSA's and are shown in table F. The States with the widest ranges in standardized mortality ratios were Maryland (82.4-109.4), Florida (85.3-110.1), and Pennsylvania (95.7-120.3). The ranges for the white population were as large as the overall ranges: Maryland (82.9-109.2), Florida (82.9-107.4), and Pennsylvania (95.5-120.3) (table G). The range for the other than white population was wider in Pennsylvania (86.7-132.3) than in Maryland (75.5-110.2) and Florida (100.9-124.3). However, the widest range for the other population was in Wisconsin (62.0-119.3) (table H).

In other States there was remarkably little variation. Among the 12 HSA's in Texas the standardized mortality ratios ranged only from 93.0 to 100.6. In the 11 HSA's in Illinois the range was from 96.9 to 110.1. In both States there was relatively little geographic variation in the standardized mortality ratios for the white population but considerably more for the other group.

Infant and Postneonatal Mortality

After 30 years of rapid decline, infant mortality rates leveled off from the mid-1950's through the late 1960's and then started down again. In 1975 the infant mortality rate was 16.1 deaths per 1,000 live births, which was a decrease of 3.6 percent from the 1974 rate and was the lowest rate ever recorded in the United States.

Again, there is wide variation among demographic groups. The infant mortality rate for white infants in 1975 was 14.2 deaths per 1,000 live births and for infants other than white 24.2 deaths per 1,000 live births. The rate for white infants declined 4.1 percent between 1974 and 1975, while the rate for other infants declined 2.8 percent.

The 1974-75 infant mortality rates varied among the HSA's from 27.8 deaths per 1,000 live births in the District of Columbia and 25.8 in South Carolina HSA 3 to 11.5 in California HSA 3. In 71 of the HSA's (35 percent), the rate was higher than 17 deaths per 1,000 live births (table J).

Within South Carolina the range was from 17.1 to 25.8 deaths per 1,000 live births. Within California the range was from 11.5 to 16.2. No HSA in California had a rate as high as the lowest rate in South Carolina but there was still wide variation in each State.

Since mortality during the postneonatal period is dominated by exogenous factors, it is thought to be more amenable to influence by public health, social, and environmental factors than neonatal mortality. In 1974-75 postneonatal mortality rates varied among the HSA's from 2.4 (Minnesota HSA 7) to 9.9 (Arizona HSA 3). Thirty-five percent of the HSA's had rates above 4.6 postneonatal deaths per 1,000 live births (table K).

A special analysis of 1969-71 vital statistics data from 19 of the largest standard metropolitan statistical areas (SMSA's) showed wide differences between races and between poverty and nonpoverty areas within single metropolitan areas, demonstrating the great influence on death rates of social, economic, and environmental conditions such as poor and crowded housing, the spacing of children and age at childbearing, and access to good care and knowledge of how to obtain it.

Life Expectancy

As death rates decline, the expectation of life increases. If the age-specific mortality rates of 1975 were to remain constant, a child born in 1975 could expect to live 72.5 years, the highest life expectancy ever attained in the United States. In 1970 life expectancy was 70.9 years; in 1960, 69.7 years; and in 1900, 47.3 years.

Life expectancy for white females in 1975 was 77.2 years, for other than white females 72.3 years. For white males it was 69.4 years and for other than white males 63.6 years.

The difference in life expectancy between the white and other populations has declined dramatically. In 1900 there was a difference of 14.6 years; by 1970 the difference was 6.4 years. On the other hand, the difference in life expectancy between males and females increased from 2.0 years in 1900 to 7.7 years in 1970.

Among the States the expectation of life at birth in 1969-71 was highest in Hawaii and lowest in the District of Columbia. Theoretically, a child born in 1970 could expect to live almost 8 years longer in Hawaii than in the

District of Columbia. This is, of course, hypothetical since mortality rates do not remain constant over a lifetime, and people do move from one place to another.

There were no dramatic changes in the State rankings in life expectancy between 1959-61 and 1969-71 (table L). In general, those States which were above the U.S. average in 1959-61 were more likely to show a substantial increase in life expectancy than those which ranked lower. Of the 49 States which had at least 1,600 deaths of white persons in both 1959-61 and 1969-71, 20 showed an increase in life expectancy of a year or more for the white population (table M). Of the 27 States which had at least 1,600 deaths of persons other than white in both 1959-61 and 1969-71, 14 showed an increase in life expectancy for the other than white population of a year or more; 3 of them had an increase of more than 2 years (table N). Given the relative stability of life expectancy, an increase of 2 years over a 10-year period is remarkable.

HEALTH RESOURCES

Physicians, other health workers, hospitals, and other health care facilities are not evenly distributed across the United States. It is important to bear in mind, however, that health care resources can be in oversupply as well as undersupply. Some analysts claim that the United States is generally oversupplied and that this can lead to unnecessary utilization and even iatrogenic illness. Thus an area which is below the national average for a particular health resource is not necessarily at a disadvantage.

Health Manpower

Physicians are concentrated in metropolitan areas, as are dentists, nurses, and other health workers. In 1973, the ratio of active, non-Federal physicians engaged in patient care to the population in the most populous metropolitan counties was 6 times the ratio in the least populous rural counties.

The imbalance in the distribution of physicians is due entirely to the concentration of specialists in urban areas. The physician-population ratio for physicians in general practice is not related to population density. Within SMSA's in 1973 there were 2.3 active, non-Federal physicians in general or family practice per 10,000 persons and 2.8 per 10,000 outside SMSA's. The ratio of specialists to population, however, is much higher in metropolitan areas than in less urban areas. In 1973 there were, for example, 2.2 active, non-Federal internists per 10,000 persons within SMSA's but only 0.6 per 10,000 outside SMSA's. High correlations among the specialties with respect to location mean that those areas above average for one specialty tend to be above average for all other specialties.

As of December 1973 there were 15.0 non-Federal physicians in active practice for every 10,000 persons in the U.S. population, or about 1 for every 667 persons (Roback, 1974). The range among HSA's was from 5.2 to 43.9 physicians per 10,000 persons. About 20 percent of the HSA's had fewer than 8.5 physicians per 10,000, which is about 1 physician for each 1,200 people (table O). The greatest variation among HSA's, like the difference between SMSA's and non-SMSA's, was with respect to specialists.

There is also variation within HSA's. For example, in 1973, 74 percent of the HSA's contained at least one county designated as a physician shortage area for the National Health Service Corps. In 30 HSA's more than 48 percent of the population lived in such counties.

Thirteen percent of all active, non-Federal physicians in the United States were 65 years and over. In one-fourth of the HSA's 16 percent or more of all physicians were in this age group. Nearly 20 percent of the office-based primary-care physicians in the United States were 65 years and over. In 10 percent of the HSA's, more than one-quarter of these physicians were in this age group.

Nationally, the ratio of primary-care, non-Federal physicians in office-based practice (i.e., general and family practitioners, internists, pediatricians, and obstetrician-gynecologists) was 4.7 per 10,000 population in 1973. Variation among HSA's was less for primary-care, non-Federal physicians than it was for total active, non-Federal physicians. For the primary-care physicians the range was from 2.8 to 9.3

per 10,000 population, with 20 percent of the HSA's having a ratio below 3.8 (table P).

Board certification varies among the specialties; 68 percent of pediatricians were board-certified in 1973, but only 44 percent of psychiatrists. The percentage of board-certified internists, pediatricians, and obstetrician-gynecologists in the 10 percent of the HSA's with the highest levels of certification was 50-60 percent higher than the percentage certified in the 10 percent of the HSA's with the lowest levels. The percentage of board-certified psychiatrists was 150 percent higher.

About 20 percent of U.S. physicians in 1973 were foreign medical graduates. The proportion of foreign medical graduates varied among the HSA's from 0 to 55 percent with a median of 12 percent. In one-fifth of the areas, more than 22 percent of the physicians were foreign medical graduates.

States vary greatly in their reliance on foreign medical graduates to staff their mental hospitals (National Institute of Mental Health, 1976). The proportion does not seem to depend on the size of the State's population, its location, or whether the State is predominantly urban or rural. In 1975 some large States, such as New York, Illinois, and Ohio, were heavily dependent on foreign medical graduates in staffing their mental hospitals, while other large States, such as California and Pennsylvania, were not. West Virginia, South Dakota, and Montana employed a high proportion of foreign medical graduates; Louisiana, Mississippi, and Wyoming employed a low proportion (table Q).

In general, the geographic distribution of dentists is nearly as uneven as the physician distribution. Nationally, there were 5.4 licensed dentists per 10,000 population in 1974 (Bureau of Health Manpower, 1976). There were about 2.5 times as many dentists per 10,000 population in the most populous metropolitan counties as in the least populous rural counties. Among HSA's the range in 1971 was from 1.9 to 10.3 dentists per 10,000 population. Twenty percent of the areas had fewer than 3.4 dentists per 10,000 population. About 60 percent contained counties designated as dentist shortage areas for the National Health Service Corps.

In 1972 there were 37.4 registered nurses employed in nursing per 10,000 population in the United States. The nurse-population ratio varied among HSA's from 10.1 to 66.4. Twenty percent of the HSA's had fewer than 24.8 nurses per 10,000 population.

In evaluating this variation among geographic areas, two limitations of the data given here should be kept in mind. First, there is no adjustment in any of the manpower data for full-time activity; the lack of adjustment is especially serious for nurses. A substantial proportion of nurses do not work full time, and this proportion is known to vary geographically.

Second, there is an interrelationship among health resources. Potential substitution of manpower (nurse practitioners for physicians, one specialist for another, ambulatory or home care for hospital care) makes it important to consider variation in more than one indicator simultaneously. The correlation among specialists has already been pointed out.

Health Facilities

There were 6,693 short-stay hospitals in the United States in 1974 providing just over 1 million beds and 677 long-stay (average length of stay greater than 30 days) hospitals with 370,000 beds. In addition there were 15,000 nursing care homes with just over 1.1 million beds and 7,000 other long-term care homes with 220,000 beds in 1973.

The non-Federal short-stay hospitals (excluding the 1 percent which are purely psychiatric) provided 4.5 beds for every 1,000 people in the United States. North Dakota, the State with the highest bed-population ratio, had 6.9 beds for every 1,000 people; Utah, the State with the lowest ratio, had 3.2. Alaska had only 2.3 beds but Federal hospitals in Alaska serve large portions of the population. Every State in the West North Central Division had a higher bed-population ratio than the U.S. ratio (the ratio for the division was 5.8) and every State in the Pacific Division had a lower ratio (the division ratio was 3.9) than the U.S. ratio. Wisconsin and Montana, which adjoin the upper tier of the States in the West North Central Division, also had more than 5 beds per 1,000 population.

Short-stay hospital beds, unlike medical manpower, were not concentrated in urban areas

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out of proportion to the population. Large SMSA's had about 4.5 beds per 1,000 people in 1974, medium SMSA's had 4.4 beds, and small ones 5.0. Counties which were adjacent to SMSA's had 4.0 beds per 1,000 people, while those counties farther out from the SMSA's had 4.7. The highest ratios were in the core counties of central cities and in urbanized counties not adjacent to SMSA's.

The range among HSA's was from 1.2 to 8.0 beds; 11 percent had more than 5.5 beds and 12 percent had fewer than 3.5 beds per 1,000 population (table R).

There was wide variation in the services available in the 6,358 non-Federal short-stay hospitals. For example, over 80 percent reported having a 24-hour emergency room or a pharmacy, while less than 5 percent reported having a burn care unit or self–care unit.

Although there are only relatively small differences in the sheer availability of hospital beds between the more and the less urbanized areas, there are substantial differences between these types of areas in staffing patterns and in the availability of specialized services. Sophisticated services are concentrated in the large hospitals which are, with well-known exceptions, located in metropolitan areas. In 1975 the average bed size of the community hospitals in metropolitan areas was 236 beds in contrast with 84 beds in nonmetropolitan areas (American Hospital Association, 1977); 79 percent of the community hospitals with fewer than 50 beds were in nonmetropolitan areas; 94 percent of those with 300 or more beds were in metropolitan areas.

The ratio of full-time equivalent personnel per bed and the ratio of total assets per bed ($55,107 per bed vs. $35,437) were both higher in community hospitals in metropolitan areas than in nonmetropolitan areas. Special services were more likely to be available. For example, 85 percent of the community hospitals in metropolitan areas had intensive care units in contrast with 55 percent in nonmetropolitan areas; 72 percent of the former had blood banks in contrast with 60 percent of the latter. Hospitals in metropolitan areas were much more likely to offer psychiatric, social work, family planning, alcoholism, or abortion services (American Hospital Association, 1977).

In 1974 there were 1.5 beds in non-Federal long-stay hospitals per 1,000 civilian population in the United States. Nine-tenths of them were in hospitals operated by State (or very rarely local) governments. Their patient service areas are usually defined by regulation rather than by individual choice. Many serve an entire State; others serve defined areas within the State. Thus the distribution of long-stay hospitals by State is of greater importance than the distribution by HSA's or other local areas.

Four-fifths of the beds in non-Federal long-stay hospitals in 1974 were in psychiatric hospitals. Only three States (Massachusetts, Rhode Island, and Delaware) and the District of Columbia had 1 or more beds per 1,000 population in other kinds of long-term hospitals. Ten States (including Alaska) had no long-term non-Federal hospitals except the psychiatric hospitals.

In 1974 there were 1.3 beds in non-Federal psychiatric hospitals per 1,000 population; 96 percent of them were in hospitals classified as long-stay. There was a steep East to West gradient in the number of beds in non-Federal psychiatric hospitals. New England had 1.6 beds per 1,000 population; the Middle Atlantic States had 2.3; the South Atlantic States had 1.5 beds per 1,000 population. In contrast, the Mountain and Pacific States had 0.7 beds per 1,000 population.

There have been great changes in psychiatric treatment and attitudes since World War II. The introduction of psychotropic drugs and their increasing use in treatment has meant that people could be treated as outpatients or hospitalized briefly rather than being hospitalized for long periods. As attitudes have changed, court rulings have brought about the release of patients.

As a result, the number of beds in psychiatric hospitals has decreased. According to the National Institute of Mental Health, the total number of beds devoted to psychiatric care declined by 16 percent from January 1974 to January 1976 and by 30 percent from January 1972 to January 1976 (National Institute of Mental Health, 1975, 1977). Virtually all of the decrease is attributed to State mental hospitals, which had only 222,202 beds in January 1976, a decrease of 21 percent from January 1974 and 39 percent from January 1972, when there were

361,578 beds in State mental hospitals. In January 1972 State mental hospital beds comprised 77 percent of all psychiatric beds; in January 1976 they comprised only 67 percent.

The decline in the number of psychiatric beds is nationwide. The number of psychiatric beds has been declining at a faster rate than other hospital beds. As a result, non–Federal psychiatric beds as a proportion of all non–Federal hospital beds has decreased from 30 percent in January 1972 to 22 percent in January 1976.

The number of beds in nursing care homes per 1,000 people 65 years and over was 52 in 1973, varying from 17 in West Virginia to 89 in Minnesota. In general, the number of beds per 1,000 elderly people was lower in Southern States than in other parts of the country but there was wide variation among States in any area. For example, Georgia had 61 beds for every 1,000 people 65 years and over; Florida had 25; South Carolina had 35.

UTILIZATION OF HEALTH RESOURCES

Utilization of health care resources varies both among HSA's and within them. This is due in part to differences in the supply of physicians, hospitals, laboratories, other health personnel, and other resources; the more resources there are, the more likely they are to be used. It is also due to characteristics of the population such as age and sex, which influence needs for health services, and due to levels of health insurance coverage and income, which influence ability to pay for care.

Other determinants of health care utilization include availability of public programs and clinics and availability of population-wide services such as immunization programs. Local norms and economic factors influence the practices followed by physicians and other health personnel, which in turn affect utilization patterns. Regulatory practices connected with payment programs play a part as well.

Need for health care is, of course, a major determinant of utilization. Needs are related to age, sex, race, and place of residence. The individual's perception of need is a determinant which is itself related to many cultural factors. Access to health care, as measured by travel time, waiting time for an appointment, and waiting time in the office, is also a determinant. Awareness of program eligibility and of the availability of providers influences utilization of services. There are other cultural factors to be considered, such as the use of nonphysician healers and preferences for certain types of medications.

Differences in utilization are of special concern when there is reason to believe that there is underutilization and needs for preventive or illness-related care are not being met. However, high utilization may carry with it waste of resources and substantial risks, as in certain types of surgery, prolonged institutionalization, and use of certain drugs or methods of treatment.

Ambulatory Care Utilization

The average number of ambulatory physician contacts per person per year has remained extremely stable since 1971. Each year through 1975 there was an average of approximately five contacts per person. Contacts include visits to physicians' offices, hospital outpatient departments, emergency rooms, and health centers; home calls; and phone contacts for medical advice, but exclude visits made by physicians to patients in hospitals and long-term care facilities such as nursing homes.

As recently as a decade ago, individuals in families of higher income averaged considerably more physician contacts per year than those in lower income families. Partly as a consequence of Medicaid, and to some extent Medicare, the average number of contacts per year for people in the poorer segments of the population is now generally as high as or higher than the number for the more affluent. However, illness rates and accompanying medical needs are greater in the low-income population. In spite of the recent catching-up process, it is likely that in many areas of the country people who are economically better off still receive a disproportionately large share of medical care in relation to need.

Substantial differences exist among population groups in the setting where ambulatory care is obtained. Nationally, in 1975 about 12 percent of ambulatory care contacts of the white population were through hospital outpatient departments and emergency rooms. However, more than 22 percent of the contacts of the

remainder of the population took place in such settings. Similarly, use of hospital ambulatory facilities is relatively frequent among the low-income population and decreases with increasing income. However, the steadily upward trend since 1973 in the use of hospital outpatient departments and emergency rooms is not due entirely to the reduction of financial barriers for the poor. Increased reliance on hospitals has been widespread throughout the population.

In addition to measures of the sheer volume of contacts and the settings in which they take place, it is essential for planning purposes to examine the health care function of the services which are sought and received. According to medical criteria, a larger proportion of the services obtained by less affluent, older, and black recipients are "mandatory" as compared to the services obtained by the remainder of the population (Andersen, et al., 1975). This is due in part to the greater prevalence of medical need within these groups; it also suggests that the poor, the elderly, and blacks are less likely to obtain medical care in the absence of urgent need.

There are differences in physician utilization by age and place of residence. Children under 5 years of age and adults in their fifties and older average considerably more ambulatory contacts than other age groups. In general, the number of contacts per person per year is higher in large metropolitan areas than in smaller metropolitan areas, which in turn have higher rates than nonmetropolitan areas. It is clear that the availability of physician manpower, discussed earlier, has an appreciable effect on the volume of utilization.

Marked differences exist between metropolitan and nonmetropolitan areas in the percentage of the population receiving certain preventive care. For example, 35 percent of those 40 years and over residing in metropolitan areas in 1973 had had an electrocardiogram in the previous 2 years, compared to 28 percent of those living in nonmetropolitan areas. Thirty–six percent, as contrasted with 28 percent, had had a glaucoma test. About 67 percent of the children under 17 years in metropolitan areas compared to 53 percent of the children in nonmetropolitan areas had had a routine physical examination within 2 years. Similar differences were reported for other preventive care services—chest X-rays, Pap smears, etc.

Nationally, there were about 1.6 dental visits per person in 1975. People living in metropolitan areas visited a dentist, on the average, 1.8 times a year while people in nonmetropolitan areas made 1.2 visits per person.

Hospital Utilization

Although certain medical conditions almost invariably result in at least one stay in a short-term general hospital for the afflicted individual, the medical indications for many other conditions are not so clear-cut. For nearly identical conditions, some patients may be treated by inpatient surgery, some may receive nonsurgical inpatient medical treatment, and others may be treated on an ambulatory basis. Considerations other than purely medical ones enter into the determination of the forms of treatment a patient receives during the course of an illness. It is not surprising that there is great variability among geographic areas in the volume of hospital utilization.

There were 908 days of care in community hospitals for every 1,000 people in the Pacific Coast States in contrast with 1,482 days of care per 1,000 in the West North Central States in 1975. According to data from the American Hospital Association the national rate was 1,209 days per 1,000 persons (American Hospital Association, 1976).

Data from the Medicare program provide useful insights into geographic variability in hospital use because of the restricted age range of the patients, the generally high rates of hospital utilization by the elderly, the relative homogeneity of hospital insurance coverage, and the availability of detailed statistical information. The hospital admission rates presented here were derived by classifying Medicare hospital episodes for individuals over age 65 in terms of the geographic locations of the hospitals. The base populations are the numbers of individuals with Medicare hospital coverage residing in the geographic areas.

In both 1973 and 1974 the four States with the highest Medicare hospital admission rates were North Dakota, Montana, South Dakota, and Arkansas (table S). Each of these States had

a rate of 400 admissions per 1,000 population or greater (Office of Research and Statistics). The three highest States, North Dakota, Montana, and South Dakota, had a greater ratio of short-stay hospital beds to population than the U.S. average and were among the lowest States in physician-population ratio. These three States traditionally have had extremely high hospital admission rates, more than 30 percent higher than the national average as long ago as 1951. The relatively small supply of physicians and large supply of hospital beds is consonant with a pattern of care that emphasizes inpatient rather than ambulatory treatment and management of medical conditions. All three States have population densities of less than 10 people per square mile, as compared to 60 people per square mile for the entire United States in 1975. It is possible that the emphasis on hospital care is in part connected with the appreciable distances that portions of these populations must travel for ambulatory care.

It is more difficult to interpret the utilization pattern in the States with the lowest Medicare hospital admission rates. Maryland, New Jersey, and Delaware were among the four lowest States. An appreciable proportion of the Maryland population resides in suburban Washington, D.C., and is hospitalized in the District of Columbia. Similarly, many New Jersey residents may be hospitalized in New York City or Philadelphia, while many Delaware residents may be hospitalized in the nearby Pennsylvania, New Jersey, and Maryland hospitals. However, New York and Pennsylvania, in spite of the importation of hospital patients, also showed relatively low Medicare admission rates. The hospital admission rates in New York and Pennsylvania for all age groups combined were only at approximately the national average even in 1951. This is noteworthy since their larger cities are referral centers for surrounding States. Thus a rather different pattern of disease treatment and management appears to have prevailed in the Middle Atlantic area from that in the Upper Midwest and Mountain States.

Also presented here are data (tables T and U) showing the variation among Health Service Areas in 1974 in the average length of hospital stay and the percent of discharges in which surgery was performed for Medicare beneficiaries 65 years and over. In interpreting these data, one must take into account the fact that hospitals in the more metropolitan and urban HSA's are used by substantial numbers of out-of-area residents, and the HSA shown in the table is the one in which the hospital was located, which may not be the same as the one in which the patient lived. Nevertheless, it is clear that hospital stays in the West tended, on the average, to be appreciably shorter than those in the Northeast and North Central Regions. The variation among HSA's within a State in the percentage of discharges in which surgery was performed reflects, in part, referral patterns. Areas with large medical centers generally have relatively large percentages of surgical discharges.

HEALTH CARE FINANCING

Expenditures for health care have more than tripled in the past 11 years. In fiscal year 1965 they were $39 billion, or 5.9 percent of the gross national product (GNP). In fiscal year 1976 they were $139 billion, 8.6 percent of the GNP, or $638 per capita (Gibson and Mueller, 1977).

About half the increase can be attributed to the rising prices of medical goods and services, and about 40 percent to greater per capita utilization of health services, quality improvements, and the greater complexity of health care. Somewhat less than 10 percent is due to population growth.

The cost of an average hospital stay increased from $311 in 1965 to $1,017 in 1975. About half of this is due to wage increases for hospital employees and higher prices for the goods and services which hospitals buy. The other half is due to the acquisition of more expensive equipment and to greater numbers of staff in proportion to patient populations.

Increases in expenditures for health care were not uniform across the country for many reasons. The age distribution of a population influences the need for health services and the eligibility for Medicare and other age-related programs. Migration patterns have changed the age distribution in some areas. Price levels of hospital and professional services rose more steeply in some areas than in others. The supply of hospital beds and professional manpower varies from one area to another. This variation

influences access and thus utilization levels which, along with prices, determine expenditures. Factors in an area's general economy are also significant. The level of personal income governs the ability to pay for care and influences the location of professionals, and industrialization is associated with the prevalence of health insurance coverage and use of insurance as a payment source for health care.

Also important in interpreting interareal differences are local concentrations of Department of Defense installations and Veterans Administration facilities. The presence of these or other specialized medical facilities that serve patients from many areas often leads to high utilization and expenditure. Hospital expenditures may be high for a given area without necessarily reflecting excessive services to local residents.

The variation in expenditures among the States is shown in a comprehensive comparison developed by the Social Security Administration, using 1969 estimates of private expenditures and expenditures of Federal, State, and local governments. Excluding the District of Columbia, per capita expenditures varied among States from $138 to $346 (table V).

Substantial variation exists among geographic areas in the funding sources for medical care. State differences in the implementation of various public medical care programs, notably Medicaid, are very pronounced. In 1969 overall per capita expenditures from State and local sources varied from $51.93 in the Northeast to $19.25 in the South, a ratio of 2.7 to 1. Federal spending exerted a somewhat compensatory effect. The per capita expenditure for Federal, State, and local governments combined was $117.39 in the Northeast and $72.87 in the South (Office of Research and Statistics, 1975).

Variation in the per capita amount of hospital expenditures is due in part to differences in hospital charges and bed supply. In 1969 the District of Columbia, Massachusetts, and New York, all of which serve patients from outside the area, had expenditures for hospital care greater than $150 per capita. At the same time, expenditures in Mississippi, Arkansas, and Idaho were below $70 per capita (table W).

For the United States as a whole in 1969, 33 percent of all hospital expenses were paid by Federal funds. For Florida, a considerably larger proportion (43 percent) of hospital expenditures was Federal, owing to the large proportion of the population covered by Medicare coupled with only moderate hospital utilization by the non-Medicare segment.

Expenditures going to physicians in 1969 averaged $59 per person nationwide, but ranged among States from $84 in California to $29 in Mississippi (they were $157 in the District of Columbia). Forty States averaged between $40 and $60. Public funds supplied 23 percent of overall expenditures for physicians, but reached nearly one-third in States with large welfare and/or elderly populations. Drugs, dentists' services, and skilled nursing home care also showed interstate variability in per capita amounts spent and the role of public financing.

Further information and insight come from the Supplemental Security Income program initiated on January 1, 1974. This program standardized eligibility and benefits for aged, blind, and disabled persons' assistance programs, and offered options to the States with respect to Medicaid eligibility rules. Among 10 States that were studied, most raised the income ceiling for eligibility and most increased the number of services covered. With respect to long-term care, utilization and expenditure increased in all 10 States, although only 6 of them increased the number of recipients.

Data from the Medicare program for 1974 reveal wide interregional and interstate disparities. The 1974 figures on reimbursement per enrollee 65 years and over, including hospital and medical insurance, show that the mean payment per Medicare enrollee for the United States was $467; in the South it was $395, in the Northeast $544 (table X).

Among the nine Census Divisions, reimbursement in 1974 varied from $339 in the East South Central to $561 in New England. The average payment in the highest division was 65 percent above the lowest. The East South Central group of four States includes Mississippi, highest in rank among these States for reimbursement per enrollee, with $345. The New England group includes six States, with average reimbursement

ranging from $409 in Maine to $614 in Massachusetts.

When the 14 counties of Massachusetts are reviewed individually, reimbursement per enrollee ranged from $828 to $460; the highest county was 80 percent above the lowest. The Mississippi average of $345 was $113 higher than the lowest county in that State ($232) and $208 lower than the highest county ($553); the highest county was 138 percent above the lowest. Two counties in Mississippi had higher payments per enrollee than the lowest county in Massachusetts, even though the average payment in Mississippi was $269 lower than the average payment in Massachusetts.

Medicare reimbursement levels also differ according to place of residence, whether urban or nonurban. The average reimbursement per Medicare enrollee 65 years and over, including hospital and medical services, in metropolitan counties with central cities was 44 percent higher ($523) than in nonmetropolitan counties ($364). For hospital services under Part A of Medicare, the urban area was 38 percent higher ($381) than the nonurban area ($276), and for services under Part B, supplemental medical insurance, the urban area was 59 percent higher than the nonurban area in 1974.

Wennberg and Gittelsohn have described a data system for Vermont's 251 towns which was set up in 1969 and which provides information on local differences in utilization and expenditures (Wennberg and Gittelsohn, 1973). Thirteen service areas were delineated, and utilization and expenditure rates were classified on the basis of the patient's place of residence rather than the location of the site of care. Per capita expenditures for hospital care in 1969 were twice as large in the highest service area as in the lowest; for nursing homes, the ratio between high and low areas was greater than five. Part B Medicare reimbursement ranged from $54 to $162 per capita. The range of payments for diagnostic X-rays, electrocardiograms, and laboratory services was even greater. That the differences in expenditures for hospital care are persistent over time is shown by a high correlation between 1963 and 1969 per capita expenditures.

Data from the 13 areas show differences among the areas in utilization of hospitals, rates of performance of all surgical procedures, and discharges for four classes of disease. These differences are sustained when the figures are adjusted for age. An examination of variation in tonsillectomy rates strongly suggests that factors unrelated to biological need are highly influential. If one assumed that the observed 1969 age-specific tonsillectomy rate for each area were to remain constant for a 20-year period, 16 percent of the children in the area with the lowest rate would have a tonsillectomy by age 20 as compared to 66 percent of the children in the area with the highest rate.

The distribution of physicians in the 13 areas was associated with the density and income level of the population rather than with its age distribution or other indicators of medical need.

Unusually comprehensive data are available for medical care utilization and expenditures in Northeastern Kentucky. These data are discussed below in some detail as an illustration of certain causes of observed differentials between local and national expenditure statistics (table Y). The types of factors considered here need to be taken into account in interpreting local data.

Northeastern Kentucky is one of a number of selected areas for which community funds flow studies have examined expenditure patterns and compared them with national parameters. Expenditures for health services and supplies in 1971 for the approximately 225,000 people residing in a 15-county, largely rural area of Northeastern Kentucky are estimated to have been $214 per capita, compared to $351 for the United States as a whole (National Center for Health Services Research, 1973). The Northeastern Kentucky expenditure figures were derived from data pertaining only to providers located within the 15-county area. Patient origin studies showed that residents of the area obtained a considerably higher volume of services outside the area than nonresidents obtained from the area's providers. More specifically, over one-quarter of the admissions for the area's residents were in hospitals outside of the area. There were more than twice as many out-of-area hospital admissions for area residents as there were in-area admissions for nonresidents. It is likely that the out-of-area admissions for residents were for longer, more complex stays than the in-area admissions. Thus, while the

funds flow study showed 1971 per capita hospital expenditures for the area of only $63, as compared to national expenditures of $147, the actual average expenditure for the residents' hospitalizations was unquestionably greater than $63.

Relatively low expenses per patient day in Northeastern Kentucky hospitals also contributed to the difference from the national average. The area's hospitals are less technologically advanced than hospitals in metropolitan areas; this paucity of specialized services results in lower costs. Again, it appears likely that the out-of-area hospitalizations for residents were more expensive than the within-area admissions, the out-of-area hospitals generally being located in larger cities.

There is evidence that the volume of hospital utilization by the area's residents was at least as great as the national average. Thus the relatively low per capita hospital expenditure of $63 appears to be due both to the substantial out-of-area utilization and to the relative inexpensiveness of area hospitals. The low expenditures may reflect problems of access to local medical care for area residents who developed conditions for which high-technology, specialized services are advantageous.

In contrast to the $214 estimate for Northeastern Kentucky, the estimated per capita expenditure for Philadelphia, Pennsylvania, was $548. In Northeastern Kentucky residents go out of the area for medical care, while Philadelphia provides more services to nonresidents than its residents obtain outside. With this difference taken into account, per capita expenditures for Philadelphia residents were still undoubtedly far greater than those for the Kentucky area's residents. In general, expenditures for health services and supplies for metropolitan area residents tend to be a great deal higher than those for populations living outside of metropolitan areas.

Only about one-third of the 1971 hospital expenditures in Northeastern Kentucky were derived from public sources, due in part to a relatively small Medicaid program and the absence of publicly supported hospital facilities in the area. It has been estimated that in New York City, 72 percent of all spending for care rendered by hospitals and related facilities in 1971 came from public sources, as compared to a figure of approximately 50 percent for the country as a whole.

Variability in both utilization and expenditure is inherent in the Medicaid program. The law requires that each participating State cover certain hospital and physician services, but other services are added at the option of the State. Further, a State may limit the number of hospital days or physician visits covered. Other factors making for variability are the level of medical prices, the scarcity of resources in rural areas, and the percentage of the area's poor people who are covered.

In 1970 the ratio of Medicaid recipients to persons with incomes under the poverty index was 1.03 in the Northeast, 1.16 in the West, but less than 0.33 in the South. Even though approximately 45 percent of the poor lived in the South, this region in 1972 had only about 20 percent of the Medicaid recipients and accounted for only a little more than 15 percent of the payments. Payments per poor person were $526 in the Northeast and $85 in the South (Davis, 1976).

There was an even larger disparity in payments per poor child. Approximately 10 percent of the poor children in Mississippi received benefits, these benefits averaging somewhat over $40 per recipient (table Z). In contrast, most of the poor and many of the near-poor children in New York received benefits, which averaged $133 per recipient. Rural children, who are likely to be in families whose fathers are present but underemployed or unemployed, are less likely to receive benefits than urban children, who are more likely to be in families headed by nonworking women.

THE NEED FOR CONTINUING INFORMATION

The National Health Planning and Resources Development Act of 1974 (Public Law 93-641) prescribes that area health systems plans be based on certain specified sets of statistical data pertaining to the health of the people and the health care system in the area. The data pre-

sented and discussed in this chapter are illustrative of the types of information that health systems agencies and other planners need to take into account when developing plans. Indicators have been included regarding health status, health care resources, resource utilization, and health care financing. Meaningful interpretation of these data is possible only if one compares the statistics pertaining to a particular health service area with the statistics for an array of areas. To this end, we have here described the variability among areas with respect to these indicators. In developing system goals and the mechanisms for achieving them, planners can, with such information, assess the situation in their own area relative to the situations in comparable areas.

To enhance the utility of statistical information in the planning process, far more sensitive and revealing indicators are needed. Furthermore, we need far greater knowledge of interrelationships among different elements of the system. For example, what are the consequences of a limitation of the number of hospital beds for the area's supply of physicians in various specialties? What are the consequences for the utilization of short-term hospitals of a change in the supply of long-term care beds? How would the geographic distribution of dentists be affected by greater availability of dental care insurance?

Health system planning must proceed immediately. We cannot postpone decisions until better indicators are developed and our understanding of the health system becomes more nearly adequate. However, research and development efforts should be accelerated if our health system is to be placed on a more rational footing.

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Notes on Tables F, G, and H

The Health Service Areas (HSA's) designated in tables F, G, and H differ from officially designated HSA's in the following particulars:

1. Alaska's three HSA's are considered one area because of their relatively small population.

2. Illinois Areas 6 and 7 and Massachusetts Areas 3 and 6 are considered single areas because of data constraints.

3. Data for the tri-State HSA appear with their respective States. New Mexico and Utah have been treated as single State HSA's. The data for the Arizona component has been aggregated with Arizona 3.

4. In three States HSA's have been redefined because of data constraints so that they fall within county boundaries. The new definitions are as follows. Arizona: Area 1—Gila, Graham, Maricopa, and Pinal Counties; Area 2—Cochise, Greenlee, Pima, and Santa Cruz Counties; Area 3—Apache, Coconino, Mohave, Navajo, and Yavapai Counties. Connecticut: Area 1—Fairfield County; Area 2—New Haven County; Area 3—Middlesex, New London, and Windham Counties; Area 4—Hartford and Tolland Counties; Area 5—Litchfield County. Massachusetts: Area 1—Berkshire, Franklin, Hampden, and Hampshire Counties; Area 2—Worcester County; Areas 3 and 6—Essex and Middlesex Counties; Area 4—Norfolk and Suffolk Counties; Area 5—Barnstable, Bristol, Dukes, Nantucket, and Plymouth Counties.

5. Data for 14 interstate areas appear twice each under their dual State designations. The pairings are as follows:

Tennessee 3–Georgia 1
Georgia 4–South Carolina 5
Georgia 5–Alabama 7
Iowa 1–Nebraska 4
Nebraska 3–Iowa 2
Iowa 3–Illinois 10
Ohio 1–Kentucky 3
North Dakota 2–Minnesota 1
Minnesota 2–Wisconsin 7
North Dakota 3–Minnesota 3
Missouri 1–Kansas 4
Missouri 3–Illinois 11
New York 4–Pennsylvania 8
Tennessee 1–Virginia 6

6. These tabulations do not incorporate the HSA designation changes of December 1976. The three areas affected are Arizona 5 and Pennsylvania 10 and 11. Data for Arizona 5 are tabulated with Arizona 3, and data for Pennsylvania 10 and 11 are tabulated according to their former designations.

Notes on Tables J, K, O, P, and R

The Health Service Areas (HSA's) designated in tables J, K, O, P, and R differ from officially designated HSA's in the following particulars:

1. Alaska's three HSA's are considered one area because of their relatively small population.

2. Illinois Areas 6 and 7 and Massachusetts Areas 3 and 6 are considered single areas because of data constraints.

3. Data for the tri-State HSA appear with their respective States. New Mexico and Utah have been treated as single State HSA's. The data for the Arizona component has been aggregated with Arizona 3.

4. In three States, HSA's have been redefined because of data constraints so that they fall within county boundaries. The new definitions are as follows. Arizona: Area 1—Gila, Maricopa, and Pinal Counties; Area 2—Cochise, Graham, Greenlee, Pima, and Santa Cruz Counties; Area 3—Apache, Coconino, Navajo, and Yavapai Counties; Area 5—Mohave and Yuma Counties. Connecticut: Area 1—Fairfield County; Area 2—New Haven County; Area 3—Middlesex, New London, and Windham Counties; Area 4—Hartford and Tolland Counties. Area 5—Litchfield County. Massachusetts: Area 1—Berkshire, Franklin, Hampden, and Hampshire Counties; Area 2—Worcester County; Areas 3 and 6—Essex and Middlesex Counties; Area 4—Norfolk and Suffolk Counties; Area 5—Barnstable, Bristol, Dukes, Nantucket, and Plymouth Counties.

5. Data for 14 interstate areas appear twice each under their dual State designations. The pairings are as follows:

Tennessee 3–Georgia 1
Georgia 4–South Carolina 5
Georgia 5–Alabama 7
Iowa 1–Nebraska 4
Nebraska 3–Iowa 2
Iowa 3–Illinois 10
Ohio 1–Kentucky 3
North Dakota 2–Minnesota 1
Minnesota 2–Wisconsin 7
North Dakota 3–Minnesota 3
Missouri 1–Kansas 4
Missouri 3–Illinois 11
New York 4–Pennsylvania 8
Tennessee 1–Virginia 6

Notes on Tables T and U

The Health Service Areas (HSA's) designated in tables T and U differ from officially designated HSA's in the following particulars:

1. Data for the tri-State HSA appear with their respective States. New Mexico and Utah have been treated as single State HSA's. The data for the Arizona component has been aggregated with Arizona 3.

2. Data for 14 interstate areas appear twice each under their dual State designations. The pairings are as follows:

Tennessee 3–Georgia 1
Georgia 4–South Carolina 5
Georgia 5–Alabama 7
Iowa 1–Nebraska 4
Nebraska 3–Iowa 2
Iowa 3–Illinois 10
Ohio 1–Kentucky 3
North Dakota 2–Minnesota 1
Minnesota 2–Wisconsin 7
North Dakota 3–Minnesota 3
Missouri 1–Kansas 4
Missouri 3–Illinois 11
New York 4–Pennsylvania 8
Tennessee 1–Virginia 6

3. These tabulations do not incorporate the HSA designation changes of December 1976. The three areas affected are Arizona 5 and Pennsylvania 10 and 11. Data for Arizona 5 are tabulated with Arizona 3, and data for Pennsylvania 10 and 11 are tabulated according to their former designations.

Table A. Resident population according to Health Service Area, geographic division, and State: United States, 1973

(Data are based on the decennial census updated by data reported by Federal, State, and local agencies)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Resident population in thousands													
New England:														
Maine	1,039													
New Hampshire	794													
Vermont	466													
Massachusetts	821	679	485	2,222	930	663								
Rhode Island	967													
Connecticut	635	592	531	911	467									
Middle Atlantic:														
New York	1,764	1,204	1,421	457	1,351	1,874	7,664	2,621						
New Jersey	1,344	2,006	592	1,939	1,443									
Pennsylvania	3,828	886	809	1,310	679	2,956	754	457	498					
East North Central:														
Ohio	1,705	1,125	400	1,010	1,533	701	826	675	2,268	752				
Indiana	1,924	2,121	1,259											
Illinois	574	698	565	775	590	3,173	2,780	771	433	419	2,389			
Michigan	4,757	660	744	1,002	576	726	280	317						
Wisconsin	778	1,781	451	491	546	365	460							
West North Central:														
Minnesota	310	460	390	395	1,899	524	395							
Iowa	2,520	708	419											
Missouri	1,356	1,049	2,389	551	476									
North Dakota	282	310	390											
South Dakota	682													
Nebraska	610	372	708	2,520										
Kansas	417	594	782	1,356										
South Atlantic:														
Delaware	573													
Maryland	305	554	818	2,128	268									
District of Columbia	734													
Virginia	595	979	1,051	886	1,249	458								
West Virginia	1,788													
North Carolina	912	1,022	911	718	795	946								
South Carolina	733	761	546	591	574									
Georgia	540	506	1,980	575	756	520	524							
Florida	747	514	661	1,387	972	715	575	750	1,425					
East South Central:														
Kentucky	1,712	1,363	1,705											
Tennessee	458	738	540	1,312	420	805								
Alabama	689	214	841	454	655	648	756							
Mississippi	2,317													
West South Central:														
Arkansas	601	540	438	455										
Louisiana	1,370	1,314	1,071											
Oklahoma	2,667													
Texas	330	338	412	605	2,714	1,138	670	1,070	1,188	578	2,483	302		

Table A. Resident population according to Health Service Area, geographic division, and State: United States, 1973—Continued

(Data are based on the decennial census updated by data reported by Federal, State, and local agencies)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Resident population in thousands													
Mountain:														
Montana	730													
Idaho	776													
Wyoming	353													
Colorado	1,678	577	212											
New Mexico	1,055	119												
Arizona	1,239	534	131	119	100									
Utah	1,145	119												
Nevada	244	307												
Pacific:														
Washington	2,109	468	398	457										
Oregon	995	935	289											
California	538	1,034	498	1,474	1,669	670	1,158	534	1,089	696	6,938	1,216	1,601	1,536
Alaska	46	219	65											
Hawaii	841													

SOURCES: Department of Health, Education, and Welfare: Determination of population of health service areas, Federal Register 41(181) Thursday, Sept. 16, 1976; U.S. Bureau of the Census: Estimates of the population of counties, July 1, 1973 and 1974, Current Population Reports, Series P-25, No. 620, Washington, U.S. Government Printing Office, Feb. 1974.

Table B. Death rates for all causes and for specified leading causes of death, according to color and sex, and geographic division and State: United States, 1975

(Data are based on the National Vital Registration System)

Color and sex, and geographic division and State	All causes	Diseases of heart (390-398, 402, 404, 410-429)	Malignant neoplasms (140-209)	Cerebro-vascular diseases (430-438)	All accidents (E800-E949)	Motor vehicle accidents (E810-E823)
	Deaths per 100,000 resident population					
United States	888.5	336.2	171.7	91.1	48.4	21.5
Color and Sex						
Male	1,013.2	385.2	192.3	81.3	69.8	32.4
Female	770.3	289.7	152.1	100.4	28.0	11.2
White	896.8	350.0	175.8	92.2	47.4	21.5
Male	1,015.3	401.1	194.8	81.1	67.7	32.2
Female	783.8	301.3	157.7	102.8	28.0	11.4
All other	833.6	244.4	144.0	83.7	54.7	21.4
Male	999.1	277.1	175.3	82.4	84.1	33.8
Female	682.5	214.7	115.5	84.9	28.0	10.0
Division and State						
New England:						
Maine	971.0	389.7	185.0	98.6	49.5	21.2
New Hampshire	889.2	310.3	182.6	95.6	43.8	19.4
Vermont	907.2	354.8	173.9	82.2	49.9	22.5
Massachusetts	929.1	364.5	198.4	87.7	41.2	15.9
Rhode Island	955.7	410.6	216.0	82.1	33.4	14.6
Connecticut	830.3	319.9	189.9	80.5	32.0	14.2
Middle Atlantic:						
New York	938.4	382.9	196.1	77.0	32.3	13.1
New Jersey	893.2	373.8	195.3	80.0	34.8	15.1
Pennsylvania	1,016.7	416.5	198.0	95.2	42.5	18.2
East North Central:						
Ohio	897.9	351.5	175.0	92.6	40.3	16.1
Indiana	879.4	332.6	161.8	103.3	48.4	21.8
Illinois	924.8	387.2	178.3	88.4	41.6	17.4
Michigan	818.7	309.6	158.2	79.6	43.6	20.2
Wisconsin	869.1	345.8	166.9	94.5	43.9	20.7
West North Central:						
Minnesota	833.6	316.1	161.8	99.2	47.5	20.1
Iowa	982.1	384.9	186.7	112.4	50.7	24.3
Missouri	1,029.1	390.4	191.3	111.8	51.0	23.2
North Dakota	862.8	340.4	145.2	91.2	64.6	27.7
South Dakota	952.1	371.0	163.7	104.8	63.1	31.3
Nebraska	945.8	356.4	179.0	110.9	55.9	25.0
Kansas	955.3	368.1	176.4	108.7	51.2	23.5
South Atlantic:						
Delaware	808.6	337.7	161.5	60.1	41.1	22.1
Maryland	777.7	303.0	168.4	58.4	38.1	17.1
District of Columbia	1,050.7	303.5	218.3	78.8	43.7	13.1
Virginia	794.1	293.9	150.3	78.9	50.9	20.9
West Virginia	1,087.2	430.4	183.2	101.6	58.2	25.1
North Carolina	841.3	304.8	143.9	96.3	59.9	28.0
South Carolina	834.4	290.7	135.9	96.7	59.0	29.1
Georgia	838.8	292.3	138.7	104.3	59.0	28.5
Florida	1,052.0	381.8	218.3	108.5	50.8	23.1

Table B. Death rates for all causes and for specified leading causes of death, according to color and sex, and geographic division and State: United States, 1975—Continued

(Data are based on the National Vital Registration System)

Color and sex, and geographic division and State	All causes	Diseases of heart (390-398, 402, 404, 410-429)	Malignant neoplasms (140-209)	Cerebro-vascular diseases (430-438)	All accidents (E800-E949)	Motor vehicle accidents (E810-E823)
	Deaths per 100,000 resident population					
East South Central:						
Kentucky	979.8	375.5	175.7	113.1	58.4	26.4
Tennessee	924.1	337.7	163.7	116.9	55.7	27.0
Alabama	931.1	302.9	161.2	115.9	62.6	29.8
Mississippi	973.3	322.1	157.9	119.0	67.7	27.5
West South Central:						
Arkansas	1,028.4	374.9	179.3	128.7	62.8	28.4
Louisiana	885.4	328.3	162.5	91.3	60.0	25.6
Oklahoma	1,001.6	378.1	179.4	111.9	59.3	28.8
Texas	804.7	271.6	146.3	87.6	56.6	27.9
Mountain:						
Montana	876.4	291.0	146.8	88.8	77.8	35.8
Idaho	801.2	272.4	135.7	85.5	68.0	34.9
Wyoming	818.6	274.3	129.9	82.1	83.7	43.9
Colorado	686.1	234.1	121.3	62.1	52.3	23.7
New Mexico	697.3	175.7	114.7	57.8	77.0	41.6
Arizona	767.6	249.8	144.6	65.5	57.9	30.5
Utah	625.9	203.6	95.0	58.9	50.2	22.7
Nevada	759.2	232.9	147.6	81.8	60.0	30.9
Pacific:						
Washington	838.2	310.7	164.5	89.4	50.3	22.7
Oregon	883.4	320.6	168.0	102.1	54.9	24.9
California	805.2	289.7	163.0	85.5	51.6	21.3
Alaska	418.9	73.9	60.5	22.2	118.2	34.1
Hawaii	501.2	162.0	107.2	45.8	29.2	15.0

NOTE: By place of residence of decedent. Refers only to resident deaths occurring within the United States. Excludes fetal deaths. Numbers after causes of death are category numbers of the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, 1975, Health Resources Administration, DHEW, Rockville, Maryland, to be published; U.S. Bureau of the Census: Estimates of the population of States, by age, July 1, 1975 and 1976 (advance report), Current Population Reports, Series P-25, No. 646, Washington, U.S. Government Printing Office, Feb. 1977.

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Table C. Average annual death rates for specified leading causes of death and relative mortality ratios for specified leading causes of death, according to geographic division and State: United States, 1969-71

(Data are based on the National Vital Registration System)

Geographic division and State	Malignant neoplasms (140-209)	Diseases of heart (390-398, 402, 404, 410-429)	Cerebrovascular diseases (430-438)	Motor vehicle accidents (E810-E823)
	Deaths per 100,000 population (age-adjusted to 1940)			
United States	129.9	256.0	67.0	27.5
	Relative mortality ratio			
United States	100.0	100.0	100.0	100.0
New England:				
Maine	105.2	106.1	93.0	91.3
New Hampshire	108.5	96.6	94.2	100.4
Vermont	104.9	95.8		91.6
Massachusetts	104.3	98.6	85.5	61.8
Rhode Island	109.6	104.3	76.9	53.5
Connecticut	102.1	91.1	87.9	59.6
Middle Atlantic:				
New York	109.0	108.6	84.5	64.4
New Jersey	109.9	113.0	87.3	68.0
Pennsylvania	104.8	112.0	96.9	77.1
East North Central:				
Ohio	104.7	105.3	102.4	90.9
Indiana	101.0	100.9	116.4	115.6
Illinois	104.3	117.5	98.5	84.4
Michigan	102.7	103.4	98.1	98.9
Wisconsin	95.1	93.9	93.7	91.6
West North Central:				
Minnesota	91.2	85.5	95.1	101.1
Iowa	94.1	88.5	92.2	117.8
Missouri	98.9	93.6	103.1	113.8
North Dakota	86.5	86.5	*	121.8
South Dakota	89.5	89.0	84.2	148.4
Nebraska	92.1	84.8	90.4	116.4
Kansas	89.2	85.9	87.0	113.1
South Atlantic:				
Delaware	108.2	121.3	82.2	91.6
Maryland	110.6	110.9	83.6	77.1
District of Columbia	129.5	111.1	99.9	72.0
Virginia	98.5	104.6	110.4	96.0
West Virginia	100.9	110.9	107.5	114.5
North Carolina	90.0	105.8	130.3	130.2
South Carolina	94.8	116.6	152.7	141.1
Georgia	93.7	105.1	153.7	144.0
Florida	98.6	86.3	94.2	119.3
East South Central:				
Kentucky	98.7	106.7	114.0	117.5
Tennessee	94.2	102.9	128.2	128.4
Alabama	92.7	96.0	140.7	148.4
Mississippi	94.7	98.4	137.6	160.0
West South Central:				
Arkansas	91.1	92.6	117.6	123.3
Louisiana	106.1	114.1	119.3	120.0
Oklahoma	92.6	90.5	99.9	114.9
Texas	94.7	88.8	103.1	118.9

Table C. Average annual death rates for specified leading causes of death and relative mortality ratios for specified leading causes of death, according to geographic division and State: United States, 1969-71—Continued

(Data are based on the National Vital Registration System)

Geographic division and State	Malignant neoplasms (140-209)	Diseases of heart (390-398, 402, 404, 410-429)	Cerebrovascular diseases (430-438)	Motor vehicle accidents (E810-E823)
	Relative mortality ratio			
Mountain:				
Montana	90.1	87.2	93.9	170.9
Idaho	82.1	85.4	*	153.5
Wyoming	83.6	87.7	*	198.5
Colorado	82.3	82.6	81.2	105.1
New Mexico	83.9	74.0	85.8	184.0
Arizona	92.0	82.9	83.3	146.2
Utah	72.8	77.3	80.6	112.4
Nevada	103.2	98.3	106.6	158.5
Pacific:				
Washington	95.9	91.9	95.7	98.5
Oregon	91.9	86.2	96.1	124.0
California	98.2	89.4	92.8	96.7
Alaska	*	73.6	*	*
Hawaii	84.5	74.2	82.8	69.1

NOTE: Death rates and relative mortality ratios computed by the direct method, using as the standard population the age distribution of the total population of the United States as enumerated in 1940. Numbers after causes of death are category numbers of the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

SOURCE: Computed by Division of Analysis from data compiled by the Division of Vital Statistics, National Center for Health Statistics.

Table D. Average annual death rates for specified leading causes of death for the white population and relative mortality ratios for specified leading causes of death for the white population, according to geographic division and State: United States, 1969-71

(Data are based on the National Vital Registration System)

Geographic division and State	Malignant neoplasms (140-209)	Diseases of heart (390-398, 402, 404, 410-429)	Cerebrovascular diseases (430-438)	Motor vehicle accidents (E810-E823)
	Deaths per 100,000 population (age-adjusted to 1940)			
United States	127.5	251.2	62.4	27.0
	Relative mortality ratio (white)			
United States	100.0	100.0	100.0	100.0
New England:				
Maine	107.3	108.2	99.7	93.0
New Hampshire	110.8	98.6	101.3	101.9
Vermont	107.1	97.7	*	93.7
Massachusetts	105.9	100.6	91.0	62.6
Rhode Island	111.7	106.2	81.7	54.8
Connecticut	103.2	92.4	92.8	60.0
Middle Atlantic:				
New York	109.5	110.0	86.5	65.6
New Jersey	110.0	113.0	89.1	65.9
Pennsylvania	104.5	114.0	100.6	78.5
East North Central:				
Ohio	104.2	105.8	106.4	93.0
Indiana	100.9	102.0	121.0	119.3
Illinois	103.4	115.1	99.8	88.5
Michigan	102.3	103.7	100.6	103.6
Wisconsin	96.6	95.6	99.7	93.0
West North Central:				
Minnesota	93.1	87.2	102.2	101.5
Iowa	95.6	89.9	98.6	120.4
Missouri	98.2	93.9	104.8	119.3
North Dakota	88.0	87.6	*	113.3
South Dakota	90.6	89.8	90.2	128.5
Nebraska	93.5	85.6	96.0	118.5
Kansas	90.0	86.7	91.2	115.6
South Atlantic:				
Delaware	104.9	118.1	*	83.7
Maryland	107.9	109.7	81.9	75.6
District of Columbia	104.1	97.0	*	*
Virginia	94.2	101.2	101.8	88.9
West Virginia	101.8	111.6	112.0	116.3
North Carolina	87.8	102.0	118.3	120.0
South Carolina	94.4	110.6	130.1	127.8
Georgia	91.5	121.7	131.7	144.4
Florida	97.4	84.4	90.2	116.7
East South Central:				
Kentucky	97.7	105.8	116.4	120.4
Tennessee	91.8	100.4	121.8	132.6
Alabama	91.4	95.9	126.4	149.6
Mississippi	95.5	98.2	119.6	166.7
West South Central:				
Arkansas	92.1	92.2	110.6	128.2
Louisiana	102.6	109.3	103.9	116.7
Oklahoma	94.1	92.2	104.3	113.3
Texas	94.0	87.8	102.1	119.6

Table D. Average annual death rates for specified leading causes of death for the white population and relative mortality ratios for specified leading causes of death for the white population, according to geographic division and State: United States, 1969-71—Continued

(Data are based on the National Vital Registration System)

Geographic division and State	Malignant neoplasms (140-209)	Diseases of heart (390-398, 402, 404, 410-429)	Cerebrovascular diseases (430-438)	Motor vehicle accidents (E810-E823)
	Relative mortality ratio (white)			
Mountain:				
Montana	91.7	88.4	99.2	158.5
Idaho	83.9	86.8	*	152.2
Wyoming	85.4	89.2	*	197.4
Colorado	83.5	84.1	86.5	107.4
New Mexico	86.5	76.9	91.4	163.7
Arizona	94.2	85.3	88.5	129.3
Utah	74.3	79.5	86.9	112.2
Nevada	105.5	100.4	*	159.3
Pacific:				
Washington	97.6	93.5	101.8	96.3
Oregon	93.8	87.9	103.0	125.2
California	99.6	91.3	98.2	99.3
Alaska	*	87.1	*	*
Hawaii	85.8	85.0	*	*

NOTE: Death rates and relative mortality ratios computed by the direct method, using as the standard population the age distribution of the total population of the United States as enumerated in 1940. Numbers after causes of death are category numbers of the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

SOURCE: Computed by Division of Analysis from data compiled by the Division of Vital Statistics, National Center for Health Statistics.

Table E. Average annual death rates for specified leading causes of death for the population other than white and relative mortality ratios for specified leading causes of death for the population other than white, according to geographic division and State: United States, 1969-71

(Data are based on the National Vital Registration System)

Geographic division and State	Malignant neoplasms (140-209)	Diseases of heart (390-398, 402, 404, 410-429)	Cerebrovascular diseases (430-439)	Motor vehicle accidents (E810-E823)
	Deaths per 100,000 population (age-adjusted to 1940)			
United States	151.2	292.9	108.4	31.7
	Relative mortality ratio (other than white)			
United States	100.0	100.0	100.0	100.0
New England:				
Maine	*	*	*	*
New Hampshire	*	*	*	*
Vermont	*	*	*	*
Massachusetts	102.2	70.6	67.5	*
Rhode Island	*	*	*	*
Connecticut	*	81.6	87.9	*
Middle Atlantic:				
New York	106.2	95.2	71.5	57.1
New Jersey	114.0	116.8	84.0	81.4
Pennsylvania	116.4	95.5	82.3	68.1
East North Central:				
Ohio	114.7	104.4	84.8	74.4
Indiana	114.3	98.4	109.8	82.3
Illinois	111.8	134.3	90.9	60.3
Michigan	106.2	100.1	83.8	74.4
Wisconsin	*	77.8	*	*
West North Central:				
Minnesota	*	*	*	*
Iowa	*	*	*	*
Missouri	108.4	93.6	99.1	76.7
North Dakota	*	*	*	*
South Dakota	*	*	*	*
Nebraska	*	*	*	*
Kansas	93.2	88.3	*	*
South Atlantic:				
Delaware	*	139.9	*	*
Maryland	118.0	112.0	76.8	77.6
District of Columbia	129.2	107.2	72.4	71.0
Virginia	108.9	113.2	113.8	118.0
West Virginia	*	126.4	*	*
North Carolina	90.5	112.3	130.6	153.9
South Carolina	87.3	121.8	148.2	159.6
Georgia	92.1	107.3	158.7	134.1
Florida	103.8	98.3	112.8	130.0
East South Central:				
Kentucky	118.3	126.8	118.2	*
Tennessee	103.0	113.4	134.5	104.7
Alabama	88.3	90.3	132.4	137.2
Mississippi	83.5	90.7	119.4	138.8
West South Central:				
Arkansas	82.7	92.8	120.1	99.4
Louisiana	104.5	116.4	111.6	118.9
Oklahoma	81.9	79.4	77.8	127.4
Texas	97.7	95.5	103.1	112.9

Table E. Average annual death rates for specified leading causes of death for the population other than white and relative mortality ratios for specified leading causes of death for the population other than white, according to geographic division and State: United States, 1969-71—Continued

(Data are based on the National Vital Registration System)

Geographic division and State	Malignant neoplasms (140-209)	Diseases of heart (390-398, 402, 404, 410-429)	Cerebrovascular diseases (430-439)	Motor vehicle accidents (E810-E823)
	Relative mortality ratio (other than white)			
Mountain:				
Montana	*	*	*	*
Idaho	*	*	*	*
Wyoming	*	*	*	*
Colorado	79.4	*	*	*
New Mexico	*	*	*	*
Arizona	72.4	57.6	*	312.9
Utah	*	*	*	*
Nevada	*	*	*	*
Pacific:				
Washington	*	79.9	*	*
Oregon	*	*	*	*
California	86.9	72.0	64.5	79.5
Alaska	*	*	*	*
Hawaii	73.3	61.6	55.5	*

NOTE: Death rates and relative mortality ratios computed by the direct method, using as the standard population the age distribution of the total population of the United States as enumerated in 1940. Numbers after causes of death are category numbers of the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

SOURCE: Computed by Division of Analysis from data compiled by the Division of Vital Statistics, National Center for Health Statistics.

Table F. Standardized mortality ratios, according to Health Service Area, geographic division, and State: United States, 1969-71

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Standardized mortality ratio													
New England:														
Maine	106.8													
New Hampshire	105.3													
Vermont	102.9													
Massachusetts	100.3	98.5	98.1	105.3	101.9	98.1								
Rhode Island	100.0													
Connecticut	92.6	97.0	94.6	92.5	92.7									
Middle Atlantic:														
New York	107.2	96.7	105.0	101.5	107.7	97.1	106.5	97.3						
New Jersey	95.4	101.6	117.5	101.5	105.7									
Pennsylvania	114.3	104.1	120.3	100.8	109.3	106.8	110.1	101.5	112.1	95.7	101.4			
East North Central:														
Ohio	106.6	99.6	102.4	105.2	105.0	109.5	103.5	98.3	103.7	107.1				
Indiana	103.3	103.7	105.1											
Illinois	97.0	98.9	103.5	98.7	105.2	110.1	110.1	96.9	96.9	99.9	105.1			
Michigan	102.5	97.2	99.6	96.7	104.4	103.0	105.4	109.7						
Wisconsin	93.2	96.2	90.0	95.4	91.1	95.4	102.3							
West North Central:														
Minnesota	95.0	102.3	87.4	90.0	91.4	86.7	85.9							
Iowa	94.0	96.0	99.9											
Missouri	98.9	98.7	105.1	101.3	108.4									
North Dakota	91.3	95.0	87.4											
South Dakota	92.2													
Nebraska	91.7	89.6	96.0	94.0										
Kansas	91.3	88.9	95.9	98.9										
South Atlantic:														
Delaware	107.3													
Maryland	105.8	82.4	96.9	108.1	109.4									
District of Columbia	109.6													
Virginia	104.9	89.0	106.3	107.2	103.8	102.2								
West Virginia	111.7													
North Carolina	99.9	101.9	103.0	102.6	113.0	112.2								
South Carolina	112.5	107.0	117.6	108.8	111.7									
Georgia	107.5	103.9	107.0	111.7	111.4	108.9	115.4							
Florida	99.9	99.2	110.1	88.2	93.2	90.1	88.8	85.3	92.7					
East South Central:														
Kentucky	106.4	105.7	106.6											
Tennessee	102.2	103.8	107.5	102.9	102.1	102.0								
Alabama	102.7	94.1	104.7	107.4	109.5	103.2	111.4							
Mississippi	107.3													
West South Central:														
Arkansas	94.4	95.8	100.4	97.4										
Louisiana	113.2	105.7	101.6											
Oklahoma	96.6													
Texas	100.6	95.8	99.3	96.3	99.5	93.0	95.1	97.5	96.8	97.1	99.9	98.6		

Table F. Standardized mortality ratios, according to Health Service Area, geographic division, and State: United States, 1969-71—Continued

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Standardized mortality ratio													
Mountain:														
Montana	99.7													
Idaho	94.4													
Wyoming	101.0													
Colorado	93.6	96.4	97.4											
New Mexico	100.2													
Arizona	96.9	97.9	108.2											
Utah	90.3													
Nevada	110.2	110.2												
Pacific:														
Washington	96.6	99.2	95.4	98.2										
Oregon	95.1	92.0	94.9											
California	103.4	102.0	93.1	97.1	91.5	97.0	84.5	91.0	100.3	88.4	97.1	93.0	87.0	89.8
Alaska	101.0													
Hawaii	65.0													

NOTE: The standardized mortality ratio computed by the indirect method, using as the standard populations the age distribution of each of the HSA's as enumerated in 1970. The standardized mortality ratio is the ratio of the observed number of deaths in an area to the expected number of deaths. The expected number is based on age-specific death rates for the United States.

SOURCE: Computed by Division of Analysis from data compiled by the Division of Vital Statistics, National Center for Health Statistics.

Table G. Standardized mortality ratios for the white population, according to Health Service Area, geographic division, and State: United States, 1969-71

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Standardized mortality ratio (white)													
New England:														
Maine	106.9													
New Hampshire	105.6													
Vermont	103.1													
Massachusetts	100.7	98.8	98.7	105.8	102.1	98.7								
Rhode Island	100.4													
Connecticut	92.7	97.3	95.0	92.8	93.0									
Middle Atlantic:														
New York	107.4	96.8	105.3	101.7	107.9	98.0	107.2	97.6						
New Jersey	95.4	100.9	117.2	101.6	105.4									
Pennsylvania	115.8	104.0	120.3	100.5	109.2	106.6	110.0	101.7	111.8	95.5	100.9			
East North Central:														
Ohio	107.1	99.7	102.3	105.5	105.5	109.6	103.8	98.5	104.1	107.6				
Indiana	103.3	104.2	105.3											
Illinois	97.4	98.9	103.2	98.8	105.0	109.5	109.5	97.5	98.3	100.2	104.0			
Michigan	102.6	98.3	100.0	96.9	106.0	103.3	105.4	109.8						
Wisconsin	93.5	97.2	90.2	95.6	91.2	95.2	102.1							
West North Central:														
Minnesota	94.7	102.1	87.5	90.1	91.9	86.8	86.0							
Iowa	94.0	95.5	100.2											
Missouri	98.5	98.5	104.0	101.3	107.9									
North Dakota	90.2	94.7	87.5											
South Dakota	90.3													
Nebraska	91.4	88.8	95.5	94.0										
Kansas	91.4	88.7	96.1	98.5										
South Atlantic:														
Delaware	105.2													
Maryland	105.7	82.9	100.5	107.7	109.2									
District of Columbia	104.7													
Virginia	105.5	88.8	105.1	106.0	100.1	101.5								
West Virginia	111.1													
North Carolina	98.3	99.0	99.8	102.4	113.5	113.6								
South Carolina	110.1	105.1	119.4	108.3	110.9									
Georgia	105.6	103.3	103.6	110.9	113.0	109.4	115.2							
Florida	99.5	95.9	107.4	86.7	90.9	86.8	84.1	82.9	90.9					
East South Central:														
Kentucky	105.0	105.3	107.1											
Tennessee	101.5	102.8	105.6	101.7	101.4	101.8								
Alabama	102.5	88.9	103.4	106.4	107.8	104.1	113.0							
Mississippi	106.5													
West South Central:														
Arkansas	94.3	96.4	98.6	100.0										
Louisiana	113.5	105.1	100.6											
Oklahoma	97.7													
Texas	100.7	94.7	100.1	96.1	98.7	92.2	95.1	97.7	96.9	97.8	101.8	98.3		

Table G. Standardized mortality ratios for the white population, according to Health Service Area, geographic division, and State: United States, 1969-71—Continued

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Standardized mortality ratio (white)													
Mountain:														
Montana	98.6													
Idaho	94.3													
Wyoming	101.0													
Colorado	94.1	97.2	97.5											
New Mexico	99.8													
Arizona	96.5	97.8	104.9											
Utah	90.8													
Nevada	110.8	111.7												
Pacific:														
Washington	97.5	99.3	94.3	98.3										
Oregon	95.9	92.4	94.8											
California	104.2	104.8	95.0	102.1	95.2	99.5	86.8	93.2	101.6	90.2	99.9	94.2	88.4	91.5
Alaska	106.0													
Hawaii	80.9													

NOTE: The standardized mortality ratio computed by the indirect method, using as the standard populations the age distribution of each of the HSA's as enumerated in 1970. The standardized mortality ratio is the ratio of the observed number of deaths in an area to the expected number of deaths. The expected number is based on age-specific death rates for the United States.

SOURCE: Computed by Division of Analysis from data compiled by the Division of Vital Statistics, National Center for Health Statistics.

Table H. Standardized mortality ratios for the population other than white, according to Health Service Area, geographic division, and State: United States, 1969-71

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Standardized mortality ratio (other than white)													
New England:														
Maine	78.0													
New Hampshire	*													
Vermont	*													
Massachusetts	84.8	63.8	63.1	97.6	86.4	63.1								
Rhode Island	86.6													
Connecticut	91.7	92.2	77.1	86.0	*									
Middle Atlantic:														
New York	104.1	93.7	90.2	86.7	97.6	86.4	103.0	91.6						
New Jersey	95.0	105.5	121.4	101.3	107.7									
Pennsylvania	110.8	111.4	117.6	107.8	117.8	109.7	114.0	86.7	132.3	100.1	106.8			
East North Central:														
Ohio	103.1	98.7	106.1	100.6	100.4	107.6	95.5	96.4	101.6	102.3				
Indiana	103.2	98.5	98.0											
Illinois	80.8	98.3	115.4	96.0	110.8	112.7	112.7	83.5	79.6	85.5	110.4			
Michigan	102.3	70.7	94.8	92.5	91.0	95.0	105.4	101.4						
Wisconsin	62.0	79.4	*	78.9	78.9	119.3	119.1							
West North Central:														
Minnesota	104.0	119.1	71.2	67.6	73.9	*	*							
Iowa	97.0	105.1	85.5											
Missouri	101.1	104.1	110.4	95.3	116.3									
North Dakota	148.0	104.0	71.2											
South Dakota	140.1													
Nebraska	128.0	64.0	105.1	101.1										
Kansas	81.7	92.6	92.9	101.1										
South Atlantic:														
Delaware	118.2													
Maryland	108.6	75.5	82.3	109.4	110.2									
District of Columbia	112.9													
Virginia	101.7	92.1	113.8	109.5	110.7	121.9								
West Virginia	120.9													
North Carolina	117.4	113.3	115.9	103.2	112.1	110.1								
South Carolina	121.6	110.8	115.4	109.4	113.1									
Georgia	120.0	109.4	116.6	113.1	108.9	108.0	115.8							
Florida	100.9	111.5	117.8	110.4	110.6	124.3	122.2	116.6	108.4					
East South Central:														
Kentucky	116.7	112.7	103.1											
Tennessee	121.9	117.2	120.0	109.9	105.4	102.3								
Alabama	103.7	104.5	107.5	111.4	112.2	101.9	108.9							
Mississippi	108.5													
West South Central:														
Arkansas	97.0	93.7	106.5	93.0										
Louisiana	112.5	107.0	103.3											
Oklahoma	87.5													
Texas	99.2	110.0	78.0	101.9	104.1	96.8	94.9	93.1	95.0	94.8	94.2	102.1		

Table H. Standardized mortality ratios for the population other than white, according to Health Service Area, geographic division, and State: United States, 1969-71—Continued

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Standardized mortality ratio (other than white)													
Mountain:														
Montana	128.1													
Idaho	100.4													
Wyoming	101.5													
Colorado	82.8	68.7	93.6											
New Mexico	104.0													
Arizona	102.3	100.5	118.4											
Utah	71.0													
Nevada	99.5	98.4												
Pacific:														
Washington	79.9	93.1	129.8	91.9										
Oregon	73.8	54.9	101.0											
California	81.8	70.7	59.9	69.0	73.0	71.2	46.7	56.9	87.1	47.4	78.4	70.1	35.6	64.9
Alaska	90.0													
Hawaii	59.8													

NOTE: The standardized mortality ratio computed by the indirect method, using as the standard populations the age distribution of each of the HSA's as enumerated in 1970. The standardized mortality ratio is the ratio of the observed number of deaths in an area to the expected number of deaths. The expected number is based on age-specific death rates for the United States.

SOURCE: Computed by Division of Analysis from data compiled by the Division of Vital Statistics, National Center for Health Statistics.

Table J. Average annual infant mortality rates, according to Health Service Area, geographic division, and State: United States, 1974-75

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Deaths per 1,000 live births													
New England:														
Maine	14.6													
New Hampshire	13.7													
Vermont	13.7													
Massachusetts	13.0	13.2	13.0	15.6	13.5	13.0								
Rhode Island	15.1													
Connecticut	14.2	16.4	15.1	15.8	*									
Middle Atlantic:														
New York	17.0	13.3	16.1	14.1	14.0	14.3	18.2	12.8						
New Jersey	12.8	16.1	19.1	14.4	16.3									
Pennsylvania	18.8	14.4	16.7	14.1	16.6	16.0	17.3	14.1	16.2					
East North Central:														
Ohio	14.3	17.6	16.3	15.4	16.8	15.8	15.4	14.7	16.6	15.6				
Indiana	17.3	14.4	14.8											
Illinois	16.4	16.0	16.3	16.6	17.5	20.4	20.4	16.1	17.9	15.3	17.6			
Michigan	17.9	14.0	16.3	15.5	18.6	16.0	*	*						
Wisconsin	12.9	13.1	14.0	13.6	16.1	13.1	15.5							
West North Central:														
Minnesota	16.8	15.5	15.1	14.0	13.7	14.6	12.7							
Iowa	13.7	15.6	15.3											
Missouri	15.0	16.9	17.6	17.2	18.8									
North Dakota	*	16.8	15.1											
South Dakota	18.0													
Nebraska	15.0	11.7	15.6	13.7										
Kansas	15.4	13.8	16.2	15.0										
South Atlantic:														
Delaware	15.7													
Maryland	*	12.9	16.0	17.3	*									
District of Columbia	27.8													
Virginia	16.2	13.9	17.5	17.8	19.2									
West Virginia	18.6													
North Carolina	19.2	18.0	17.7	16.2	19.6	21.3								
South Carolina	19.5	18.2	25.8	18.8	17.1									
Georgia	16.7	19.0	17.0	17.1	21.0	19.5	18.3							
Florida	17.8	18.8	17.3	16.9	15.8	20.6	19.8	16.2	16.5					
East South Central:														
Kentucky	15.4	17.5	14.3											
Tennessee	16.1	16.6	16.7	14.6	19.8	18.7								
Alabama	17.8	*	16.8	23.8	24.4	19.4	21.0							
Mississippi	22.7													
West South Central:														
Arkansas	15.5	18.3	16.6	20.6										
Louisiana	18.8	18.0	18.9											
Oklahoma	16.8													
Texas	20.7	21.3	14.6	20.5	17.0	15.7	20.2	16.1	15.0	22.2	16.4	21.4		

Table J. Average annual infant mortality rates, according to Health Service Area, geographic division, and State: United States, 1974-75—Continued

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Deaths per 1,000 live births													
Mountain:														
Montana	16.0													
Idaho	14.2													
Wyoming	16.7													
Colorado	14.0	17.1	*											
New Mexico	17.6													
Arizona	15.0	12.2	19.8		*									
Utah	12.7													
Nevada	*	18.4												
Pacific:														
Washington	15.2	14.0	17.0	16.8										
Oregon	15.3	14.8	*											
California	12.9	14.3	11.5	12.6	13.0	12.9	12.4	13.4	16.2	11.8	13.9	14.0	12.7	13.5
Alaska	16.1													
Hawaii	14.2													

SOURCE: Computed by Division of Analysis from data compiled by the Division of Vital Statistics, National Center for Health Statistics.

Table K. Average annual postneonatal mortality rates, according to Health Service Area, geographic division, and State: United States, 1974-75

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Deaths per 1,000 live births													
New England:														
Maine	4.0													
New Hampshire	3.4													
Vermont	3.0													
Massachusetts	3.1	3.8	2.8	3.6	3.1	2.8								
Rhode Island	4.0													
Connecticut	2.6	3.3	4.1	3.3	*									
Middle Atlantic:														
New York	4.2	3.3	4.2	3.8	3.6	3.3	4.7	3.4						
New Jersey	3.4	4.7	5.2	3.7	3.8									
Pennsylvania	4.1	3.3	3.4	4.0	2.8	3.3	5.2	3.8	3.8					
East North Central:														
Ohio	3.8	5.5	4.1	4.5	4.6	4.3	3.4	4.3	4.0	4.3				
Indiana	4.5	4.3	3.8											
Illinois	3.8	4.1	3.7	4.3	4.1	5.8	5.8	4.4	4.0	3.6	4.5			
Michigan	4.9	3.4	5.2	4.8	6.4	3.8	*	*						
Wisconsin	4.2	3.8	3.0	3.6	3.7	3.6	4.3							
West North Central:														
Minnesota	2.9	4.3	3.2	3.8	3.6	4.4	2.4							
Iowa	3.1	3.7	3.6											
Missouri	4.2	4.1	4.5	4.5	5.4									
North Dakota	*	2.9	3.2											
South Dakota	5.5													
Nebraska	3.7	3.1	3.7	3.1										
Kansas	2.4	3.8	4.5	4.2										
South Atlantic:														
Delaware	3.7													
Maryland	*	3.1	3.5	4.2	*									
District of Columbia	5.9													
Virginia	4.3	3.5	4.4	3.9	4.7	3.8								
West Virginia	4.2													
North Carolina	4.9	4.6	4.8	5.4	6.2	6.0								
South Carolina	5.8	5.3	7.1	6.0	5.5									
Georgia	5.5	5.6	4.5	5.5	6.6	7.2	5.9							
Florida	5.2	6.2	5.2	4.9	4.4	5.9	5.4	4.4	4.1					
East South Central:														
Kentucky	4.1	4.9	3.8											
Tennessee	3.8	4.2	5.5	4.1	4.3	4.7								
Alabama	5.3	*	3.6	6.2	6.8	6.7	6.6							
Mississippi	6.9													
West South Central:														
Arkansas	4.7	5.1	4.4	6.3										
Louisiana	4.4	4.4	5.4											
Oklahoma	4.9													
Texas	4.7	6.2	4.4	5.1	4.5	4.6	6.1	4.4	4.2	4.9	4.8	5.5		

Table K. Average annual postneonatal mortality rates, according to Health Service Area, geographic division, and State: United States, 1974-75—Continued

(Data based on the National Vital Registration System)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Deaths per 1,000 live births													
Mountain:														
Montana	4.4													
Idaho	4.0													
Wyoming	4.6													
Colorado	4.3	5.0	*											
New Mexico	6.1													
Arizona	4.6	4.1	9.9		*									
Utah	3.5													
Nevada	*	6.2												
Pacific:														
Washington	4.7	4.3	4.9	4.8										
Oregon	5.3	4.6	*											
California	5.0	4.9	3.4	4.0	4.1	4.4	3.3	3.8	4.8	4.2	4.4	4.4	3.4	3.9
Alaska	5.4													
Hawaii	3.7													

SOURCE: Computed by Division of Analysis from data compiled by the Division of Vital Statistics, National Center for Health Statistics.

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Table L. Average lifetime in years, change over decade, and rank for each State: United States, 1969-71 and 1959-61
(Data are based on National Vital Registration System)

State	Average lifetime		Change from 1959-61 to 1969-71	Rank	
	1969-71	1959-61		1969-71	1959-61
United States	70.75	69.89	0.86	...	...
Hawaii	73.60	71.55	2.05	1	7
Minnesota	72.96	71.84	1.12	2	4
Utah	72.90	71.61	1.29	3	6
North Dakota	72.79	71.72	1.07	4	5
Nebraska	72.60	71.95	0.65	5	1
Kansas	72.58	71.90	0.68	6	3
Iowa	72.55	71.91	0.64	7	2
Connecticut	72.48	71.02	1.46	8	10
Wisconsin	72.48	71.22	1.26	8	8
Oregon	72.13	70.85	1.28	10	14
South Dakota	72.08	70.94	1.14	11	12
Colorado	72.06	70.79	1.27	12	16
Rhode Island	71.90	70.60	1.30	13	18
Idaho	71.87	71.13	0.74	14	9
Massachusetts	71.83	70.61	1.22	15	17
Washington	71.72	70.95	0.77	16	11
California	71.71	70.82	0.89	17	15
Vermont	71.64	70.35	1.29	18	22
Oklahoma	71.42	70.89	0.53	19	13
New Hampshire	71.23	70.41	0.82	20	19
Maine	70.93	70.02	0.91	21	27
New Jersey	70.93	69.80	1.13	21	30
Texas	70.90	70.12	0.78	23	26
Indiana	70.88	70.37	0.51	24	21
Ohio	70.82	70.18	0.64	25	23
Missouri	70.69	70.40	0.29	26	20
Arkansas	70.66	70.16	0.50	27	24
Florida	70.66	69.84	0.82	27	29
Michigan	70.63	70.13	0.50	29	25
Montana	70.56	69.49	1.07	30	35
Arizona	70.55	68.91	1.64	31	40
New York	70.55	69.61	0.94	31	33
Pennsylvania	70.43	69.47	0.96	33	37
New Mexico	70.32	69.48	0.84	34	36
Wyoming	70.29	69.90	0.39	35	28
Maryland	70.22	68.72	1.50	36	42
Illinois	70.14	69.64	0.50	37	32
Tennessee	70.11	69.43	0.68	38	38
Kentucky	70.10	69.66	0.44	39	31
Virginia	70.08	68.80	1.28	40	41
Delaware	70.06	69.38	0.68	41	39
West Virginia	69.48	69.53	—0.05	42	34
Alaska	69.31	67.51	1.80	43	48
North Carolina	69.21	68.40	0.81	44	43
Alabama	69.05	68.11	0.94	45	45
Nevada	69.03	67.42	1.61	46	49
Louisiana	68.76	68.13	0.63	47	44
Georgia	68.54	67.91	0.63	48	46
Mississippi	68.09	67.70	0.39	49	47
South Carolina	67.96	66.41	1.55	50	51
District of Columbia	65.71	66.62	—0.91	51	50

SOURCES: National Center for Health Statistics: U.S. Decennial Life Tables, 1969-71, Vol. II, DHEW Pub. No. (HRA) 75-1151; State Life Tables, 1959-61, Volume 2, Public Health Service Publication No. 1252, Washington, June 1968.

Table M. Average lifetime in years for the white population, change over decade, and rank for each State: United States, 1969-71 and 1959-61

(Data are based on National Vital Registration System)

State	Average lifetime		Change from 1959-61 to 1969-71	Rank	
	1969-71	1959-61		1969-71	1959-61
United States	71.62	70.73	0.89	...	...
North Dakota	73.09	71.95	1.14	1	4
Minnesota	73.04	71.91	1.13	2	5
South Dakota	72.96	71.64	1.32	3	7
Utah	72.95	71.76	1.19	4	6
Nebraska	72.89	72.22	0.67	5	1
Connecticut	72.88	71.33	1.55	6	12
Kansas	72.87	72.18	0.69	7	2
Iowa	72.64	71.98	0.66	8	3
Wisconsin	72.64	71.35	1.29	8	11
Oregon	72.20	70.99	1.21	10	18
Colorado	72.18	70.91	1.27	11	19
Florida	72.16	71.62	0.54	12	8
Rhode Island	72.07	70.73	1.34	13	24
Massachusetts	72.01	70.72	1.29	14	25
Idaho	71.99	71.25	0.74	15	14
Washington	71.95	71.15	0.80	16	16
California	71.95	71.02	0.93	16	17
Oklahoma	71.85	71.50	0.35	18	10
New Jersey	71.84	70.45	1.39	19	32
Texas	71.74	71.29	0.45	20	13
Arkansas	71.71	71.61	0.10	21	9
Vermont	71.62	70.34	1.28	22	36
Virginia	71.61	70.64	0.97	23	30
Missouri	71.57	71.23	0.34	24	15
Maryland	71.55	70.09	1.46	25	39
New York	71.48	70.28	1.20	26	38
Michigan	71.47	70.64	0.83	27	30
Ohio	71.44	70.72	0.72	28	25
Delaware	71.42	70.76	0.66	29	23
Indiana	71.32	70.80	0.52	30	22
Arizona	71.30	69.71	1.59	31	47
Illinois	71.23	70.40	0.83	32	34
Tennessee	71.22	70.83	0.39	33	21
New Hampshire	71.21	70.41	0.80	34	33
Pennsylvania	71.16	69.99	1.17	35	42
North Carolina	71.08	70.68	0.40	36	27
Montana	71.01	69.89	1.12	37	43
New Mexico	71.00	69.85	1.15	38	44
Maine	70.93	70.04	0.89	39	41
Alabama	70.93	70.67	0.26	39	29
Louisiana	70.70	70.34	0.36	41	37
Kentucky	70.66	70.36	0.30	42	35
District of Columbia	70.64	69.48	1.16	43	48
Georgia	70.62	70.68	—0.06	44	27
Mississippi	70.50	70.86	—0.36	45	20
Wyoming	70.47	70.08	0.39	46	40
South Carolina	70.32	69.79	0.53	47	46
West Virginia	69.78	69.84	—0.06	48	45
Nevada	69.43	67.85	1.58	49	49

NOTE: Includes only States which had at least 1,600 deaths of white persons in both 1969-71 and 1959-61.

SOURCES: National Center for Health Statistics: U.S. Decennial Life Tables, 1969-71, Vol. II, DHEW Pub. No. (HRA) 75-1151; State Life Tables, 1959-61, Volume 1, Public Health Service Publication No. 1252, Washington, June 1968; and unpublished data from the Division of Vital Statistics, National Center for Health Statistics.

Table N. Average lifetime in years for the population other than white, change over decade, and rank for each State: United States, 1969-71 and 1959-61

(Data are based on National Vital Registration System)

State	Average lifetime		Change from 1959-61 to 1969-71	Rank	
	1969-71	1959-61		1969-71	1959-61
United States	64.95	63.91	1.04	...	...
Hawaii	73.67	72.42	1.25	1	1
California	70.10	68.75	1.35	2	2
Oklahoma	67.82	65.47	2.35	3	5
Massachusetts	67.73	66.20	1.53	4	3
Connecticut	67.17	64.58	2.59	5	9
Arkansas	65.88	65.36	0.52	6	6
Texas	65.51	64.75	0.76	7	7
Indiana	65.37	64.45	0.92	8	10
Ohio	65.34	64.66	0.68	9	8
New York	65.10	63.96	1.14	10	12
Michigan	64.97	66.02	—1.05	11	4
Maryland	64.59	62.65	1.94	12	20
Tennessee	64.52	63.35	1.17	13	18
New Jersey	64.44	63.91	0.53	14	13
Louisiana	64.40	63.78	0.62	15	15
Virginia	64.09	62.54	1.55	16	21
Mississippi	64.03	63.66	0.37	17	17
Alabama	63.93	62.54	1.39	18	21
Missouri	63.88	63.21	0.67	19	19
Pennsylvania	63.80	64.01	—0.21	20	11
Illinois	63.69	63.79	—0.10	21	14
Kentucky	63.58	62.52	1.06	22	23
District of Columbia	63.55	63.73	—0.18	23	16
North Carolina	63.20	62.16	1.04	24	25
Florida	62.94	62.39	0.55	25	24
Georgia	62.89	61.56	1.33	26	26
South Carolina	62.64	60.28	2.36	27	27

NOTE: Includes only States which had at least 1,600 deaths of persons other than white in both 1969-71 and 1959-61.

SOURCES: National Center for Health Statistics: U.S. Decennial Life Tables, 1969-71, Vol. II, DHEW Pub. No. (HRA) 75-1151; State Life Tables, 1959-61, Volume 1, Public Health Service Publication No. 1252, Washington, June 1968; and unpublished data from the Division of Vital Statistics, National Center for Health Statistics.

Table O. Total active non-Federal physicians per 10,000 population, according to Health Service Area, geographic division, and State: United States, 1973

(Data are based on reporting by physicians)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Physicians per 10,000 population													
New England:														
Maine	11.5													
New Hampshire	14.5													
Vermont	18.6													
Massachusetts	13.7	13.8	16.7	43.9	10.6	16.7								
Rhode Island	16.4													
Connecticut	19.0	26.8	11.9	19.7	12.2									
Middle Atlantic:														
New York	16.2	19.2	14.2	13.5	16.6	23.4	29.7	18.6						
New Jersey	16.8	18.8	13.2	13.9	11.2									
Pennsylvania	22.1	12.9	9.1	12.0	10.1	13.7	8.8	13.5	9.2					
East North Central:														
Ohio	15.2	9.8	7.2	12.1	13.8	6.4	8.6	13.5	19.0	10.3				
Indiana	8.7	13.2	8.5											
Illinois	9.4	9.6	9.6	8.7	7.1	19.2	19.2	11.1	8.0	7.9	16.3			
Michigan	16.1	9.8	9.8	9.9	10.1	7.8	10.9	6.8						
Wisconsin	18.4	14.0	9.7	7.9	9.2	10.0	9.5							
West North Central:														
Minnesota	7.1	9.5	8.9	6.4	18.3	6.8	35.9							
Iowa	10.5	17.0	7.9											
Missouri	15.2	9.2	16.3	7.8	5.8									
North Dakota	8.3	7.1	8.9											
South Dakota	7.7													
Nebraska	7.0	9.2	17.0	10.5										
Kansas	7.6	10.1	10.6	15.2										
South Atlantic:														
Delaware	13.9													
Maryland	9.9	31.3	8.0	23.8	11.0									
District of Columbia	40.3													
Virginia	18.4	13.3	9.9	17.4	9.4	8.2								
West Virginia	10.7													
North Carolina	8.6	11.5	9.9	31.4	6.9	6.6								
South Carolina	10.5	9.9	6.4	13.7	14.0									
Georgia	10.6	7.0	15.6	14.0	8.5	7.0	8.7							
Florida	8.5	19.0	13.2	12.4	12.4	14.9	14.7	16.2	26.4					
East South Central:														
Kentucky	11.5	10.7	15.2											
Tennessee	8.2	10.6	10.6	13.2	6.3	19.5								
Alabama	6.7	6.8	16.9	5.7	7.0	8.2	8.5							
Mississippi	8.5													
West South Central:														
Arkansas	8.7	5.2	19.5	5.7										
Louisiana	18.4	8.8	8.8											
Oklahoma	10.4													
Texas	7.8	9.3	9.9	8.4	13.5	11.2	8.7	8.2	13.8	8.1	18.1	7.2		

Table O. Total active non-Federal physicians per 10,000 population, according to Health Service Area, geographic division, and State: United States, 1973—Continued

(Data are based on reporting by physicians)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Physicians per 10,000 population													
Mountain:														
Montana	10.5													
Idaho	10.0													
Wyoming	10.0													
Colorado	22.0	10.6	11.4											
New Mexico	12.1													
Arizona	17.6	20.4	7.5		7.3									
Utah	15.5													
Nevada	14.0	10.6												
Pacific:														
Washington	17.5	8.7	9.3	14.3										
Oregon	20.9	11.6	9.8											
California	12.6	18.0	16.2	35.6	18.1	12.5	23.5	14.4	11.6	16.3	20.4	14.4	17.3	18.9
Alaska	9.3													
Hawaii	16.1													

NOTE: April 1, 1970, population used as denominator.

SOURCE: Calculated from Roback, G.: Distribution of Physicians in the U.S., 1973. Chicago, 1974. By permission of the American Medical Association.

Table P. Primary care non-Federal physicians in office-based practice per 10,000 population, according to Health Service Area, geographic division, and State: United States, 1973

(Data are based on reporting by physicians)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Physicians per 10,000 population													
New England:														
Maine	4.4													
New Hampshire	5.4													
Vermont	5.8													
Massachusetts	4.7	4.7	5.0	6.6	4.4	5.0								
Rhode Island	4.7													
Connecticut	6.0	5.9	4.0	5.2	5.1									
Middle Atlantic:														
New York	4.6	5.3	4.4	4.8	4.8	7.1	6.3	6.1						
New Jersey	5.3	5.6	4.2	4.6	4.2									
Pennsylvania	5.2	5.5	4.5	4.8	3.6	4.0	3.3	4.8	3.9					
East North Central:														
Ohio	4.9	3.9	3.8	4.5	4.2	3.5	4.0	3.8	4.8	3.8				
Indiana	4.1	4.2	4.1											
Illinois	4.2	3.9	4.1	4.3	4.2	5.1	5.1	4.5	3.6	3.5	4.1			
Michigan	4.0	3.8	3.9	3.6	3.3	3.4	4.4	3.4						
Wisconsin	5.2	4.2	4.6	4.1	4.6	4.4	4.5							
West North Central:														
Minnesota	4.1	4.5	4.3	4.0	5.0	4.4	8.4							
Iowa	4.0	4.8	3.5											
Missouri	4.1	3.0	4.1	3.6	3.2									
North Dakota	3.9	4.1	4.3											
South Dakota	3.7													
Nebraska	4.4	4.6	4.8	4.0										
Kansas	4.4	4.0	4.3	4.1										
South Atlantic:														
Delaware	5.1													
Maryland	4.1	9.3	2.8	4.9	5.1									
District of Columbia	8.0													
Virginia	5.4	4.8	4.3	4.5	3.5	3.6								
West Virginia	3.8													
North Carolina	4.4	4.4	4.5	4.9	3.1	3.5								
South Carolina	4.5	4.0	3.7	3.7	3.5									
Georgia	4.0	3.7	4.8	3.5	3.4	3.6	3.5							
Florida	3.2	4.0	3.5	4.3	4.5	6.4	5.7	6.1	7.0					
East South Central:														
Kentucky	4.2	4.0	4.9											
Tennessee	3.6	4.2	4.0	3.9	3.6	3.9								
Alabama	3.8	2.9	4.3	3.2	3.4	3.5	3.4							
Mississippi	3.7													
West South Central:														
Arkansas	4.5	3.4	4.5	3.5										
Louisiana	4.6	4.0	3.4											
Oklahoma	3.9													
Texas	3.9	4.3	3.4	4.2	4.5	4.6	4.7	4.0	4.2	4.3	5.1	3.6		

Table P. Primary care non-Federal physicians in office-based practice per 10,000 population, according to Health Service Area, geographic division, and State: United States, 1973—Continued

(Data are based on reporting by physicians)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Physicians per 10,000 population													
Mountain:														
Montana	5.1													
Idaho	5.2													
Wyoming	5.0													
Colorado	6.2	4.1	5.8											
New Mexico	3.9													
Arizona	5.8	5.5	4.1		3.7									
Utah	4.7													
Nevada	5.2	4.0												
Pacific:														
Washington	5.7	4.5	4.3	5.3										
Oregon	5.8	5.2	4.8											
California	6.2	6.3	6.1	8.9	6.6	5.2	7.1	5.9	4.6	6.0	6.7	5.2	6.4	6.0
Alaska	4.1													
Hawaii	5.8													

NOTE: Primary care physicians in office-based practice include all non-Federal physicians in the following specialties: general and family practitioners, internists, pediatricians and obstetrician-gynecologists. April 1, 1970, population used as denominator.

SOURCE: Calculated from Roback, G.: Distribution of Physicians in the U.S., 1973. Chicago, 1974. By permission of the American Medical Association.

Table Q. Physicians employed in State and county mental hospitals, according to whether U.S. and Canadian medical graduate or foreign medical graduate, and percent who are foreign medical graduates, by geographic division and State: United States, 1975

(Data are based on reporting by facilities)

Geographic division and State	Number of physicians			Percent who are foreign medical graduates
	All medical graduates	U.S. and Canadian medical graduates	Foreign medical graduates	
United States	7,362	3,654	3,708	50.4
New England:				
Maine	21	8	13	61.9
New Hampshire	18	12	6	33.3
Vermont	11	9	2	18.2
Massachusetts	209	92	117	56.0
Rhode Island	39	5	34	87.2
Connecticut	135	38	97	71.9
Middle Atlantic:				
New York	1,509	472	1,037	68.7
New Jersey	363	112	251	69.1
Pennsylvania	555	414	141	25.4
East North Central:				
Ohio	348	102	246	70.7
Indiana	116	74	42	36.2
Illinois	327	98	229	70.0
Michigan	403	153	250	62.0
Wisconsin	124	110	14	11.3
West North Central:				
Minnesota	64	43	21	32.8
Iowa	71	35	36	50.7
Missouri	149	44	105	70.5
North Dakota	12	4	8	66.7
South Dakota	15	3	12	80.0
Nebraska	62	46	16	25.8
Kansas	88	37	51	58.0
South Atlantic:				
Delaware	58	30	28	48.3
Maryland	193	51	142	73.6
District of Columbia	161	111	50	31.1
Virginia	148	38	110	74.3
West Virginia	43	7	36	83.7
North Carolina	156	78	78	50.0
South Carolina	132	70	62	47.0
Georgia	172	74	98	57.0
Florida	112	26	86	76.8
East South Central:				
Kentucky	40	18	22	55.0
Tennessee	81	42	39	48.1
Alabama	40	21	19	47.5
Mississippi	36	29	7	19.4
West South Central:				
Arkansas	38	36	2	5.3
Louisiana	86	74	12	14.0
Oklahoma	79	47	32	40.5
Texas	190	133	57	30.0

Table Q. Physicians employed in State and county mental hospitals, according to whether U.S. and Canadian medical graduate or foreign medical graduate, and percent who are foreign medical graduates, by geographic division and State: United States, 1975—Continued

(Data are based on reporting by facilities)

Geographic division and State	Number of physicians			Percent who are foreign medical graduates
	All medical graduates	U.S. and Canadian medical graduates	Foreign medical graduates	
Mountain:				
Montana	9	2	7	77.8
Idaho	8	5	3	37.5
Wyoming	8	8	–	–
Colorado	161	144	17	10.6
New Mexico	5	3	2	40.0
Arizona	50	42	8	16.0
Utah	5	4	1	20.0
Nevada	6	3	3	50.0
Pacific:				
Washington	35	22	13	37.1
Oregon	53	41	12	22.6
California	607	573	34	5.6
Alaska	11	11	–	–
Hawaii	—	—	—	—

SOURCE: National Institute of Mental Health: Mental Health Statistical Note No. 131, July 1976.

Table R. Community hospital beds per 1,000 population, according to Health Service Area, geographic division, and State: United States, 1974

(Data are based on reporting by facilities)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Beds per 1,000 population													
New England:														
Maine	4.6													
New Hampshire	4.0													
Vermont	4.8													
Massachusetts	4.8	4.9	3.9	6.6	3.2	3.9								
Rhode Island	3.7													
Connecticut	3.5	3.9	2.6	3.7	3.0									
Middle Atlantic:														
New York	5.0	4.0	4.0	4.9	4.7	4.0	5.6	3.2						
New Jersey	3.8	5.0	4.1	3.3	3.4									
Pennsylvania	4.7	4.1	4.8	4.1	4.8	4.9	5.4	4.9	5.4					
East North Central:														
Ohio	4.3	3.9	4.2	4.8	4.4	4.6	4.3	4.1	4.9	4.7				
Indiana	4.2	4.5	4.4											
Illinois	3.8	5.8	6.0	4.7	5.3	4.9	4.9	4.2	3.4	5.2	5.5			
Michigan	4.4	3.9	4.6	3.9	4.9	4.2	5.8	5.0						
Wisconsin	5.3	4.6	5.1	5.2	6.6	5.5	8.0							
West North Central:														
Minnesota	6.4	8.0	5.5											
Iowa	6.0	7.0	5.2											
Missouri	5.0	5.0	5.5	4.8	4.6									
North Dakota	7.6	6.4	5.5											
South Dakota	5.6													
Nebraska	5.4	5.5	7.0	6.0										
Kansas	8.0	4.5	6.2	5.0										
South Atlantic:														
Delaware	3.5													
Maryland	4.0	2.2	1.2	4.0	3.4									
District of Columbia	6.9													
Virginia	4.5	2.5	4.7	4.7	3.5	4.6								
West Virginia	5.8													
North Carolina	4.1	3.9	4.1	4.9	3.6	3.1								
South Carolina	4.3	3.9	4.0	3.6	4.3									
Georgia	4.5	3.8	4.1	4.3	4.4	4.4	4.9							
Florida	3.5	4.2	4.1	4.4	4.5	5.1	3.8	4.4	5.4					
East South Central:														
Kentucky	4.7	4.0	4.3											
Tennessee	4.6	5.3	4.5	5.0	3.9	5.8								
Alabama	4.9	3.7	5.9	4.2	4.2	4.1	4.4							
Mississippi	4.7													
West South Central:														
Arkansas	5.1	3.5	5.1	4.1										
Louisiana	4.6	4.0	4.9											
Oklahoma	4.5													
Texas	5.4	5.3	4.2	5.6	4.4	3.7	4.9	3.6	3.9	4.8	5.5	4.3		

Table R. Community hospital beds per 1,000 population, according to Health Service Area, geographic division, and State: United States, 1974—Continued

(Data are based on reporting by facilities)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Beds per 1,000 population													
Mountain:														
Montana	5.3													
Idaho	4.0													
Wyoming	4.7													
Colorado	4.0	4.3	4.6											
New Mexico	3.3													
Arizona	4.0	4.1	2.5		2.7									
Utah	3.2													
Nevada	4.8	3.9												
Pacific:														
Washington	3.2	2.9	3.8	4.5										
Oregon	4.6	3.1	4.6											
California	4.3	3.6	3.0	5.3	3.4	4.0	3.0	3.6	3.5	3.9	4.5	3.9	3.7	3.1
Alaska	2.1													
Hawaii	3.0													

NOTE: Community hospitals include all non-Federal short-stay hospitals classified by the American Hospital Association to one of the following services: General medical and surgical; obstetrics and gynecology; eye, ear, nose, and throat; rehabilitation; orthopedic; other specialty; children's general; children's eye, ear, nose, and throat; children's rehabilitation; children's orthopedic; and children's other specialty.

SOURCE: Computed by the Division of Analysis from data compiled by the Division of Health Manpower and Facilities Statistics, National Center for Health Statistics.

Table S. Hospital admissions to all hospitals per 1,000 Medicare enrollees 65 years and over, according to geographic division and State: United States, fiscal year 1974

(Data are based on reporting by facilities)

Geographic division and State	All hospital inpatient admissions per 1,000 enrollees 65 years and over
United States	325
New England:	
Maine	316
New Hampshire	316
Vermont	343
Massachusetts	317
Rhode Island	282
Connecticut	276
Middle Atlantic:	
New York	273
New Jersey	263
Pennsylvania	295
East North Central:	
Ohio	307
Indiana	312
Illinois	324
Michigan	303
Wisconsin	324
West North Central:	
Minnesota	389
Iowa	365
Missouri	364
North Dakota	458
South Dakota	416
Nebraska	399
Kansas	393
South Atlantic:	
Delaware	265
Maryland	189
District of Columbia	351
Virginia	319
West Virginia	376
North Carolina	322
South Carolina	293
Georgia	346
Florida	321
East South Central:	
Kentucky	342
Tennessee	372
Alabama	350
Mississippi	336
West South Central:	
Arkansas	400
Louisiana	362
Oklahoma	375
Texas	394
Mountain:	
Montana	423
Idaho	340
Wyoming	364
Colorado	391
New Mexico	319
Arizona	327
Utah	302
Nevada	378
Pacific:	
Washington	326
Oregon	319
California	310
Alaska	260
Hawaii	288

SOURCE: Office of Research and Statistics: Medicare; Health Insurance for the Aged, Selected State Data, Fiscal Years 1971-1975. Social Security Administration, DHEW, Washington, D.C. In preparation. Expected date of publication 1977.

Table T. Average length of stay of Medicare enrollees in short-stay hospitals, according to Health Service Area, geographic division, and State: United States, fiscal year 1974

(Data are based on reporting by facilities)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Average length of stay in days													
New England:														
Maine	9.9													
New Hampshire	9.9													
Vermont	10.1													
Massachusetts	11.5	11.8	11.8	11.6	11.2	12.2								
Rhode Island	12.0													
Connecticut	11.6	11.8	10.1	11.0	11.1									
Middle Atlantic:														
New York	12.7	10.8	11.0	10.7	12.1	12.3	13.5	11.7						
New Jersey	11.8	12.3	13.0	11.8	12.5									
Pennsylvania	12.7	12.7	11.6	11.8	10.4	11.8	10.4	10.7	11.5	12.5	12.3			
East North Central:														
Ohio	12.3	11.9	10.0	10.8	11.5	10.6	10.7	11.9	12.0	11.6				
Indiana	11.0	11.6	10.6											
Illinois	9.6	10.8	10.0	9.7	9.2	12.8	11.8	11.1	11.4					
Michigan	12.5	10.5	10.6	10.4	11.9	10.6	10.4	10.1						
Wisconsin	10.3	11.6	10.8	10.5	9.6	9.7	10.1							
West North Central:														
Minnesota	9.3	10.1	9.5	9.2	10.7	8.9	10.5							
Iowa	9.8	10.9	10.3											
Missouri	11.2	10.3	12.0	10.2	9.4									
North Dakota	8.9	9.3	9.5											
South Dakota	9.1													
Nebraska	8.6	9.8	10.9	9.8										
Kansas	9.4	10.2	9.8	11.2										
South Atlantic:														
Delaware	11.6													
Maryland	11.3	11.2	11.2	12.5	10.4									
District of Columbia	11.7													
Virginia	11.0	11.3	10.9	11.9	12.0	10.3								
West Virginia	10.2													
North Carolina	9.7	10.8	10.8	10.9	10.1	10.3								
South Carolina	10.1	9.9	9.0	10.6	9.6									
Georgia	9.4	7.7	9.5	9.6	9.3	7.9	9.4							
Florida	8.7	8.8	10.1	10.3	9.7	9.8	9.2	9.7	10.1	10.3	12.0			
East South Central:														
Kentucky	9.9	9.0	12.3											
Tennessee	10.3	9.9	9.4	10.1	9.7	11.2								
Alabama	10.2	8.6	10.7	9.5	9.3	9.6	9.3							
Mississippi	9.3													
West South Central:														
Arkansas	9.1	8.2	9.9	9.1										
Louisiana	10.8	8.2	8.4											
Oklahoma	9.0													
Texas	8.6	8.6	10.3	8.6	9.6	9.5	8.7	9.1	9.6	9.6	9.8	8.5		

Table T. Average length of stay of Medicare enrollees in short-stay hospitals, according to Health Service Area, geographic division, and State: United States, fiscal year 1974—Continued

(Data are based on reporting by facilities)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Average length of stay in days													
Mountain:														
Montana	7.7													
Idaho	8.0													
Wyoming	8.6													
Colorado	9.3	9.6	7.5											
New Mexico	8.5													
Arizona	9.6	9.9	8.2											
Utah	8.1													
Nevada	8.9	8.9												
Pacific:														
Washington	7.8	7.2	6.8	7.5										
Oregon	9.2	7.5	7.8											
California	7.5	7.9	7.8	9.8	8.6	7.7	8.6	8.1	7.7	8.3	9.7	8.4	8.8	8.4
Alaska	8.1	6.9	7.3											
Hawaii	8.8													

NOTE: Based on a 20-percent sample of Medicare beneficiaries 65 years and over discharged from Social Security Administration certified hospitals. Lengths of stay greater than 40 days are excluded.

SOURCE: Computed by the Office of Research and Statistics, Social Security Administration for the Division of Planning Methods and Technology, Bureau of Health Planning and Research Development.

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Table U. Percent of discharges of Medicare enrollees from short-stay hospitals in which surgery was performed, according to Health Service Area, geographic division, and State: United States, fiscal year 1974

(Data are based on reporting by facilities)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Percent of discharges with surgery													
New England:														
Maine	33.1													
New Hampshire	30.2													
Vermont	31.1													
Massachusetts	27.8	32.3	31.7	38.2	30.3	31.6								
Rhode Island	35.6													
Connecticut	39.7	37.8	36.5	36.3	38.7									
Middle Atlantic:														
New York	35.1	35.0	33.5	30.5	33.2	34.6	41.4	36.3						
New Jersey	37.8	33.4	32.0	32.6	34.8									
Pennsylvania	41.6	45.0	31.9	40.9	32.8	39.0	32.3	30.5	37.0	39.8	34.6			
East North Central:														
Ohio	34.5	35.0	26.0	33.2	34.5	25.5	31.5	36.6	38.2	32.0				
Indiana	31.7	34.3	29.1											
Illinois	28.6	29.6	26.4	30.8	22.5	34.5	35.3	32.1	29.8	30.0	35.8			
Michigan	37.0	31.9	29.2	34.8	29.8	27.6	28.7	19.4						
Wisconsin	34.8	35.2	30.9	31.6	24.4	33.5	30.2							
West North Central:														
Minnesota	23.8	30.2	32.1	27.5	34.4	26.1	43.2							
Iowa	29.7	33.8	30.0											
Missouri	34.4	22.3	35.8	25.2	23.3									
North Dakota	30.4	23.8	32.1											
South Dakota	28.2													
Nebraska	21.9	25.5	33.8	29.7										
Kansas	22.5	23.5	28.4	34.4										
South Atlantic:														
Delaware	34.0													
Maryland	36.3	37.4	26.8	45.5	37.2									
District of Columbia	44.0													
Virginia	28.1	33.2	27.0	33.2	33.8	27.6								
West Virginia	27.1													
North Carolina	27.5	33.1	34.4	31.9	24.5	26.1								
South Carolina	31.2	33.1	24.2	30.3	29.0									
Georgia	27.9	25.0	39.6	29.0	27.5	26.1	26.3							
Florida	29.4	31.9	38.3	39.6	36.3	38.4	43.5	38.7	32.5					
East South Central:														
Kentucky	28.6	21.8	34.5											
Tennessee	27.6	32.4	27.9	27.0	22.7	41.3								
Alabama	20.7	23.9	34.4	24.9	26.1	26.4	27.5							
Mississippi	21.4													
West South Central:														
Arkansas	24.3	13.1	31.7	16.9										
Louisiana	38.3	25.0	22.4											
Oklahoma	28.0													
Texas	28.9	28.2	37.8	25.0	32.6	26.5	22.7	28.7	31.9	20.9	34.5	26.4		

Table U. Percent of discharges of Medicare enrollees from short-stay hospitals in which surgery was performed, according to Health Service Area, geographic division, and State: United States, fiscal year 1974—Continued

(Data are based on reporting by facilities)

Geographic division and State	Health Service Area													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Percent of discharges with surgery													
Mountain:														
Montana	26.4													
Idaho	30.0													
Wyoming	21.6													
Colorado	31.5	27.8	25.0											
New Mexico	30.2													
Arizona	36.9	34.0	25.0											
Utah	41.0													
Nevada	30.6	26.3												
Pacific:														
Washington	37.0	28.6	32.9	35.8										
Oregon	40.3	36.1	26.5											
California	32.8	38.3	38.1	39.9	38.0	36.0	41.3	37.3	33.5	37.7	35.8	36.7	35.6	40.2
Alaska	24.3	35.7	51.8											
Hawaii	32.3													

NOTE: Based on a 20-percent sample of Medicare beneficiaries 65 years and over discharged from Social Security Administration certified hospitals.

SOURCE: Computed by the Office of Research and Statistics, Social Security Administration for the Division of Planning Methods and Technology, Bureau of Health Planning and Research Development.

Table V. Total private and public personal health care expenditures by source of funds, according to region, geographic division, and State: United States, fiscal year 1969

(Data are compiled from a number of government and private sources)

Region, geographic division, and State	Total	Private	Public		
			Total	Federal	State and local
	Expenditures per person				
United States	$256.89	$166.31	$ 90.58	$ 58.91	$31.67
Northeast	295.46	178.07	117.39	65.46	51.93
North Central	251.58	173.15	78.42	51.23	27.19
South	211.49	138.63	72.87	53.61	19.25
West	294.58	189.54	105.04	72.02	33.02
Northeast					
New England	307.18	196.76	110.42	71.07	39.35
Middle Atlantic	291.84	172.29	119.54	63.73	55.81
North Central					
East North Central	254.66	179.39	75.27	47.65	27.61
West North Central	243.98	157.77	86.21	60.05	26.16
South					
South Atlantic	223.24	148.10	75.13	54.62	20.51
East South Central	184.17	124.54	59.64	45.24	14.40
West South Central	211.50	133.29	78.22	57.66	20.55
West					
Mountain	247.63	164.32	83.31	61.61	21.70
Pacific	309.09	197.34	111.75	75.24	36.51
New England:					
Maine	210.42	133.46	76.96	57.84	19.13
New Hampshire	214.79	144.50	70.30	49.50	20.79
Vermont	234.49	147.79	86.70	63.97	22.73
Massachusetts	346.44	215.03	131.41	83.85	47.56
Rhode Island	295.56	184.53	111.03	80.41	30.62
Connecticut	303.45	207.49	95.95	55.44	40.51
Middle Atlantic:					
New York	338.42	177.25	161.17	80.32	80.85
New Jersey	236.57	163.21	73.36	43.47	29.88
Pennsylvania	252.99	170.10	82.89	50.24	32.65
East North Central:					
Ohio	230.74	169.32	61.41	41.04	20.37
Indiana	225.29	167.12	58.17	37.59	20.58
Illinois	274.06	188.14	85.91	54.77	31.15
Michigan	270.77	189.79	80.99	45.23	35.76
Wisconsin	266.87	175.40	91.47	63.06	28.40
West North Central:					
Minnesota	268.13	167.62	100.51	64.94	35.58
Iowa	227.71	153.55	74.17	52.78	21.39
Missouri	248.22	165.02	83.20	56.60	26.60
North Dakota	243.02	157.66	85.36	69.87	15.50
South Dakota	219.00	127.32	91.69	77.16	14.53
Nebraska	241.24	158.23	83.01	57.42	25.60
Kansas	225.52	140.98	84.54	62.10	22.44

Table V. Total private and public personal health care expenditures by source of funds, according to region, geographic division, and State: United States, fiscal year 1969—Continued

(Data are compiled from a number of government and private sources)

Region, geographic division, and State	Total	Private	Public		
			Total	Federal	State and local
	Expenditures per person				
South Atlantic:					
Delaware	253.67	177.12	76.56	46.90	29.66
Maryland	259.88	179.09	80.79	52.30	28.49
District of Columbia	694.09	399.05	295.05	210.91	84.13
Virginia	197.26	140.03	57.23	40.75	16.48
West Virginia	195.86	131.82	64.04	48.19	15.85
North Carolina	172.38	120.44	51.94	37.57	14.37
South Carolina	156.47	96.03	60.44	43.92	16.52
Georgia	197.02	130.56	66.46	48.98	17.48
Florida	255.81	163.88	91.93	71.68	20.26
East South Central					
Kentucky	192.35	121.77	70.58	55.38	15.20
Tennessee	206.22	143.84	62.38	44.03	18.34
Alabama	182.85	128.66	54.20	42.33	11.87
Mississippi	137.72	89.57	48.15	37.74	10.42
West South Central:					
Arkansas	166.39	95.27	71.13	53.65	17.47
Louisiana	194.30	122.85	71.45	44.84	26.62
Oklahoma	233.08	138.02	95.05	73.96	21.09
Texas	220.35	142.47	77.88	58.93	18.95
Mountain:					
Montana	214.46	129.60	84.86	59.52	25.34
Idaho	190.14	132.84	57.30	41.39	15.91
Wyoming	255.53	171.87	83.67	60.81	22.85
Colorado	301.24	191.62	109.62	79.91	29.71
New Mexico	199.04	119.09	79.94	62.51	17.44
Arizona	257.82	174.12	83.70	62.96	20.75
Utah	213.91	162.46	51.45	38.06	13.38
Nevada	281.48	202.15	79.33	59.89	19.44
Pacific:					
Washington	265.29	177.36	87.93	60.64	27.29
Oregon	245.42	169.55	75.86	51.14	24.73
California	325.66	206.35	119.31	79.92	39.39
Alaska	267.21	110.00	157.21	124.71	32.51
Hawaii	268.85	164.44	104.42	67.28	37.14

SOURCE: Personal Health Care Expenditures by State, Volume II. Public and Private Funds, 1966 and 1969, Social Security Administration, DHEW Pub. No. (SSA) 75-11906.

Table W. Total and public personal health care expenditures for hospital care and physicians' services, according to region, geographic division, and State: United States, fiscal year 1969

(Data are compiled from a number of different government and private sources)

Region, geographic division, and State	Total			Public		
	Total	Hospital care	Physicians' services	Total	Hospital care	Physicians' services
	Expenditures per person					
United States	$256.89	$110.72	$ 58.65	$ 90.58	$ 57.35	$13.49
Northeast	295.46	136.29	63.23	117.39	74.80	15.22
North Central	251.58	109.56	56.43	78.42	51.57	11.37
South	211.49	90.97	48.72	72.87	47.67	10.83
West	294.58	112.58	74.15	105.04	59.82	19.43
Northeast						
New England	307.18	144.29	62.19	110.42	69.62	13.65
Middle Atlantic	291.84	133.82	63.56	119.54	76.40	15.71
North Central						
East North Central	254.66	109.80	59.05	75.27	49.22	10.83
West North Central	243.98	108.97	49.98	86.21	57.37	12.69
South						
South Atlantic	223.24	95.69	51.03	75.13	51.17	10.51
East South Central	184.17	83.17	41.57	59.64	38.61	9.43
West South Central	211.50	88.84	49.90	78.22	48.29	12.27
West						
Mountain	247.63	102.68	54.86	83.31	52.33	12.91
Pacific	309.09	115.63	80.11	111.75	62.14	21.44
New England:						
Maine	210.42	101.68	46.11	76.96	54.23	11.62
New Hampshire	214.79	92.79	54.89	70.30	45.86	10.83
Vermont	234.49	117.12	46.08	86.70	53.52	13.76
Massachusetts	346.44	171.74	62.47	131.41	81.15	14.86
Rhode Island	295.56	142.44	59.46	111.03	71.92	16.25
Connecticut	303.45	125.01	71.84	95.95	60.97	11.96
Middle Atlantic:						
New York	338.42	158.29	71.77	161.17	103.11	19.07
New Jersey	236.57	96.28	59.03	73.36	46.84	12.67
Pennsylvania	252.99	118.58	53.55	82.89	52.83	12.32
East North Central:						
Ohio	230.74	99.14	57.81	61.41	41.16	9.84
Indiana	225.29	89.28	57.39	58.17	39.74	8.13
Illinois	274.06	123.82	59.83	85.91	61.72	10.96
Michigan	270.77	115.64	60.73	80.99	48.78	12.71
Wisconsin	266.87	112.94	58.69	91.47	49.38	12.35
West North Central:						
Minnesota	268.13	116.21	52.62	100.51	61.16	13.74
Iowa	227.71	96.76	50.98	74.17	49.36	12.17
Missouri	248.22	114.68	51.12	83.20	58.27	13.03
North Dakota	243.02	113.92	51.84	85.36	57.68	11.76
South Dakota	219.00	91.63	39.41	91.69	62.44	10.63
Nebraska	241.24	108.75	49.29	83.01	56.75	12.26
Kansas	225.52	104.37	45.20	84.54	57.98	12.05

Table W. Total and public personal health care expenditures for hospital care and physicians' services, according to region, geographic division, and State: United States, fiscal year 1969—Continued

(Data are compiled from a number of different government and private sources)

Region, geographic division, and State	Total			Public		
	Total	Hospital care	Physicians' services	Total	Hospital care	Physicians' services
	Expenditures per person					
South Atlantic:						
Delaware	253.67	122.41	55.47	76.56	56.03	10.09
Maryland	259.88	116.01	56.52	80.79	61.17	7.19
District of Columbia	694.09	313.11	156.51	295.05	199.29	13.81
Virginia	197.26	84.40	43.47	57.23	41.91	6.67
West Virginia	195.86	95.70	45.49	64.04	41.70	11.72
North Carolina	172.38	76.40	41.41	51.94	37.38	6.75
South Carolina	156.47	70.28	29.62	60.44	38.96	7.89
Georgia	197.02	79.28	48.64	66.46	41.85	10.07
Florida	255.81	100.91	60.00	91.93	59.02	19.09
East South Central:						
Kentucky	192.35	84.39	44.02	70.58	42.45	12.60
Tennessee	206.22	93.48	47.29	62.38	42.64	8.85
Alabama	182.85	83.38	41.59	54.20	35.08	8.10
Mississippi	137.72	63.77	28.54	48.15	31.84	8.07
West South Central:						
Arkansas	166.39	68.31	36.29	71.13	43.47	11.49
Louisiana	194.30	83.92	50.62	71.45	46.69	10.04
Oklahoma	233.08	92.89	55.80	95.05	51.20	18.04
Texas	220.35	93.21	50.73	77.88	49.01	11.83
Mountain:						
Montana	214.46	87.76	46.55	84.86	55.22	13.32
Idaho	190.14	69.65	42.41	57.30	34.53	10.96
Wyoming	255.53	110.70	62.29	83.67	59.38	10.00
Colorado	301.24	131.49	60.40	109.62	64.88	14.72
New Mexico	199.04	87.05	39.05	79.94	49.63	11.68
Arizona	257.82	110.34	63.04	83.70	57.20	14.57
Utah	213.91	76.09	50.27	51.45	33.42	8.70
Nevada	281.48	105.65	70.98	79.33	44.32	15.19
Pacific:						
Washington	265.29	93.05	73.63	87.93	54.02	13.48
Oregon	245.42	91.42	62.87	75.86	45.81	14.81
California	325.66	122.26	84.07	119.31	64.41	24.15
Alaska	267.21	143.04	43.18	157.21	121.63	10.66
Hawaii	268.85	102.39	68.01	104.42	62.03	10.10

SOURCE: Personal Health Care Expenditures by State. Volume II. Public and Private Funds, 1966 and 1969, Social Security Administration, DHEW Pub. No. (SSA) 75-11906.

Table X. Reimbursement for Medicare hospital and medical insurance for all enrollees and enrollees 65 years and over, according to region, geographic division, and State: United States, fiscal year 1974

(Data are based on the Medicare program)

Region, geographic division, and State	All enrollees	Enrollees 65 years and over
	Reimbursement per enrollee	
United States	$471	$467
Northeast	548	544
North Central	456	451
South	397	395
West	527	516
Northeast		
New England	566	561
Middle Atlantic	542	539
North Central		
East North Central	468	463
West North Central	432	426
South		
South Atlantic	417	415
East South Central	341	339
West South Central	402	401
West		
Mountain	429	423
Pacific	557	545
New England:		
Maine	412	409
New Hampshire	419	417
Vermont	485	482
Massachusetts	618	614
Rhode Island	569	565
Connecticut	574	562
Middle Atlantic:		
New York	625	623
New Jersey	508	497
Pennsylvania	439	436
East North Central:		
Ohio	434	431
Indiana	416	409
Illinois	473	468
Michigan	550	548
Wisconsin	452	441
West North Central:		
Minnesota	$510	$498
Iowa	395	389
Missouri	405	403
North Dakota	462	477
South Dakota	383	377
Nebraska	392	387
Kansas	448	443
South Atlantic:		
Delaware	474	465
Maryland	515	506
District of Columbia	611	612
Virginia	370	368
West Virginia	318	327
North Carolina	349	344
South Carolina	321	319
Georgia	364	359
Florida	479	475
East South Central:		
Kentucky	336	335
Tennessee	346	341
Alabama	337	335
Mississippi	343	345
West South Central:		
Arkansas	312	316
Louisiana	341	347
Oklahoma	401	400
Texas	443	438
Mountain:		
Montana	370	368
Idaho	402	398
Wyoming	357	355
Colorado	463	455
New Mexico	399	398
Arizona	464	458
Utah	327	325
Nevada	578	560
Pacific:		
Washington	401	395
Oregon	414	409
California	606	593
Alaska	507	499
Hawaii	453	429

SOURCE: Reimbursement by State and County, Medicare, 1974. Social Security Administration. In preparation.

Table Y. Expenditures for health, according to type of expenditure and selected sites: United States, 1971 or selected years

(Data are compiled from a number of different government and private sources)

Selected sites	Total	Type of expenditure										
		Hospital care	Nursing home care	Physician services	Dentist services	Other professional services	Drugs and sundries	Vision care and appliances	Government public health activities	Other health services	Prepayment and administration	Research, education, and construction
	Expenditures per person											
United States	$386	$145	$26	$ 75	$24	$ 7	$37	$ 9	$ 9	$14	$13	$28
Total selected sites	411	154	20	75	26	8	39	9	17	11	16	36
Rhode Island	434	180	26	64	28	10	54	9	8	19	15	21
Delaware (FY 1972)	401	162	19	67	28	11	25	14	11	16	16	32
Arkansas	332	109	25	79	19	1	31	3	43	1	1	20
Philadelphia, Pa.	614	251	28	101	31	11	51	10	18	16	31	66
East Los Angeles, Calif.	422	173	18	87	20	7	23	11	18	16	4	45
St. Louis, Mo.	490	190	36	92	25	10	41	14	13	15	29	25
Memphis, Tenn. (CY 1972)	502	171	9	112	42	12	26	8	18	26	16	62
Binghamton, N.Y.	472	173	30	78	27	8	48	7	10	14	15	62
Jacksonville, Fla. (FY 1971)	444	154	12	92	30	8	42	10	19	11	15	51
Lubbock, Texas	364	86	16	64	24	5	37	13	27	8	11	73
Rapid City, S.D.	389	176	25	59	18	4	49	6	7	2	30	13
Boise, Idaho	335	133	22	65	22	6	21	8	8	3	16	31
Northeast Kentucky	222	63	6	44	16	6	38	7	16	2	16	8
Mon Valley, Pa.	212	68	5	28	25	8	42	8	8	9	1	10
Tucson, Ariz.	553	198	20	105	30	21	50	12	21	13	21	62

SOURCES: U.S. data: Office of Research and Statistics, Compendium of National Health Expenditures Data, by B. S. Cooper, W. L. Worthington, and M. F. McGee, DHEW Pub. No. (SSA) 76-11927, Social Security Administration, Washington, U.S. Government Printing Office, Jan. 1976; Site data: National Center for Health Services Research, Community Funds Flow Reports.

Table Z. Medicaid payments per recipient and per poor person, and ratio of recipients to poor, according to age, region, geographic division, and State: United States, 1970

(Data are based on the Medicare program and the decennial census)

Region, geographic division, and State	Children under 21 years			Adults aged 21-64			Adults 65 years and over		
	Medical payments per child recipient	Ratio of recipients to poor children	Medicaid payments per poor child	Medical payments per adult recipient	Ratio of recipients to poor adults	Medicaid payments per poor adult	Medical payments per aged recipient	Ratio of recipients to poor aged	Medicaid payments per poor aged
United States	$126	0.55	$ 69	$403	0.61	$250	$527	0.69	$363
Northeast	132	1.24	163	404	1.31	530	999	0.67	667
North Central	137	0.49	67	525	0.41	216	700	0.40	279
South	108	0.20	21	349	0.23	79	334	0.53	176
West	122	0.96	117	389	1.29	500	350	1.97	690
New England:									
Maine	109	0.48	52	321	0.46	147	341	0.32	110
New Hampshire	98	0.46	45	471	0.37	174	150	0.52	78
Vermont	201	0.80	160	361	0.60	215	601	0.72	435
Massachusetts	---	---	---	---	---	---	---	---	---
Rhode Island	134	0.72	97	354	1.02	362	633	1.30	825
Connecticut	149	1.04	155	674	0.53	359	1,803	0.51	918
Middle Atlantic:									
New York	133	1.68	224	450	1.72	773	1,049	1.02	1,075
New Jersey	153	0.70	108	215	0.63	134	1,942	0.22	433
Pennsylvania	117	0.97	113	329	1.28	422	675	0.38	259
East North Central:									
Ohio	103	0.40	41	435	0.36	156	629	0.29	185
Indiana	89	0.26	23	417	0.22	93	376	0.21	78
Illinois	159	0.70	111	558	0.50	279	546	0.34	185
Michigan	122	0.51	62	573	0.62	356	1,260	0.47	593
Wisconsin	237	0.66	155	848	0.47	395	1,054	0.62	656
West North Central:									
Minnesota	143	0.72	103	607	0.40	243	1,044	0.55	573
Iowa	103	0.43	44	319	0.32	101	227	0.32	73
Missouri	80	0.33	26	331	0.33	110	296	0.55	161
North Dakota	142	0.20	29	587	0.22	127	928	0.40	367
South Dakota	114	0.14	17	440	0.14	62	690	0.28	196
Nebraska	120	0.31	38	492	0.31	154	382	0.39	150
Kansas	129	0.51	66	498	0.45	226	478	0.36	170

Table Z. Medicaid payments per recipient and per poor person, and ratio of recipients to poor, according to age, region, geographic division, and State: United States, 1970—Continued

(Data are based on the Medicare program and the decennial census)

Region, geographic division, and State	Children under 21 years			Adults aged 21-64			Adults 65 years and over		
	Medical payments per child recipient	Ratio of recipients to poor children	Medicaid payments per poor child	Medical payments per adult recipient	Ratio of recipients to poor adults	Medicaid payments per poor adult	Medical payments per aged recipient	Ratio of recipients to poor aged	Medicaid payments per poor aged
South Atlantic:									
Delaware	64	0.81	52	343	0.48	165	151	0.28	42
Maryland	118	0.73	86	376	0.83	313	464	0.68	316
District of Columbia	171	1.10	189	442	0.72	317	431	0.67	291
Virginia	98	0.20	19	374	0.18	69	250	0.28	69
West Virginia	87	0.38	33	183	0.39	71	135	0.19	25
North Carolina	---	---	---	---	---	---	---	---	---
South Carolina	65	0.09	6	325	0.19	60	475	0.38	180
Georgia	87	0.26	23	447	0.31	139	416	0.71	296
Florida	68	0.20	13	192	0.25	48	351	0.43	150
East South Central:									
Kentucky	76	0.38	29	262	0.37	96	231	0.68	158
Tennessee	66	0.16	10	222	0.17	37	166	0.32	53
Alabama	97	0.10	10	446	0.11	48	511	0.49	253
Mississippi	43	0.11	5	264	0.07	20	181	0.49	89
West South Central:									
Arkansas	56	0.06	4	179	0.10	17	68	0.19	13
Louisiana	112	0.08	9	260	0.18	46	245	0.94	230
Oklahoma	201	0.37	75	402	0.43	174	583	0.64	372
Texas	215	0.08	17	738	0.09	69	326	0.66	213
Mountain:									
Montana	127	0.28	35	451	0.26	118	669	0.31	207
Idaho	90	0.26	23	436	0.29	126	829	0.26	217
Wyoming	75	0.18	13	308	0.18	56	273	0.24	67
Colorado	91	0.40	36	340	0.55	186	328	1.34	440
New Mexico	97	0.26	25	352	0.29	103	274	0.37	101
Arizona	---	---	---	---	---	---	---	---	---
Utah	190	0.27	52	329	0.73	240	376	0.50	186
Nevada	119	0.47	56	558	0.34	190	794	0.55	440
Pacific:									
Washington	99	0.70	69	317	1.13	359	748	0.67	498
Oregon	99	0.35	35	283	0.47	133	298	0.31	92
California	126	1.33	168	389	1.73	672	321	3.17	1,017
Alaska	---	---	---	---	---	---	---	---	---
Hawaii	100	0.92	92	319	1.01	322	1,162	0.96	1,119

SOURCE: Davis, K.: Medicaid payments and utilization of medical services by the poor. Inquiry. Vol XIII: 122-135, June 1976.

CHAPTER IV

National Health Insurance: Research Findings on Selected Issues[a]

INTRODUCTION

Current levels of coverage under various public and private health insurance programs provide many U.S. citizens protection against many of the financial risks associated with disease and injury. However, careful examination of this coverage reveals many serious gaps in protection, both in terms of individuals with little or no health insurance coverage and in terms of services which are not covered. Many Americans still face relatively high financial risk from accidents and disease, with some groups in the population facing considerably higher risks than others.

Goals of a national health insurance policy include assurance of access to medical care for all persons, encouragement of access to early care, control of rapidly rising health care costs, assurance of quality of care, and dispersion of the uneven and unexpected burdens of large expenses for medical care over the entire population so that the burden to each citizen is small. The form of national health insurance that will best meet some or all of these goals is still the subject of debate.

The design of any national health insurance plan requires determination of, among others, the following fundamental policy questions:

1. Who should be covered?
2. What types of services should be covered?
3. How much should consumers pay out-of-pocket for health care?
4. How should health care services be delivered?
5. How should national health insurance be financed?
6. How should providers of health care services be reimbursed?
7. What type of administrative structure should be used to operate the program?

The purpose of this paper is to summarize research findings regarding coverage, benefits, cost sharing, financing, reimbursement, and administration of public and private health insurance programs. This will serve to highlight the problems facing policymakers in designing a national health insurance program that will attain the objectives set out previously. Some serious failings of the current medical care system will be described and methods for correcting them via national health insurance will be discussed. The reader should realize that other important health policy questions will not be addressed here. These include issues of how the delivery of health services should be organized, and whether and how standards of patterns of patient care should be established and formalized. Moreover, we do not address the costs of various national health insurance plans nor their impact on the Federal budget.

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EXTENT OF COVERAGE

In discussing insurance coverage for health care it is useful to divide the U.S. population into two groups, under 65 years and 65 years and over, because of the different experiences of the two groups with private and public health insurance. The extent of coverage within the younger group will be examined first.

Approximately 78 percent of all civilian noninstitutionalized persons in the United States under 65 years had private insurance coverage for hospital expenses in 1974, and 76 percent had private insurance coverage for surgical expenses. Thus about one-fifth of the age group under 65 years had no private hospital or surgical insurance (NCHS, 1976). This appeared to be relatively stable over the period 1968-74 (Mueller, 1977).

These aggregate figures mask substantial variation in private health insurance coverage by family income, age, and color, as shown in table A. The lower the family income, the lower the percentage of persons with hospital insurance. Data for surgical insurance coverage are not shown in table A, but they follow the same pattern, at 1 to 2 percentage points less in each group. Persons other than white had substantially lower insurance levels than whites. Younger persons had less insurance than older persons. These factors combine in an interactive fashion, so that only 19 percent of all persons other than white under 17 years with a family income of less than $5,000 had private hospital insurance coverage. However, 94 percent of all white persons aged 45-64 with a family income of $15,000 or more had private hospital insurance coverage (NCHS, 1976).

Table A. Percent of persons under 65 years of age with private hospital insurance coverage, by annual family income, age, and color: United States, 1974

Characteristic	Percent
Annual family income	
Less than $3,000	37.2
$3,000-$4,999	41.0
$5,000-$6,999	59.8
$7,000-$9,999	76.2
$10,000-$14,999	87.8
$15,000 or more	91.8
Age	
Under 17 years	73.8
17-24 years	72.4
25-44 years	81.9
45-64 years	82.3
Color	
White	80.9
All other	57.7

SOURCE: National Center for Health Statistics: Hospital and surgical insurance coverage among persons under 65 years of age in the United States, 1974. Monthly Vital Statistics Report. Vol. 25, No. 2, Supplement 3. DHEW Pub. No. (HRA) 76-1120. Health Resources Administration. Rockville, Md., May 19, 1976.

The obvious question is whether *public* health benefits (i.e., Medicaid, CHAMPUS, Veterans Administration, and Indian Health Service) cover these gaps in private insurance for people under age 65, especially for the lower income groups. The Medicaid program provides coverage of expenses for hospital care, physicians' services, and other services such as laboratory and X-ray services, skilled nursing home services, home health services, family planning services, and health screening services to certain people who are categorically eligible. These categories include all persons receiving public assistance under Aid to Families with Dependent Children (AFDC) and most recipients of Supplemental Security Income (SSI) cash assistance, which includes Old Age Assistance (OAA), Aid to Blind (AB), and Aid to the Permanently and Totally Disabled (APTD) categories. States can restrict Medicaid eligibility somewhat below the SSI criteria for the OAA, AB, and APTD categories.

Thirty-two States (Commerce Clearing House, Inc., 1976) also provide Medicaid coverage of medical care expenses for the medically needy, i.e., persons who would qualify under a welfare category except that their income is somewhat above the cutoff for cash assistance (Stevens and Stevens, 1974). Often included in the definition for medically needy are those persons who "spend down." The "spend down" provision covers the nonpoor who have medical expenses that lower their *net* income to the cutoff level for Medicaid benefits (Commerce Clearing House, Inc., 1976). From this description Medicaid coverage may appear ample. However, it has been estimated that in 1974 approximately 9.5 million persons below the poverty level, or 39 percent of the poor, were not covered by Medicaid (Davis, 1976a). Among the poor excluded from Medicaid are persons in families without dependent children and, in many States,

persons in poor families with a father living at home. In addition, in 18 States none of the medically needy are covered.

Coverage for the poor and the medically needy varies considerably by State, although the evidence is sketchy. Data on Medicaid coverage by State are difficult to assess because of the inherent problem in the Medicaid program of defining the eligible population. Some medically needy persons cannot be identified until they become ill and spend their resources on medical care to the point where their net income is below the poverty level. As a result the Medicaid program cannot determine who is eligible for services until these people apply for Medicaid. With this caveat in mind, there are estimates available for selected States of the percent of the poor and near poor not covered by Medicaid. In 1975 the proportion of poor and near poor persons not eligible for Medicaid or Medicare programs varied from 6 to 66 percent among the selected States shown in table B. Although table B presents data for Medicare and Medicaid combined, the stability of Medicare coverage by State (between 98 and 99 percent) means that nearly all of the variation among States is due to Medicaid eligibility differences (ORS, 1975; U.S. Bureau of the Census, 1974).

Turning now to the elderly population, we find that Medicare excludes increasing numbers of the aged owing to more stringent eligibility requirements. In 1966 the Medicare hospital insurance program covered virtually the entire population 65 years and over. Only 0.8 percent of this group was not covered under the program, and most of these were Federal annuitants covered under the Federal Employees' Health Benefits Program. Instead of coverage improving, however, by 1975, 3.2 percent of the population 65 years and over, or 750,000 persons, were without Medicare coverage for hospital care (Gornick, 1976). This number does not include 260,000 Federal annuitants who had health insurance protection under the Federal Employees' Health Benefits Program. However, veterans with access to VA hospitals and some aliens are probably included in the 750,000 estimate.

Table B. Percent of poor and near poor[1] not eligible for Medicaid or Medicare programs for selected States, 1975

State	Percent not eligible for Medicaid or Medicare coverage
Alabama	61
California	6
Illinois	26
Maine	32
Mississippi	66
New Jersey	12
South Dakota	62
Wisconsin	37

[1] Near poor are defined as people with incomes less than 125 percent of the poverty level.

SOURCE: Blendon, R. J.: The reform of ambulatory care, a financial paradox. Med. Care 14(6):526-534, June 1976.

Persons ineligible for hospital insurance (HI) can purchase coverage of physicians' services through supplementary medical insurance (SMI). As of July 1, 1975, elderly persons not enrolled in HI but enrolled in SMI numbered 290,000, excluding Federal civil service annuitants. This means that 460,000 aged persons have neither HI nor SMI coverage, excluding Federal annuitants (i.e., 750,000 aged persons without HI minus 290,000 without HI but with SMI).

Hospital insurance coverage has decreased because as of 1968 persons 65 years and over were required to have paid 3 quarters of payroll taxes under the Social Security program during their working life in order to be eligible for Medicare. As of 1975 the required number of paid quarters of Social Security taxes was increased to 10 (Gornick, 1976). Increasing numbers of persons are unable to meet this requirement and are, therefore, ineligible for Medicare.

It is notable that the gap in Medicare hospital insurance coverage has worsened despite enactment of the Supplemental Security Income program in 1974, which pays Medicare premiums for those blind, disabled, and elderly poor persons who can obtain Medicare coverage only by "buying in." Of the population 65 years and over, Medicare categorically covers only those people covered by Social Security or the Railroad Retirement system, the blind and disabled, and those elderly who are very poor (i.e., with incomes below the U.S. Bureau of the Census definition of poverty). The elderly who do not fall into any of these categories may "buy in," but at the average cost of hospital care for a high-risk group (i.e., $540 per year for hospital insurance in 1976). In 1974 only

15,000 persons had enrolled in Hospital Insurance (Part A) under the "buy in" provision (Gornick, 1976).

For the reasons described above, 18 million persons will be unprotected by any form of health insurance in fiscal year 1978 (Congressional Budget Office, 1977a). These individuals will not be insured for medical care services and will not have protection from other health care programs, e.g., Veterans Administration.

The problem of coverage gaps is exacerbated because public assistance income eligibility limits are not automatically adjusted to reflect rising prices and money incomes (Davis, 1976a). Moreover, many States have been tightening eligibility criteria and reducing Medicaid benefits in an effort to control spiraling health and welfare costs. Congress also shifted emphasis to cost control in Public Law 92-603, the Social Security Amendments of 1972, which required States to impose monthly premium charges on the medically indigent and allowed the States to charge copayments and deductibles for all services under the Medicaid program (Stevens and Stevens, 1974, p. 339). This has increased the financial burden on the poor.

Unemployed persons represent another important population group unlikely to be covered by private and public health insurance. Although it is incorrect to assume that all unemployed workers lack health insurance, a substantial portion lose job-related health insurance. In 1975 approximately 20 million workers experienced some unemployment. An estimated 60 percent of these lost their health insurance benefits for an average duration of 22 weeks (McCaffree, et al., 1977).

EXTENT OF BENEFITS

Health insurance coverage varies significantly by type of medical service. Certain services had little coverage for most of the population in 1970, as shown in table C. Dental services, prescription drugs, and, to a lesser extent, physicians' outpatient services are paid for directly by consumers. By comparison, hospital and physicians' inpatient services are heavily financed by insurance.

Coverage of medical care expenses is also variable across the population. Some individuals are personally responsible for all, or nearly all the expenses they incur, while others remain covered by relatively comprehensive public or private benefit packages. As shown in table C, the lower income groups have the lowest out-of-pocket expenditures as a proportion of total medical payments as compared to the expenditures of the higher income groups. This reflects the benefits paid by the Medicare and Medicaid programs for low-income persons.

The level of medical care expenses incurred by individuals is also highly variable across the population. For example, 10 percent of the population with the greatest incurred expenses during a given year generally account for about two-thirds of the Nation's total medical care bill for that year (Andersen, Lion, and Anderson, 1976). Unfortunately, high expenses may strike anyone in the population whether or not his health insurance coverage is good. As shown in table D, about 12 percent of the population had out-of-pocket expenses of $500 or more in 1975 ranging from 7 percent of the people in families with incomes under $3,000 to 17 percent of the

Table C. Proportion of total expenditures paid out-of-pocket by selected services and family income: United States, 1970

Type of expense	Family income							
	All incomes	Less than $2,000	$2,000-$3,499	$3,500-$4,999	$5,000-$7,499	$7,500-$9,999	$10,000-$14,999	$15,000 or more
Total	44	32	35	43	41	48	50	56
Hospital inpatient	12	9	7	15	12	12	10	8
Physician inpatient	25	26	29	28	24	29	25	24
Physician outpatient	65	56	47	59	57	72	66	74
Prescription drugs	80	65	74	85	74	93	83	79
Dental	88	69	60	68	90	79	89	98
Other	74	63	76	74	70	79	73	77

SOURCE: Andersen, R., Lion, J., and Anderson, O.: Two Decades of Health Services: Social Survey Trends in Use and Expenditure. Cambridge, Mass. Ballinger Pub. Co., 1976. pp. 134-149.

people in families with incomes of $25,000 or more. However, the impact of medical expenses on the family budget is generally greater for lower-income families than for the more affluent. Those people in families with incomes under $3,000 who had out-of-pocket expenses had, on the average, expenses of $252 per person, over 8 percent of family income. Those people in families with incomes of $25,000 or more who had out-of-pocket expenses had, on the average, expenses of $326, a far lower proportion of family income.

It should be noted that there is a wide range in expenditures, with some individuals spending much more than the average for their income group and some spending much less. Moreover, there may be families in which more than one individual had expenses. Finally, expenditures for care in long-term institutions are underrepresented in the present data. Thus it is clear that for some families, especially those in lower income groups, outlays for medical care under present circumstances absorb an extremely large proportion of family income.

Specifying all the reasons for the high out-of-pocket cost incurred by the poor who have expense is difficult. Lack of insurance coverage, and the deductibles, coinsurance, and copayments where insurance coverage exists, as well as exclusion of important services from coverage may be significant factors. Also, illness may reduce income while causing high medical expense. Analysis of the contribution of each of these factors to total out-of-pocket health care expense will have to await the results of the National Medical Care Expenditure Study in progress under the joint sponsorship of the National Center for Health Services Research and the National Center for Health Statistics. This study will combine expenditure, utilization, and health insurance data from longitudinal household interviews, providers, and health insurance carriers.

Even if national health insurance covers the entire population, it still may exclude many services from coverage or it may feature copayments, coinsurance, and/or deductibles so that the out-of-pocket costs to patients may be significant. Current levels of expenditures for prescription drugs, dental services, and optical services by low-income persons represent a larger portion of their incomes than that for high-income persons. But families with extensive health insurance coverage are also vulnerable to large health care expenses arising from noninsured services, such as nursing home care, mental health services, drugs, and dental services.

There is no need for risk spreading through insurance when the consumer can plan and budget the use of a particular type of service (such as routine dental checkups). The process of collecting premiums and dispensing reimburse-

Table D. Percent of population with total out-of-pocket health expenses of $500 or more, according to family income; annual out-of-pocket expenses per person with expenses, according to family income and type of expenditure; and number of persons with some out-of-pocket expenses, according to type of expenditure: United States, 1975

Type of expenditure	Family income								Persons with expense
	All incomes	Less than $3,000	$3,000-$4,999	$5,000-$6,999	$7,000-$9,999	$10,000-$14,999	$15,000-$24,999	$25,000 or more	
	Percent of population								Number in thousands
With total expenses of $500 or more	11.6	6.6	10.6	10.4	11.5	11.6	11.5	17.1	...
	Annual expense per person with expense (age-adjusted)								
Total	$285	$252	$281	$264	$272	$279	$272	$326	180,274
Hospital	264	486	394	301	240	249	182	151	24,163
Physician	107	123	118	104	110	101	94	116	122,494
Dental	99	76	88	97	86	95	98	116	87,826
Prescription drugs	59	53	65	57	63	50	52	57	110,727
Optical	67	64	60	65	59	61	66	73	46,014
Health insurance premium	108	108	108	100	99	104	95	121	122,283

SOURCE: National Center for Health Statistics, unpublished data.

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ments is an inefficient method of paying for health care that the consumer can pay for directly without unexpected risk. One alternative that avoids the costs of claims processing and provides coverage of routine services is a health maintenance organization. But under such a plan and under national health insurance, decisions regarding the inclusion of routine services in the benefit package depend on program goals beyond risk spreading and on certain system characteristics. Examples of germane program goals are the redistribution of income, the encouragement of early treatment of health problems, and the minimization of access barriers to health services that have recognizable health benefits, whether in terms of reduced mortality and morbidity or in terms of reduced anxiety and suffering. Relevant system characteristics might include the adequacy of the supply of a service with respect to expected demand and the extent to which an insured health service can be substituted for an uninsured service.

In any case, the greater the breadth and depth of insurance coverage, the less the financial risk to individuals and the more equitable the kinds of services available to all income groups.

COST SHARING BY CONSUMERS OF HEALTH CARE SERVICES

An important issue for health policy is whether or not the recipient of health care services should pay *directly* some part of the cost of services. Cost sharing can occur in three forms: (1) as coinsurance (where the consumer pays a proportion of his or her medical bill), (2) as a deductible (where the consumer pays a specified dollar amount of expense incurred per year, e.g., up to $100 a year), and (3) as a copayment (where the consumer pays a specified dollar amount per unit of service received, e.g., $1 per prescription). In addition, maximum patient liability on total annual medical expenses, usually specified not to exceed some proportion of income, is proposed under some national health insurance plans.

Whether or not cost sharing should be a feature of national health insurance depends on the answers to five major questions:

1. Does cost sharing help to deter medical care price increases and unnecessary medical care consumption?
2. What are the equity considerations of cost sharing across various population groups and types of services?
3. What administrative problems and costs are associated with applying an income-related cost-sharing national health insurance program? What difficulties will individuals have complying with income test and understanding their benefit entitlements?
4. Will consumers supplement public insurance with private health insurance to obtain coverage for the first dollar of medical expense? If so, to what extent will better insured, higher income persons use more medical care than lower income persons?
5. What will be the effect of cost sharing on the public health budget and the total Federal budget?

One well-designed study of the effect of coinsurance on the use of physicians' services indicated that cost sharing does deter use of services. In 1967 a comprehensive prepaid health plan imposed a uniform 25-percent coinsurance rate on physicians' services, with the result that the number of physician visits per enrollee fell 24 percent, a substantial reduction in use of services. The cost saving associated with this reduction was 23 percent per enrollee (Scitovsky and Snyder, 1972). Other studies support the conclusion that cost sharing is a deterrent to the use of health services (Newhouse and Phelps, 1974a, b, c, and 1976; Phelps and Newhouse, 1972, 1974a, and 1974b; Peel and Scharff, 1973; Feldstein, 1973; Ginsburg and Mannheim, 1973; Beck, 1974).

Two questions have been raised about the stability of the results from the Scitovsky and Snyder study (Klarman, 1977). The first question is: Will these dramatic results last or will utilization turn around and increase after the first 2 years? Four years after the first decline in use of services, new evidence showed that the fall in use of physicians' services experienced after the first 2 years with coinsurance provisions had remained stable. There was no evidence of an upward trend, either overall or for any of the

demographic groups studied (Scitovsky and McCall, 1977).

The second question is: Did the study group (the coinsured clinic population) comprise such a small portion of the clinic's total population that physicians did not react to the substantial fall-off in use of services by this group? Physicians faced with the overall declining utilization which could result from a national health insurance plan with coinsurance might prescribe more followup visits. In Saskatchewan a copayment plan was implemented for an entire province (Beck, 1974). This at first resulted in a declining use of services, but utilization subsequently returned to earlier levels (Scitovsky and McCall, 1977). The cause of this rebound in utilization is unclear. The issue of long-run deterrent effects of copayments is as yet unresolved. In any case, the short-run effects are likely to be significant, especially for certain population groups.

Who were most affected by the fall in use of services? This question brings us to the equity considerations of cost sharing. Some evidence in the Scitovsky and Snyder study (1972) suggested that persons in lower income occupational groups decreased their use of services somewhat more than persons in other occupational groups. In their followup study (Scitovsky and McCall, 1977), the percent of low-income persons in the health plan declined, suggesting that low-income groups found the 25-percent coinsurance rate undesirable. Beck's study (1974) of the effect of a $1.50 copayment on utilization of medical services in Canada showed that poor persons reduced their number of physician visits much more than others (i.e., 18 percent compared with 7 percent). Thus, if equity considerations are taken into account, any cost sharing under national health insurance should be proportional to income.

However, it is not known whether the administrative problems and costs of income-related cost sharing would offset the savings from lower utilization due to the requirement that patients pay directly a part of their health care expenses. In addition, increased complexity of a health insurance scheme is likely to make it difficult for some people to understand and use the system. These individuals would not be able to take full advantage of the benefits potentially available to them (Klarman, 1974).

Another question that should be answered is: Will consumers supplement their mandatory health insurance plan with additional insurance to cover cost-sharing provisions? The experience from Medicare is instructive. The initial drop in private health insurance coverage by persons 65 years and over after the enactment of Medicare has reversed; in 1974 private health insurance coverage of hospital and surgical care for the Medicare population was at a higher level than it was before Medicare (Mueller and Piro, 1976). While the level of supplementation for hospital expenses was 60.4 percent and for surgical expenses 51.9 in 1974 (Mueller and Piro, 1976), it is estimated that only about 11 percent of Medicare enrollees purchase supplemental coverage for the first dollar of outpatient *physician* expenditures (Keeler, et al., 1977). Thus supplementation will be extensive for expensive types of services such as hospital care, where a coinsurance rate of 20 percent may represent a sizable expenditure and proportion of income, but supplementation may be relatively small for less expensive services.

One study, assuming that the greatest threat of supplementation will come from the nonpoor, nonaged population, suggests that this supplementation can be avoided. This can be accomplished either by abolishing tax subsidies of health insurance purchases or by requiring the deductible under national health insurance to apply to *unreimbursed* expenditures. Tax subsidies take the form of exclusion of employer-paid health insurance premiums from taxable income and exclusion of individually paid premiums via the medical expense deduction (one-half of premiums up to $150) for those who itemize deductions on their personal income tax return. Although several national health insurance proposals before Congress address the question of eliminating the tax subsidies for health insurance premiums, no major national health insurance plan requires that the deductible be applied to unreimbursed expenditures (Keeler, et al., 1977).

The effect of supplementation of public health insurance with voluntary private insurance is to create a system of health care that induces persons in lower income groups, who cannot afford to supplement their health insurance, to consume less services than persons in other income groups. The empirical studies cited previously show that cost sharing discourages low-income

persons from using services. If a cost-sharing plan is not income related, ability to pay acts as a barrier to access for low-income groups because poor people are least able to purchase supplementary coverage for cost-sharing expenses.

An argument for cost sharing, in addition to the deterrence of unnecessary utilization, is that out-of-pocket payments for health services enable tax revenues to be spent on other goods and services that cannot be financed with private money. The spillover of benefits that characterize true public goods, such as national defense and environmental protection, removes any incentives for the private sector to provide them because it is rational for the individual to wait for others to undertake these projects. Public spending is necessary to assure an adequate supply of goods and services that have these spillover effects. Some people view health care as essentially a private good and contend that using public monies for health care diverts spending away from goods that can be financed only with public money (Klarman, 1974).

Alternatively, cost sharing could be used to decrease the Federal budget. One study estimates that $5.7 billion could be transferred from the public budget to private budgets by increasing the annual national health insurance deductible from $100 to $200 per person (Keeler, et al., 1977).

In addition, cost sharing may reduce the administrative costs of a national health insurance program by reducing the number of small claims.

FINANCING HEALTH CARE SERVICES

The Nation's total health bill in fiscal year 1976 was $139.3 billion, or an average of $638 per person (Gibson and Mueller, 1977). Of this amount, approximately $120.4 billion, or $552 per person, represent expenditures for personal health care services. The difference between the total health bill and total personal health care expenditures represents expenses for prepayment and administration, governmental public health activities, research, and medical facilities construction. Third parties dispensed over $81.3 billion in benefits in fiscal year 1976, or 68 percent of total personal health care expenditures. There has been a substantial growth in private and public health insurance benefits in the 10 years since the passage of Medicare and Medicaid (Gibson and Mueller, 1977).

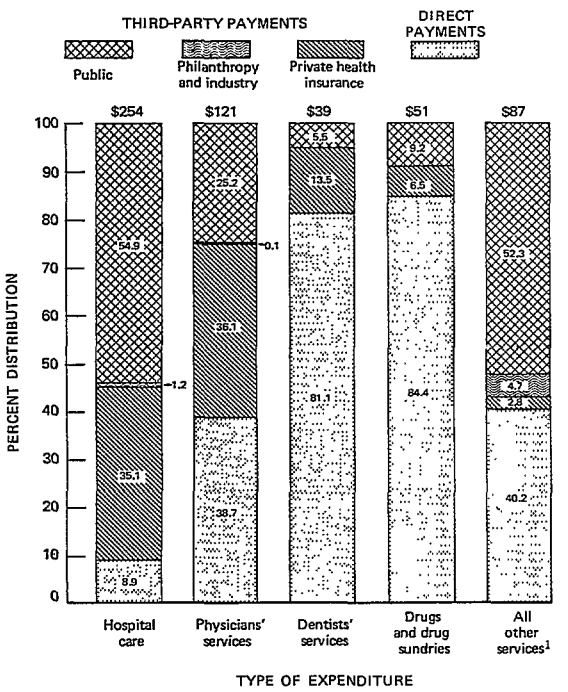
As figure 1 shows, although consumers paid only 9 percent of hospital expenses out of pocket, consumers paid 39 percent of the expenses for physicians' services, 81 percent of dental expenses, 84 percent of drug expenses, and 40 percent of the expenses for all other health care services. Despite the growth in third-party payments, out-of-pocket payments still represent a substantial source of financing for many types of health care services. Another major source of funds is payments by private health insurance companies, which are financed out of premiums. The third major source of funds for health care expenses is payments by Federal and State governments, which are financed mostly out of general revenues and payroll taxes.

The methods to be used for financing health care expenses are a matter of controversy, as they affect income redistribution. The pattern of the current out-of-pocket payments for various types of services and for insurance premiums is evident in table D. Of persons with out-of-pocket hospital expense, those with annual incomes of $3,000 spent 16 percent of their income on hospital bills, while persons with family income of $25,000 spent only 0.6 percent of their income. These same persons spent 3.6 percent and 0.5 percent, respectively, on annual health insurance premiums. Even in those cases where higher income persons spent more than lower income persons for a service, as in the case of dental services, they were still spending a lower percentage of their income, 0.5 percent versus 2.5 percent.

Proposed financing methods for national health insurance include premiums, payroll taxes, income taxes, and direct out-of-pocket payments by consumers, in various combinations. Detailed comparisons of financing alternatives proposed under national health insurance bills can be found in Mitchell and Schwartz (1976), p. 622; and Davis (1975), pp. 114-128.

Recent studies have analyzed the distribution of costs of alternative national health insurance plans. Mitchell and Schwartz (1976) conclude that four prototypical national health insurance proposals (the Nixon Administration, Kennedy-Mills, Corman-Kennedy, and Long-Ribicoff

Figure 1. PERCENT DISTRIBUTION OF PER CAPITA PERSONAL HEALTH CARE EXPENDITURES, BY TYPE OF EXPENDITURE AND SOURCE OF FUNDS: FISCAL YEAR 1976



[1]Includes other professional services, eyeglasses and appliances, nursing home care, and other services not elsewhere classified.

SOURCE: Gibson, R.M. and Mueller, M.S.: National health expenditures, fiscal year 1976. *Social Security Bulletin* 40 (4): 3-22, Apr. 1977.

bills) distribute the total cost of national health insurance (i.e., tax plus out-of-pocket payments and other costs) differently, with the burden falling more heavily on the poor under the Nixon Administration plan than under the other plans. For example, projections indicate that the total cost for a family of four with an annual income of $3,000 or less would have been $640 per year under the Nixon Administration plan (or 21 percent of income). The Corman-Kennedy bill, by comparison, is projected to cost the same family $190 per year (or 6 percent of income). At the other end of the income scale, families earning $50,000 per year would probably pay $2,220 per year (4 percent of income) under the Nixon Administration bill and $4,080 (8 percent of income) under the Corman-Kennedy bill. Between these extremes a family with an income of $15,000 annually would spend about the same under both bills, 8 percent of income.

More important is the distribution of *net* benefits (utilization minus total burden). These benefits give poor families net gains and higher income families net losses for all proposed national health insurance bills. Net gains by poor families reflect their greater need and anticipated higher use of health care after removal of financial barriers. However, levels of benefits and definitions of poverty vary among the plans. Under the Nixon Administration plan only those with income of $3,000 or less would receive net gains in income; all other income groups would have net losses. Under the Corman-Kennedy plan income groups up to $12,000 would receive net gains; higher income groups would incur net losses. The total income redistributed would be much higher under the Corman-Kennedy plan than under the Nixon Administration plan. The redistributive impact of national health insurance can be substantial and should not be overlooked by policymakers.

The distribution of net benefits under an insurance plan can be manipulated by altering the structure of premiums. Thus, even if copayments, coinsurance, and deductibles are fixed and independent of income, health insurance premiums can be varied with income so as to make the distribution of net benefits under national health insurance progressive. This may require negative premiums, i.e., subsidies, for low-income persons.

Analysis of the distribution of expected net benefits under national health insurance can produce misleading results if one is not aware of demographic factors affecting utilization and expense. Feldstein, et al. (1972) demonstrated that premiums calculated on a per family basis place a heavier burden on low-income groups than on high-income groups, since low-income families contain a greater number of two- and one-person families (i.e., young couples and elderly). In this study, substantial redistribution of net benefits from high- to low-income families resulted from simulating a change in the premium structure from $50 per family to $15 per adult and $10 per child. Wilensky and Holahan (1972) showed that benefits under national health insurance would vary by race, region, and urban or rural residence. Southerners, rural residents, and persons other than white would receive

fewer benefits, presumably due to the unavailability of physicians and health facilities.

Wilensky and Holahan (1972) also examined the distributive effects of deductibles, coinsurance, and copayments. They found that low-income persons and large families would derive greater benefits from plans with full coverage and no out-of-pocket costs. High-income persons would benefit most from plans with high deductibles and/or moderate copayments, principally due to the lower level of income transfer to low-income groups involved. If copayments and deductibles were proportional to income, middle-income families would fare the worst because they would face maximum deductible and copayment rates while financing a fairly high transfer of benefits to low-income persons.

Another issue under the distribution of medical care costs is the effect on the Federal budget of financing national health insurance through mandated employee health insurance coverage. It is argued that such a plan would minimize the impact of national health insurance on the Federal budget and on the private insurance industry, would shift the public-private health expenditure mix toward the private sector, and would permit tailoring of health insurance coverage to local needs and conditions by requiring employers to provide health insurance policies of prescribed standards to their employees. Mitchell and Phelps (1976) found that mandated employee coverage would have three significant effects:

1. Employers would substantially increase their health insurance premium contributions; the 1975 level of $16 billion would increase to between $20.9 billion and $37.2 billion (in 1975 dollars), depending on the employer's share of the premium and the scope of benefits required under the plan.
2. These increased premium payments would result in transitory increases of between 0.4 and 1.4 percent in the unemployment rate with significant variation by industry. Services, wholesale and retail trade, and agriculture would be affected the most because current levels of employee health insurance are very low.
3. As the short-term unemployment effects of this mandated coverage diminish, a long-run reduction in tax revenues would take effect because the newly required premium payments would eventually be reflected in lower taxable income for employees. (Employers limit wage increases in reaction to the increased cost of fringe benefits in order to maintain total labor costs at a constant level.)

Approximately $1 billion to $6 billion (1975 dollars) in increased tax revenues would be foregone under mandated coverage. Therefore, contrary to the view that it is an "off-budget" financing mechanism, mandated employee coverage would have significant budgetary effects.

Many national health insurance plans call for the elimination of the personal income tax deduction for medical expenses because it would be redundant under national health insurance. The medical expense deduction represents a limited program for financing health care through indirect subsidization of health insurance premiums and out-of-pocket medical costs. These subsidies rise rapidly with level of personal income because the progressive tax rate structure makes a deduction worth more to higher income persons (Mitchell and Vogel, 1975).

REIMBURSEMENT OF PROVIDERS

Although not directly related to the insurance function, reimbursement of providers is an important issue in designing a national health insurance plan. One objective of national health insurance may be to contain medical care costs. Current methods of reimbursing hospitals and physicians contain little incentive to control costs. The principal method of hospital reimbursement, employed under Medicare, Medicaid, and most Blue Cross plans, is cost reimbursement. Under this method the hospital is automatically paid for all allowable expenses incurred during the previous year. This provides hospitals an opportunity to increase volume and complexity of services without constraints on resource use. Physicians are paid on the basis of

customary, prevailing, and reasonable charges, the criteria for which are ambiguous and vary across States.

Inflation in hospital costs has received particular attention. The Administration has proposed the Hospital Cost Containment Act of 1977, which limits both revenues and capital expenditures of non-Federal short-term hospitals. Growth in total revenues would be limited to 10.6 percent in 1978 and 8.9 percent by 1981. Limits would be placed on both capital expenditures by hospitals ($2.5 billion per year) and on beds per 1,000 population (4.0 beds per 1,000 persons) (Congressional Budget Office, 1977b). These revenue and expenditure controls have been proposed because of the inadequacy of other measures and because the underlying causes of hospital cost inflation are not completely understood.

Several States and many Blue Cross plans have adopted prospective rate (PR) reimbursement systems in an attempt to control hospital costs. Prospective rate reimbursement involves replacing the traditional cost reimbursement system with one that predetermines the price the hospital will receive for a unit of service (e.g., a patient day). The hospital then is at risk of incurring losses if costs are greater than revenues for the year. The Social Security Administration has recently completed studies to evaluate PR systems in four States: Pennsylvania, New York, New Jersey, and Rhode Island (Gaus and Hellinger, 1976). These studies assessed the effectiveness of established PR systems in controlling hospital costs.

In Pennsylvania, the behavior of departmental costs was analyzed for 5 experimental and 10 control hospitals over the period 1971-74 under the auspices of Blue Cross of Western Pennsylvania. Participation in the experiment was voluntary. An approved per diem rate for each experimental hospital was based on similar-sized hospitals in the same general location and of the same teaching status during the forthcoming year.

In examining the costs of various departments, the costs of general service departments (dietary, laundry, administration, etc.) increased 75 percent for control hospitals and 52 percent for prospectively reimbursed (PR) hospitals. However, no difference in cost increases was found between PR and control hospitals for patient service departments (nursing, pathology, radiology, etc.). These findings have been interpreted to mean that in areas where physicians have control, hospital costs were not successfully controlled through PR. The net effect of PR on total hospital costs was a 2.5-percent reduction annually in the costs of experimental hospitals as compared with the control group.

Costs per patient day for New Jersey hospitals, which were under a mandatory prospective rate reimbursement system, were compared to the costs for a group of control hospitals in Philadelphia, Pennsylvania. The analysis showed that the PR program reduced costs by 2 to 3 percent per year over what they would have been in the absence of the program. Although not statistically significant, the effect was in the right direction.

In Rhode Island, a budget negotiation procedure was adopted by the Rhode Island Blue Cross Association and the Hospital Association of Rhode Island. A comparison of all Rhode Island hospitals with 12 short-term general hospitals in Massachusetts for the years 1971 and 1972 showed that PR effected a cost savings on the order of 2 to 6 percent per year. The effect was not statistically significant, but again it was in the right direction.

Two separate evaluations of PR in New York were conducted. In upstate New York, it was estimated that PR lowered the cost per patient day by 1 percent per year and the cost per admission by 2 percent per year, although the effects were not statistically significant. In downstate New York, PR decreased the average cost per patient day by 3 percent per year and decreased the cost per admission by 0.5 percent per year.

Even though the results of the PR evaluation studies did not pass the criterion of statistical significance, they showed a remarkable degree of consistency from one plan to the next, a fact which allows one to place somewhat more confidence in the findings. The magnitude of the effect of PR on costs in any one year is small, on the order of 1 to 3 percent, but if that effect is compounded each year for over 10 years, appreciable savings could be realized.

Reimbursement of physicians is another complex issue. One question is whether physicians should be forced to accept reimbursement from the insurer as payment in full for services delivered to the patient, or whether physicians

should be allowed to bill the patient for more than the plan allows. Nearly all Western European countries using fee schedules to reimburse physicians under national health insurance have, sooner or later, adopted the fee schedule as the *maximum* allowable charge to the patient, primarily to control health care costs (Glaser, 1976).

Fixed fee schedules have not been adopted on a widespread basis in the United States, but efforts have been made under the Medicare program to control amounts reimbursed to physicians. Medicare regulations issued over the period 1971 to 1975 restricted the maximum allowable amounts that could be reimbursed for physicians' services. When given a choice, physicians will tend to accept assignments of Medicare patients (agreeing that total charges will not be more than the allowed charges determined by the carrier) until the amount of reimbursement per service is reduced. For example, "assigned" claims submitted by physicians under Medicare were reduced by an average of $12.35 in 1975, almost twice the $6.71 reduction in 1971, and the number of "assigned" claims reduced during review rose from 45 to 71 percent in that time period. As a result, the assignment rate of 58.5 percent in 1971 fell to 51.8 percent by 1975 (Gornick, 1976).

The use of a maximum allowable fee schedule as a method of setting reimbursement levels for physicians is not without complications. A method must be devised for allowing increases in fixed fees. Negotiations between providers and consumers (or third-party payers) are essential, and these will place substantial demands on the participants. Provider associations must develop effective self-government to resolve conflicts among providers (i.e., reimbursement among different specialties) prior to going to the bargaining table. Insurers must develop negotiators who have a more adversarial attitude toward providers than has been their custom in the past. The negotiators must develop mutual understanding and respect in order to make the process productive. Greater financial discipline will be necessary among both providers and insurers. Finally, accurate data on utilization and on provider incomes will be necessary so that negotiators are working from a common information base (Glaser, 1977).

Other methods of paying physicians and controlling costs have been used abroad and have resulted in their own sets of problems. Under capitation payment methods the physican is paid a monthly allotment for each patient on his or her list, whether or not that patient seeks services. This would appear to control costs, but primary-care physicians may respond by increasing their referrals to specialists, who are paid per service rendered, particularly for time-consuming patients. This would negate the cost saving of capitation payment methods and misallocate patients to the care of more expensive specialists (Glaser, 1976).

Payment for hospitalized patients who are otherwise under capitation is often on a per diem basis to compensate physicians for the presumably increased time and effort of treating these patients. However, the result is that physicians hospitalize time-consuming patients because the income they accumulate from a few days' hospitalization is often greater than the case payment per month (Glaser, 1976). Policymakers must be wary of perverse incentives arising when reimbursement mechanisms are changed.

ADMINISTRATION OF A NATIONAL HEALTH INSURANCE PLAN

A wide variety of administrative structures have been proposed for national health insurance. These involve different roles for the Federal Government, State governments, and private health insurance companies. They range from a plan administered totally by the Federal Government, with no role for State governments and private carriers, to total reliance on the private insurance industry to underwrite and administer the program, with State governments responsible for regulating the insurance companies and setting reimbursement guidelines and quality standards. In between these extremes is an arrangement similar to the Medicare program in which the Federal Government administers and underwrites the program, while private health insurance companies serve as fiscal intermediaries.

Some have argued that commercial health

Table E. Financial aspects of public and private health insurance organizations, by type of organization: United States, 1974

Type of organization	Claims expense as a percent of premium income	Administrative expense as a percent of premium income	Administrative expense per enrollee in dollars	Net underwriting gain as a percent of premium income
Total	87.2	14.1	—	—1.3
Medicare [1]	94.8	5.2	$22.87	—
Hospital insurance [1]	97.2	2.8	9.08	—
Supplementary medical insurance [1]	88.9	11.1	14.61	—
Blue Cross-Blue Shield	94.1	7.4	—	—1.5
Blue Cross	96.1	5.4	6.21	—1.5
Blue Shield	89.5	11.8	7.21	—1.3
Private insurance companies	80.1	21.0	—	—1.1
Group policies	90.6	13.0	15.89	—3.6
Individual policies	46.3	47.0	53.47	6.7
Independent plans	93.2	7.6	13.15	—0.8
Community	94.2	6.7	—	—0.9
Employer-employee union	95.1	7.0	—	—2.1
Private group clinic	79.3	15.0	—	5.7
Dental service corporation	87.6	10.3	—	2.1

[1] 1973 data.

SOURCES: Mueller, M. S., and Piro, P. A.: Private health insurance in 1974, a review of coverage, enrollment, and financial experience, Social Security Bulletin 39(3):3-20, Mar. 1976; and Vogel, R. J., and Blair, R. D.: An analysis of Medicare administrative costs, Social Security Bulletin 37(8):3-23, Aug. 1974.

insurance carriers should administer a national health insurance program because of the carriers' claims processing technology and because political realities dictate against nationalizing or dislocating a $31 billion industry. Consequently, a majority of the proposed national health insurance plans include the private health insurance industry either as underwriters in a mandated coverage program or as fiscal intermediaries in a plan underwritten by the Federal Government (ORS, 1976).

The relative efficiency of the various insurance carriers, both public and private, will have important implications for the administrative costs of various national health insurance plans. Carriers vary widely in their administrative costs, and the presence or absence of economies of scale in administration has implications for the desired degree of administrative centralization of national health insurance.

Comparisons of efficiency among health insurers often are made on the basis of operating or administrative expense as a percent of total premium income. In 1974 this indicator was 5.4 percent for Blue Cross, 11.8 percent for Blue Shield, 13 percent for group commercial plans, 47 percent for individual commercial plans, 2.8 percent for Medicare hospital insurance (HI), and 11.1 percent for Medicare supplementary medical insurance (SMI). (See table E.) This comparison seems to indicate that Medicare hospital insurance is administered more efficiently than all other health insurance programs, but it must be noted that certain Federal Government overhead costs are not included.

In addition, the operating ratio does not adjust for size and/or frequency of claims and the mix of services covered. For example, the average size of a claim under the hospital insurance part of Medicare is 3 times the size of a supplementary claim. So if administrative expenses per claim were identical, the operating ratio for HI would be lower than that for SMI. On a per claim basis, however, SMI administrative costs are lower than HI costs ($3.18 for SMI versus $6.33 for HI in 1972) (Vogel and Blair, 1974). This difference is attributed to SMI amenability to electronic data processing and the absence of a requirement for provider audits and claims review for the SMI program.

Differences in the overall claims processing strategy adopted by the insurer can influence the operating ratio. Administrative costs may be cut back by reducing the number of personnel

involved in claims audit and review, resulting in fewer claims being disallowed and, hence, higher amounts paid out in claims. On the other hand, intensive and expensive claims review procedures can be passed on in the form of increased premiums. Therefore, conclusions regarding relative efficiency among insurance organizations cannot be drawn from the data shown in table E.

Two other factors bear on the issue of relative efficiency—possible differences in costs and premiums due to economies of scale, and average size of risk pool. In an analysis of operating ratios for 307 commercial (i.e., profit-seeking and mutual) insurance companies that sell health insurance, Blair, et al. (1975) found evidence of economies of scale. Operating ratios were found to decrease at a decreasing rate with increases in the total volume of premiums received by the firms. Thus centralization of administration would produce significant savings only up to a point, after which further savings would be very small. Blair, et al. did not find any *increase* in administrative costs at higher output levels, but this could be due to a restricted range of observations.

As to size of risk pool, it is well known that pooling of health insurance risks into larger groups allows lower premiums than possible when writing individual policies (Blair, et al., 1975).

In reviewing the role of State governments under national health insurance, the difficulties faced by the States under Medicaid have been well documented by Stevens and Stevens (1974). They conclude that the problems of Medicaid demonstrate that the States are unable or unwilling to carry a significant portion of the financing of a national health insurance program. Realities dictate that national health insurance be funded through Federal taxation or otherwise regulated by the Federal Government. This would protect State budgets from spiraling health care costs and also insure uniform coverage for all beneficiaries among the various States.

CONCLUSIONS

A review of some recent studies on national health insurance suggests answers to some of the policy questions posed in the introduction to this chapter.

The target population (Who should be covered by health insurance?).—To obtain universal coverage and equal access to health care for all individuals, national health insurance might expand existing programs, redefine eligibility, or establish a new program. Medicaid and Medicare programs limit enrollment now. Medicaid covers only welfare categories, and Medicare is limited to Social Security beneficiaries, railroad retirees, the disabled, and the very poor (others may buy in at a substantial cost). The result is that of all poor people, 9.5 million (39 percent) are excluded from Medicaid, and probably several hundred thousand near poor and medically indigent elderly are without Medicare coverage. Thus current health programs do not achieve universal coverage of health care expenses. An estimated 18 million persons will not have any protection against health care expenses in 1978.

Scope of benefits (What should be covered?).—Private health insurance, Medicaid, and Medicare do not cover certain types of services, such as nursing home care, mental health services, optical services, and dental services, or do not cover them adequately. A comprehensive benefit package might be recommended to reduce the overall burden of medical care expenses on the patient and to equalize the burden across income groups.

Cost sharing by consumers (How much should consumers pay out of pocket?).—Cost sharing does deter persons from using physicians' services. However, low-income persons are more likely to cut back on their use of health services when they are faced with copayments, coinsurance, or deductibles than are high-income persons. If equal access to medical care is an objective of national health insurance, cost sharing should be tied to the level of income.

The complexities resulting from a health insurance program with income-related cost sharing might be enormous. Not only might there be higher administrative costs but it might be even harder for individuals to comply with the regulations of such a national health insurance plan than it currently is for them to comply with Medicare. Consumer supplementation of public health insurance might overcome the deterrent effect and undermine the objectives of equal access to medical care. Nevertheless, it can be argued that cost sharing, which is basically

private financing of medical care, would allow tax revenues to be spent on other public goods that could not be accomplished through private financing.

Financing (How should national health insurance be financed?).—The most progressive methods for financing health insurance are through income taxes or taxes on payrolls and unearned income. In addition, the medical expense deduction benefits those in higher income tax brackets the most. The most regressive financing methods are premiums and out-of-pocket payments that are not income related. The regressivity of premiums, coinsurance, copayments, and deductibles can be altered by varying them with income. The income transfer of national health insurance may be quite substantial, and should be given explicit consideration by the policymaker.

Reimbursement (How should providers be reimbursed?).—Prospective reimbursement mechanisms have exhibited promise in controlling the rise in hospital costs. However, experience with and evaluation of additional reimbursement methods are needed to achieve more than marginal impact on hospital cost inflation.

Experiences under Medicare in the United States and experiences of foreign countries seem to suggest that countervailing economic and political power is required to control the level of physician reimbursement.

Administration (How should national health insurance be administered?).—Theoretical and empirical literature on the advantages of Federal, State, and private administration of national health insurance is limited. The question still before us is whether there should be a significant Federal role in processing and auditing claims, either similar to the current role under Medicare or enlarged to take over the functions of the fiscal intermediaries.

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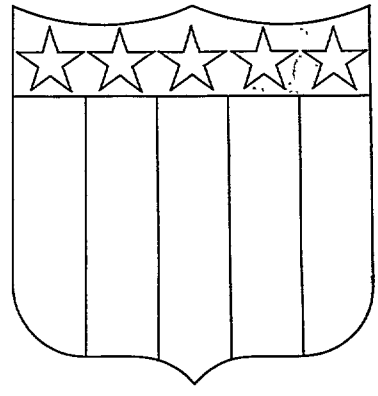
PART B

DATA ON THE NATION'S HEALTH



CONTENTS—Part B

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SECTION I

Health Status and Determinants

A. Population

The total population of the United States as of the middle of 1975 was approximately 213.5 million, which is an increase of 1.6 million people or 0.8 percent from the previous year. About three-quarters of the increase is natural (i.e., the excess of birth rates over death rates). Net civilian immigration contributes the balance (about one-fourth) of the total population increase.

The rate of natural increase in the 1970's is lower than it has ever been. The death rate has declined slightly (from 9.3 per 1,000 population in 1955 to 8.9 per 1,000 in 1975), and the birth rate has declined 41 percent in the same 20 years (from 25.0 per 1,000 population to 14.8). As a result, the rate of natural increase, which was 15.7 per 1,000 population in 1955, was only 5.9 per 1,000 in 1975.

The population has grown older in recent years primarily because of the declining birth rate and modest increases in survival rates. Births for 1975 added only 3.1 million to the population as compared with 4.1 million in 1955. A consequence of this depression in growth at the youngest ages has been an increase in the average age of the total population.

The changed age structure of the population has important implications for the health care delivery system and its financing. Since 1 million fewer infants were born in 1975 than were born 20 years ago, the demand for obstetric services has decreased. During the same 20-year period, the population at the older ages was increasing, thus increasing the need for costly long-term and chronic disease care. The rise in expenditures for health care is therefore partly due to the increase in the number of people 65 years and over, which as a proportion of the total population increased from 9 to 11 percent between 1955 and 1975. During the same period the percent of the population under age 20 dropped only slightly, from 36 to 35 percent, but the decline is projected to continue.

Projected changes in the population structure are important because planning for future demands on the health care system should begin well in advance. Assuming that women average 2.1 births and that recent death rates prevail, the total population will be about 262.5 million in the year 2000. The number of children under age 20 will increase by only 6.3 percent (from 74.6 million to 79.3 million), while the number of elderly people will increase by 36.6 percent (from 22.4 million to 30.6 million). The greatest increase will occur in the prime working ages of 35-49 when the children of the post World War II baby boom reach the middle years of life. These changes will have a significant impact on the amounts and types of health manpower and facilities for health care required by the population. Certainly, the demand for long-term institutional care and home health services will increase as a result of the increase in the number of elderly people.

The geographic distribution of the population has also been changing. States in the South and West have been gaining while States in the Northeast and North Central Regions have been losing population through migration. The heaviest migration streams are to the South from the Northeast and North Central Regions. Of lesser magnitude are migration streams to States in the West from States in the North Central and South Regions. From 1970 to 1975, the highest net inmigration rates were 20.8 percent for Florida and 18.7 percent for Arizona. The highest net outmigration rates were 4.6

percent for Rhode Island and 3.1 percent for Illinois. The regional migration patterns for 1970-75 followed those established in the late 1960's. While future migration is more difficult to project than age distribution changes, a different geographic distribution of health care manpower and facilities will be needed in the future.

The population bases for health data are usually slightly smaller than in the 213.5 million total population including Armed Forces overseas. Two population bases are represented in the largest part of the health data shown in this report: (1) the 211.4 million civilians and (2) the 209.1 million who are noninstitutionalized civilians.

Table 1. Total, resident, and civilian populations: United States, selected years 1960-75

Year	Total population including Armed Forces overseas	Resident population	Civilian population	
			Total	Non-institutionalized
	Number in thousands			
1960	180,671	179,979	178,140	176,246
1965	194,303	193,526	191,605	189,575
1970	204,878	203,810	201,722	199,589
1971	207,053	206,219	204,258	202,103
1972	208,846	208,234	206,461	204,287
1973	210,410	209,859	208,102	205,912
1974	211,901	211,389	209,683	207,477
1975	213,540	213,032	211,355	209,132

NOTE: Estimates as of July 1.

SOURCES: U.S. Bureau of the Census: Statistical Abstract of the United States: 1974, 95th ed., Washington, U.S. Government Printing Office, 1974; U.S. Bureau of the Census: Population estimates and projections, Current Population Reports, Series P-25, No. 632, Washington, U.S. Government Printing Office, July 1976.

Table 2. Resident population, according to race, sex, and age: United States, July 1, 1975

Age	All races			White			All other					
							Total			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Number in thousands											
All ages	213,137	103,760	109,377	185,198	90,423	94,775	27,940	13,338	14,602	24,456	11,646	12,811
Under 5 years	15,896	8,119	7,777	13,141	6,729	6,413	2,755	1,391	1,364	2,395	1,209	1,186
Under 1 year	3,081	1,575	1,506	2,558	1,310	1,248	523	265	258	452	229	223
1 year	2,999	1,531	1,468	2,475	1,266	1,209	524	264	260	451	228	223
2 years	3,014	1,539	1,474	2,475	1,267	1,208	538	272	266	466	235	231
3 years	3,225	1,646	1,579	2,661	1,361	1,299	564	284	280	491	248	243
4 years	3,577	1,828	1,749	2,972	1,523	1,449	606	305	301	535	270	265
5-9 years	17,334	8,836	8,499	14,479	7,403	7,076	2,855	1,432	1,423	2,519	1,263	1,256
5 years	3,493	1,783	1,710	2,916	1,493	1,423	578	290	288	506	254	252
6 years	3,430	1,745	1,685	2,859	1,459	1,399	572	286	286	504	252	252
7 years	3,397	1,732	1,665	2,836	1,451	1,385	561	281	280	495	248	248
8 years	3,436	1,750	1,686	2,881	1,471	1,409	556	279	277	492	246	245
9 years	3,577	1,825	1,752	2,988	1,528	1,460	589	297	292	523	263	259
10-14 years	20,418	10,410	10,008	17,185	8,783	8,401	3,233	1,627	1,607	2,902	1,459	1,443
10 years	3,942	2,008	1,934	3,288	1,679	1,608	654	329	325	585	294	291
11 years	3,977	2,031	1,946	3,348	1,715	1,634	629	317	312	563	284	280
12 years	4,065	2,074	1,991	3,424	1,751	1,673	641	323	318	575	290	286
13 years	4,138	2,107	2,031	3,495	1,784	1,711	643	322	320	578	290	288
14 years	4,296	2,189	2,107	3,629	1,854	1,775	667	335	332	601	302	299
15-19 years	20,966	10,614	10,352	17,798	9,034	8,765	3,167	1,580	1,587	2,820	1,405	1,416
15 years	4,225	2,154	2,071	3,571	1,825	1,746	654	329	325	586	294	292
16 years	4,201	2,137	2,063	3,552	1,811	1,741	649	326	323	582	292	290
17 years	4,220	2,146	2,073	3,581	1,824	1,756	639	322	317	570	287	283
18 years	4,229	2,131	2,097	3,602	1,820	1,782	627	311	316	556	275	281
19 years	4,092	2,046	2,047	3,494	1,754	1,740	599	292	307	526	255	271
20-24 years	19,037	9,488	9,550	16,380	8,222	8,157	2,658	1,265	1,392	2,309	1,097	1,213
20 years	4,103	2,056	2,047	3,508	1,765	1,742	595	291	304	526	255	271
21 years	3,907	1,958	1,948	3,359	1,693	1,665	548	265	283	480	230	249
22 years	3,755	1,868	1,887	3,237	1,622	1,614	518	245	273	451	213	238
23 years	3,622	1,798	1,825	3,129	1,567	1,562	493	231	263	423	198	225
24 years	3,651	1,808	1,843	3,147	1,574	1,574	503	234	269	430	201	229

Table 2. Resident population, according to race, sex, and age: United States, July 1, 1975—Continued

Age	All races			White			All other					
							Total			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Number in thousands											
25-29 years	16,848	8,345	8,503	14,729	7,370	7,359	2,119	975	1,144	1,785	826	958
25 years	3,471	1,719	1,751	2,998	1,500	1,497	473	219	254	403	188	215
26 years	3,431	1,697	1,734	2,984	1,492	1,493	447	205	241	377	175	202
27 years	3,468	1,716	1,753	3,030	1,514	1,515	439	202	237	371	172	199
28 years	3,753	1,863	1,891	3,341	1,674	1,668	412	189	223	345	159	186
29 years	2,724	1,350	1,374	2,376	1,190	1,186	348	161	188	289	134	156
30-34 years	13,935	6,861	7,075	12,160	6,047	6,113	1,776	814	962	1,481	675	806
30 years	2,942	1,454	1,488	2,541	1,269	1,272	400	184	216	332	153	180
31 years	2,827	1,393	1,433	2,478	1,233	1,245	348	160	188	288	132	156
32 years	3,007	1,482	1,525	2,655	1,321	1,335	352	161	190	294	134	160
33 years	2,625	1,290	1,335	2,292	1,138	1,154	334	152	181	279	126	152
34 years	2,534	1,241	1,293	2,193	1,086	1,107	341	155	186	288	130	158
35-39 years	11,584	5,631	5,953	10,128	4,976	5,151	1,457	655	802	1,258	565	692
35 years	2,393	1,168	1,225	2,085	1,028	1,057	308	139	169	263	118	144
36 years	2,355	1,145	1,210	2,058	1,011	1,047	296	133	163	255	115	140
37 years	2,326	1,129	1,197	2,035	999	1,036	291	130	160	252	113	139
38 years	2,262	1,098	1,164	1,980	971	1,009	282	126	156	245	110	135
39 years	2,249	1,092	1,157	1,970	967	1,003	279	125	154	243	109	134
40-44 years	11,175	5,457	5,718	9,780	4,822	4,958	1,395	634	760	1,195	545	651
40 years	2,230	1,088	1,142	1,948	961	987	282	128	154	244	111	133
41 years	2,196	1,071	1,125	1,915	945	971	281	127	154	241	109	132
42 years	2,234	1,089	1,145	1,946	958	989	288	131	157	246	112	134
43 years	2,234	1,093	1,142	1,963	969	994	271	124	147	231	105	125
44 years	2,280	1,116	1,164	2,007	990	1,017	273	126	148	234	108	126
45-49 years	11,784	5,722	6,062	10,436	5,096	5,339	1,349	626	723	1,168	544	624
50-54 years	11,980	5,762	6,218	10,731	5,180	5,551	1,249	582	667	1,098	510	588
55-59 years	10,537	5,024	5,512	9,523	4,553	4,969	1,014	471	543	908	419	489
60-64 years	9,243	4,321	4,923	8,348	3,908	4,439	895	412	483	813	368	445
65-69 years	8,099	3,584	4,515	7,270	3,220	4,050	829	365	464	765	329	436
70-74 years	5,775	2,443	3,332	5,296	2,224	3,072	479	218	261	420	187	233
75-79 years	4,001	1,572	2,429	3,682	1,434	2,248	319	138	181	273	116	157
80-84 years	2,649	960	1,688	2,431	874	1,558	218	87	131	194	76	118
85 years and over	1,877	613	1,265	1,703	548	1,155	175	65	110	152	53	99

Table 2. Resident population, according to race, sex, and age: United States, July 1, 1975—Continued

Age	All races			White			All other					
							Total			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Number in thousands											
1-4 years	12,815	6,544	6,271	10,583	5,418	5,165	2,232	1,126	1,106	1,942	980	962
5-13 years	33,456	17,056	16,400	28,035	14,333	13,702	5,422	2,724	2,698	4,821	2,420	2,401
14-17 years	16,941	8,626	8,314	14,332	7,314	7,018	2,608	1,312	1,296	2,339	1,176	1,163
18-24 years	27,358	13,665	13,694	23,475	11,796	11,679	3,883	1,869	2,015	3,392	1,628	1,764
18-21 years	16,330	8,191	8,139	13,962	7,032	6,929	2,369	1,159	1,210	2,088	1,016	1,072
22-24 years	11,028	5,474	5,554	9,513	4,764	4,750	1,515	710	805	1,303	612	692
15-44 years	93,545	46,395	47,150	80,974	40,471	40,503	12,571	5,924	6,646	10,849	5,113	5,736
14 years and over	163,785	78,585	85,200	144,022	69,361	74,660	19,763	9,223	10,540	17,241	8,016	9,224
16 years and over	155,265	74,242	81,023	136,822	65,683	71,139	18,443	8,559	9,884	16,054	7,420	8,634
18 years and over	146,844	69,958	76,886	129,689	62,048	67,642	17,155	7,911	9,244	14,902	6,841	8,061
21 years and over	134,421	63,726	70,695	119,086	56,709	62,378	15,334	7,017	8,317	13,294	6,055	7,238
62 years and over	27,807	11,677	16,130	25,248	10,557	14,691	2,559	1,120	1,439	2,296	981	1,315
65 years and over	22,400	9,172	13,228	20,382	8,299	12,082	2,019	873	1,146	1,804	760	1,043
Median age of population in years	28.8	27.6	30.0	29.6	28.4	31.0	23.7	22.5	24.7	23.4	22.2	24.6

SOURCE: U.S. Bureau of the Census: Population estimates and projections, Current Population Reports, Series P-25, No. 614. Washington. U.S. Government Printing Office, Nov. 1975.

Table 3. Birth rates, death rates, and rates of natural increase, according to race: United States, selected years 1910-75

(Data are based on the National Vital Registration System)

Year	Birth rate [1]				Death rate [2]				Rate of natural increase [3]			
	All races	White	All other		All races	White	All other		All races	White	All other	
			Total	Black			Total	Black			Total	Black
	Rate per 1,000 resident population											
1910	30.1	29.2	—	—	14.7	14.5	21.7	—	15.4	14.7	—	—
1920	27.7	26.9	35.0	—	13.0	12.6	17.7	—	14.7	14.3	17.3	—
1930	21.3	20.6	27.5	—	11.3	10.8	16.3	16.4	10.0	9.8	11.2	—
1940	19.4	18.6	26.7	—	10.8	10.4	13.8	13.9	8.6	8.2	12.9	—
1950	24.1	23.0	33.3	—	9.6	9.5	11.2	11.3	14.5	13.5	22.1	—
1955	25.0	23.8	34.7	—	9.3	9.2	10.0	—	15.7	14.6	24.7	—
1960	23.7	22.7	32.1	31.9	9.5	9.5	10.1	10.4	14.2	13.2	22.0	21.5
1965	19.4	18.3	27.6	27.5	9.4	9.4	9.6	10.1	10.0	8.9	18.0	17.4
1970	18.4	17.4	25.1	25.3	9.5	9.5	9.4	10.0	8.9	7.9	15.7	15.3
1971	17.2	16.2	24.7	24.5	9.3	9.4	9.2	9.7	7.9	6.8	15.5	14.8
1972	15.6	14.6	22.9	22.6	9.4	9.5	9.2	9.7	6.2	5.1	13.7	12.9
1973	14.9	13.9	21.9	21.5	9.4	9.4	9.1	9.7	5.5	4.5	12.8	11.8
1974	14.9	14.0	21.4	21.0	9.2	9.2	8.7	9.2	5.7	4.8	12.7	11.8
1975	14.8	13.8	21.2	20.9	8.9	9.0	8.3	8.9	5.9	4.8	12.9	12.0

[1] The 1920 and 1930 birth rates include adjustments for States not in the registration area; the 1910 figures are estimates based on the number of registered births in the 10 original registration States in 1910. Birth rates for 1960, 1965, 1970, and 1971 are based on a 50-percent sample of births; for 1972-75 they are based on 100 percent of births in selected States and on a 50-percent sample of births in all other States.

[2] Death rates for 1972 are based on a 50-percent sample of deaths.

[3] Difference between birth and death rates.

NOTE: Beginning 1970, births and deaths to nonresidents of the United States are excluded.

SOURCES: National Office of Vital Statistics: Births and birth rates in the entire United States, 1909 to 1948, by P. K. Whelpton, Vital Statistics—Special Reports, Vol. 33, No. 8, Public Health Service, Washington, D.C., Sept. 1950; National Center for Health Statistics: Vital Statistics of the United States, 1975, Vols. I and II, Health Resources Administration, DHEW, Rockville, Md., to be published; plus unpublished data.

Table 4. Percent of population changing county or State of residence between March 1970 and March 1975, according to geographic region and location of residence in 1975: United States, 1975

Geographic region and location of residence in 1975	1975 population aged 5 years and over in thousands [1]	County of residence in 1975				
		Total	Same county as in 1970	Different county from 1970		
				Total	Same State	Different State
		Percent distribution				
United States	179,489	100.0	81.6	18.4	9.1	9.3
Within SMSA	120,853	100.0	82.6	17.4	8.4	9.0
Central city	51,431	100.0	86.2	13.8	5.8	7.9
Balance of SMSA	69,423	100.0	79.9	20.1	10.3	9.8
Outside SMSA	58,635	100.0	79.6	20.4	10.6	9.9
Northeast	40,644	100.0	87.8	12.2	6.9	5.3
Within SMSA	31,978	100.0	88.8	11.2	6.6	4.7
Central city	13,348	100.0	92.1	7.9	4.5	3.4
Balance of SMSA	18,630	100.0	86.4	13.6	8.0	5.6
Outside SMSA	8,666	100.0	84.4	15.6	8.2	7.4
North Central	49,201	100.0	84.2	15.8	9.0	6.8
Within SMSA	32,091	100.0	85.8	14.2	7.5	6.7
Central city	13,217	100.0	88.8	11.2	4.7	6.5
Balance of SMSA	18,874	100.0	83.7	16.3	9.5	6.8
Outside SMSA	17,111	100.0	81.3	18.7	11.7	7.0
South	58,123	100.0	78.1	21.9	9.8	12.2
Within SMSA	32,394	100.0	77.3	22.7	9.2	13.5
Central city	15,277	100.0	82.6	17.4	6.8	10.6
Balance of SMSA	17,117	100.0	72.7	27.3	11.3	16.0
Outside SMSA	25,730	100.0	79.0	21.0	10.4	10.6
West	31,520	100.0	76.0	24.0	11.0	13.0
Within SMSA	24,390	100.0	77.3	22.7	10.9	11.8
Central city	9,589	100.0	80.3	19.7	7.7	12.0
Balance of SMSA	14,802	100.0	75.4	24.6	13.0	11.6
Outside SMSA	7,129	100.0	71.6	28.4	11.3	17.0

[1] Includes the civilian noninstitutionalized population of the United States plus approximately 1,064,000 members of the Armed Forces in the United States living off post or with their families on post in 1975. Excludes all other members of the Armed Forces, persons abroad at the beginning of the period, and persons of unknown mobility status.

SOURCE: U.S. Bureau of the Census: Population characteristics. Current Population Reports. Series P-20, No. 285. Washington. U.S. Government Printing Office, Oct. 1975.

Table 5. Components of population change, according to geographic division and State: United States, 1970-75

Geographic division and State	Resident population		Components of population change, 1970-75				Net migration as percent of 1970 population
	April 1, 1970 (census)	July 1, 1975 (estimate)	Net change [1]	Births [2]	Deaths [2]	Net migration	
	Number in thousands						
United States	203,304	213,121	9,817	17,490	10,200	2,527	1.2
New England	11,847	12,198	351	885	605	71	0.6
Maine	994	1,059	66	86	57	37	3.7
New Hampshire	738	818	80	64	39	55	7.5
Vermont	445	471	26	39	23	11	2.4
Massachusetts	5,689	5,828	138	411	298	25	0.4
Rhode Island	950	927	—23	70	49	—43	—4.6
Connecticut	3,032	3,095	63	215	138	—14	—0.5
Middle Atlantic	37,213	37,263	50	2,783	1,975	—758	—2.0
New York	18,242	18,120	—121	1,375	958	—539	—3.0
New Jersey	7,171	7,316	145	538	357	—37	—0.5
Pennsylvania	11,801	11,827	26	869	661	—182	—1.5
East North Central	40,266	40,979	713	3,469	1,982	—774	—1.9
Ohio	10,657	10,759	102	910	527	—282	—2.6
Indiana	5,196	5,311	116	466	257	—94	—1.8
Illinois	11,113	11,145	32	951	576	—343	—3.1
Michigan	8,882	9,157	275	786	406	—105	—1.2
Wisconsin	4,418	4,607	189	355	216	50	1.1
West North Central	16,328	16,690	362	1,332	866	—103	—0.6
Minnesota	3,806	3,926	120	308	179	—9	—0.2
Iowa	2,825	2,870	45	221	154	—22	—0.8
Missouri	4,678	4,763	85	385	270	—29	—0.6
North Dakota	618	635	17	53	30	—7	—1.1
South Dakota	666	683	17	59	35	—6	—1.0
Nebraska	1,485	1,546	61	127	80	14	0.9
Kansas	2,249	2,267	18	179	117	—44	—2.0
South Atlantic	30,679	33,715	3,036	2,762	1,585	1,859	6.1
Delaware	548	579	31	47	26	9	1.7
Maryland	3,924	4,098	174	310	172	37	0.9
District of Columbia	757	716	—40	63	43	—61	—8.1
Virginia	4,651	4,967	315	401	211	125	2.7
West Virginia	1,744	1,803	59	152	105	11	0.7
North Carolina	5,084	5,451	367	472	242	137	2.7
South Carolina	2,591	2,818	227	265	125	88	3.4
Georgia	4,588	4,926	338	465	224	97	2.1
Florida	6,791	8,357	1,565	587	438	1,416	20.8
East South Central	12,808	13,544	736	1,218	685	202	1.6
Kentucky	3,221	3,396	175	295	177	57	1.8
Tennessee	3,926	4,188	262	352	205	115	2.9
Alabama	3,444	3,614	170	329	180	21	0.6
Mississippi	2,217	2,346	129	242	123	9	0.4
West South Central	19,325	20,855	1,530	1,915	948	563	2.9
Arkansas	1,923	2,116	192	182	114	125	6.5
Louisiana	3,642	3,791	148	364	177	—38	—1.1
Oklahoma	2,559	2,712	152	226	141	68	2.6
Texas	11,199	12,237	1,037	1,143	515	409	3.7

See footnotes at end of table.

Table 5. Components of population change, according to geographic division and State: United States, 1970-75—Continued

Geographic division and State	Resident population		Components of population change, 1970-75				Net migration as percent of 1970 population
	April 1, 1970 (census)	July 1, 1975 (estimate)	Net change [1]	Births [2]	Deaths [2]	Net migration	
	Number in thousands						
Mountain	8,290	9,644	1,354	888	366	832	10.0
Montana	694	748	53	63	35	26	3.7
Idaho	713	820	107	77	33	63	8.8
Wyoming	332	374	42	33	16	25	7.5
Colorado	2,210	2,534	324	207	94	212	9.6
New Mexico	1,017	1,147	130	112	41	59	5.8
Arizona	1,775	2,224	448	202	85	332	18.7
Utah	1,059	1,206	147	147	39	39	3.6
Nevada	489	592	103	47	22	78	15.9
Pacific	26,549	28,234	1,686	2,237	1,187	635	2.4
Washington	3,413	3,544	131	272	158	17	0.5
Oregon	2,092	2,288	197	171	107	133	6.3
California	19,971	21,185	1,214	1,675	893	431	2.2
Alaska	303	352	49	37	8	20	6.5
Hawaii	770	865	95	83	22	34	4.5

[1] Net change in resident population is composed of the difference between births and deaths of residents (natural increase) plus or minus estimated net migration for the area during the period April 1, 1970, to June 30, 1975.

[2] Births and deaths are based on vital statistics reported for the period April 1, 1970, to December 31, 1974, with extrapolation to June 30, 1975.

SOURCE: U.S. Bureau of the Census: Population estimates and projections. Current Population Reports. Series P-25. No. 640. Washington. U.S. Government Printing Office, Nov. 1976.

Table 6. Population projections under different assumptions of completed fertility and percent change from 1975 population: United States, selected years 1980-2000

Year	Assumption of average number of lifetime births per woman		
	Series I (2.7 births)	Series II (2.1 births)	Series III (1.7 births)
	Projected population in thousands		
1980	225,705	222,769	220,356
1985	241,274	234,068	228,355
1990	257,663	245,075	235,581
1995	272,685	254,495	241,198
2000	287,007	262,494	245,098
	Percent change from 1975 population [1]		
1980	5.7	4.3	3.1
1985	12.9	9.6	6.9
1990	20.6	14.7	10.3
1995	27.6	19.1	12.9
2000	34.3	22.9	14.7

[1] Estimated total population, including Armed Forces abroad, for July 1, 1975=213,631,000.

NOTE: Projected total population, including Armed Forces abroad. Based on U.S. Bureau of the Census assumptions of average numbers of lifetime births per woman with continuation of mortality rates at current levels.

SOURCES: U.S. Bureau of the Census: Population estimates and projections. Current Population Reports. Series P-25, Nos. 601 and 614. Washington. U.S. Government Printing Office, Oct. 1975 and Nov. 1975, respectively.

Table 7. Population projections and projected percent change from 1975 population under Series II fertility assumption (2.1 births), according to age: United States, selected years 1980-2000

Age	1975 population in thousands	1980	1985	1990	1995	2000	1980	1985	1990	1995	2000
		Projected population in thousands					Percent change from 1975 population				
All ages	213,631	222,769	234,068	245,075	254,495	262,494	4.3	9.6	14.7	19.1	22.9
Under 5 years	15,896	17,259	19,785	20,096	19,161	18,364	8.6	24.5	26.4	20.5	15.5
5-9 years	17,334	16,139	17,501	20,019	20,323	19,387	—6.9	1.0	15.5	17.2	11.8
10-14 years	20,418	17,804	16,605	17,974	20,513	20,812	—12.8	—18.7	—12.0	0.5	1.9
15-19 years	21,028	20,589	18,000	16,800	18,166	20,707	—2.1	—14.4	—20.1	—13.6	—1.5
20-24 years	19,242	20,908	20,496	17,954	16,755	18,137	8.7	6.5	—6.7	—12.9	—5.7
25-29 years	16,941	18,933	20,572	20,159	17,672	16,506	11.8	21.4	19.0	4.3	—2.6
30-34 years	13,994	17,224	19,274	20,903	20,476	17,988	23.1	37.7	49.4	46.3	28.5
35-39 years	11,630	14,027	17,249	19,252	20,859	20,428	20.6	48.3	65.5	79.4	75.6
40-44 years	11,195	11,675	14,083	17,293	19,285	20,887	4.3	25.8	54.5	72.3	86.6
45-49 years	11,790	11,014	11,497	13,853	16,995	18,953	—6.6	—2.5	17.5	44.1	60.8
50-54 years	11,981	11,626	10,881	11,360	13,686	16,789	—3.0	—9.2	—5.2	14.2	40.1
55-59 years	10,537	11,303	10,988	10,285	10,745	12,947	7.3	4.3	—2.4	2.0	22.9
60-64 years	9,243	9,744	10,477	10,194	9,551	9,990	5.4	13.4	10.3	3.3	8.1
65-69 years	8,099	8,663	9,161	9,861	9,609	9,023	7.0	13.1	21.8	18.6	11.4
70-74 years	5,775	6,749	7,228	7,671	8,258	8,056	16.9	25.2	32.8	43.0	39.5
75-79 years	4,001	4,291	5,029	5,402	5,760	6,224	7.2	25.7	35.0	44.0	55.6
80-84 years	2,649	2,750	2,976	3,513	3,798	4,080	3.8	12.3	32.6	43.4	54.0
85 years and over	1,877	2,071	2,265	2,487	2,881	3,217	10.3	20.7	32.5	53.5	71.4

NOTE: Projected population and percent change are based on U.S. Bureau of the Census Series II fertility assumption of an average 2.1 lifetime births per woman with continuation of mortality rates at current levels. Figures are for the total population, including Armed Forces abroad, as of July 1.

SOURCE: U.S. Bureau of the Census: Population estimates and projections. Current Population Reports. Series P-25, Nos. 601 and 614. Washington. U.S. Government Printing Office, Oct. 1975 and Nov. 1975, respectively.

B. Fertility

The birth rate in the United States continued the downward trend which began at the height of the baby boom in 1957. By the mid-1970's the crude birth rate was below the historical low of the 1930's despite record numbers of young people who are 18-19 years of age or in their early twenties when fertility is highest. These changes in fertility have enormous impact on the need for and utilization of obstetrical and pediatric services.

In 1975, 3.1 million children were born alive in the United States in contrast with 3.8 million in 1965. Yet more first births were recorded (1.3 million) than in 1965 (1.2 million). The great decline has been in higher order births. This decline is partly due to changes in the age structure of the population and the timing of births; it is also caused by unprecedented changes in contraceptive use as a means of reducing completed family size. Utilization of the more effective means of fertility control increased.

Higher proportions of married women of childbearing ages were using contraception in 1973 than in 1965 (70 percent compared to 64 percent). More important, only 14 percent of the contraceptive users in 1973 were relying on methods with high failure rates, while 31 percent were relying on such methods in 1965. Thus 60 percent of the married women interviewed in 1973 were using effective means of contraception, in contrast with 44 percent in 1965. The most effective methods are sterilization, the birth control pill, and the intrauterine device (IUD). In 1973 almost a quarter of all users relied on sterilization, 36 percent on birth control pills, and 10 percent on IUD's. The percent of contraceptive users relying on the diaphragm and condom, also regarded as relatively effective methods, declined from 32 percent to 17 percent.

In 1973 married women aged 35-44 years were less likely than the younger wives to be using contraception. Also black women were less likely than white women to be using such devices. When they did use contraception, the older and black wives both tended toward either permanent ending of fertility through sterilization or toward reliance on nonmedical methods. Among contraceptive users, the youngest married women aged 15-24 relied heavily on the pill (65 percent) and IUD's (11 percent).

Poverty levels also affect the use of contraception. Of the total 26.6 million married women of childbearing ages in 1973, the vast majority (19.5 million) were well above the poverty level. About 70 percent of these women were using some form of contraception. The 5.1 million women just above poverty level were even more likely to be using contraception (73 percent), while the 2.0 million who were below the poverty level were least likely to use contraception (61 percent).

It is unfortunate that we know little about fertility control among unmarried women, especially young women, because knowledge of the changing patterns of contraceptive usage among these women would help in understanding the changes in the fertility rates for all women. These rates for women aged 15-49 have been declining at every age, but the greatest percentage of declines have been at the older ages of childbearing. For example, birth rates for women age 35 and older are less than half the 1965 rates, while for women aged 15-19 the 1975 rate was 80 percent of the 1965 rate. As a result, a higher proportion of children are born to women under age 20 (19 percent in 1975 and 16 percent in 1965); a higher proportion are now first births (43 percent vs. 31 percent); and a higher proportion are now born to unmarried women (14 percent vs. 8 percent). Over half of the births to unmarried women in 1975 were to women who had not reached their 20th birthday; 29 percent were to young women who were not yet 18 and thus were unlikely to have finished high school.

Therefore, the needs for fertility-related services (i.e., prenatal and postnatal care, well-baby care, and fertility control services) were different in 1975 than in 1965 and vastly different from the needs a quarter of a century ago, when relatively large families and high marital fertility were the societal norms.

The need for fertility-rated services varies enormously among the States and geographic divisions, at least partly because of the differing demographic characteristics of the population by States. Birth rates per 1,000 population were generally low in the New England and Middle Atlantic States and highest in the Mountain and South Central States.

Table 8. Live births and percent of live births which were first births, according to race: United States, selected years 1950-75

(Data are based on the National Vital Registration System)

Year	Race							
	All races		White		All other			
					Total		Black	
	Number of births	Percent first births	Number of births	Percent first births	Number of births	Percent first births	Number of births	Percent first births
1950	3,632,000	30.9	3,108,000	32.2	524,000	23.4	466,718	25.1
1955	4,097,000	27.5	3,485,000	28.5	613,000	21.9	558,251	22.7
1960	4,257,850	26.4	3,600,744	27.2	657,106	21.9	602,264	---
1965	3,760,358	30.8	3,123,860	31.7	636,498	26.8	581,126	26.7
1970	3,731,386	38.8	3,091,264	39.1	640,122	37.5	572,362	37.4
1971	3,555,970	39.2	2,919,746	39.4	636,224	38.1	564,960	38.0
1972	3,258,411	40.7	2,655,558	40.7	602,853	40.6	531,329	40.6
1973	3,136,965	41.4	2,551,030	41.5	585,935	41.3	512,597	41.3
1974	3,159,958	42.2	2,575,792	42.3	584,166	41.9	507,162	41.9
1975	3,144,198	42.5	2,551,996	42.6	592,202	41.7	511,581	41.8

NOTE: Births adjusted for underregistration for 1950 and 1955; registered births for all other years. Figures for 1960, 1965, 1970, and 1971 based on a 50-percent sample of births; for 1972-75, based on 100 percent of births in selected States and on a 50-percent sample of births in all other States.

SOURCE: National Center for Health Statistics: Vital Statistics of the United States, Vol. I, for data years 1950-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 9. Contraceptive use by currently married women 15-44 years of age, according to method of contraception, age, and poverty level: United States, 1973

(Data are based on household interviews of a sample of women in the childbearing ages)

Age and poverty level	Number of currently married women in thousands	Percent using contraception	Method of contraception							
			Total	Wife sterilized	Husband sterilized	Pill	IUD	Diaphragm	Condom	All other
			Percent distribution of women using contraception							
All ages 15-44 years	26,646	69.6	100.0	12.3	11.2	36.1	9.6	3.4	13.5	13.8
Under poverty level	2,033	60.7	100.0	19.7	8.0	40.0	9.4	*	8.3	11.4
100 to 149 percent of poverty level	2,108	72.4	100.0	19.7	8.1	37.0	10.5	*	9.7	13.7
150 to 199 percent of poverty level	3,053	73.0	100.0	14.4	8.7	37.4	11.9	*	11.3	14.4
200+ percent of poverty level	19,452	69.7	100.0	10.5	12.2	35.4	9.2	4.0	14.7	14.0
15-29 years	12,040	70.2	100.0	5.9	5.3	53.6	12.0	2.5	10.0	10.6
Under poverty level	993	61.9	100.0	*	*	58.9	*	*	*	*
100 to 149 percent of poverty level	1,028	75.5	100.0	12.5	*	51.6	11.2	*	9.9	*
150 to 199 percent of poverty level	1,487	74.4	100.0	7.1	*	53.6	13.6	*	9.0	18.2
200+ percent of poverty level	8,531	69.8	100.0	4.5	5.4	53.3	12.3	2.9	10.5	11.1
30-44 years	14,606	69.1	100.0	17.7	16.1	21.4	7.6	4.2	16.4	16.6
Under poverty level	1,040	59.6	100.0	29.8	11.6	21.3	11.2	*	*	13.8
100 to 149 percent of poverty level	1,079	69.5	100.0	27.1	11.5	21.8	9.7	*	9.5	19.0
150 to 199 percent of poverty level	1,566	71.6	100.0	21.6	11.8	21.3	10.2	*	13.7	10.7
200+ percent of poverty level	10,921	69.6	100.0	15.3	17.6	21.4	6.7	4.8	18.1	16.2

SOURCE: National Center for Health Statistics: Contraceptive utilization among currently married women 15-44 years of age: United States, 1973. Monthly Vital Statistics Report. Vol. 25, No. 7, Supp. (HRA) 76-1120. Health Resources Administration. Rockville, Md. Oct. 4, 1976.

Table 10. Contraceptive use by currently married women 15-44 years of age, according to method of contraception, race, and age: United States, 1965, 1970, and 1973

(Data based on household interviews of samples of women in the childbearing ages)

Race, age, and year of survey	Number of currently married women in thousands	Percent using contraception	Method of contraception							
			Total	Wife sterilized	Husband sterilized	Pill	IUD	Diaphragm	Condom	All other
			Percent distribution of women using contraception							
All races 15-44 years [1]										
1965	24,710	63.9	100.0	7.0	5.1	23.9	1.2	9.9	21.9	30.9
1970	25,577	65.0	100.0	8.5	7.8	34.2	7.4	5.7	14.2	22.4
1973	26,646	69.7	100.0	12.4	11.1	36.0	9.6	3.4	13.5	13.8
15-24 years:										
1965	5,324	59.8	100.0	1.3	1.5	48.7	1.9	4.4	15.7	26.5
1970	6,212	63.4	100.0	1.0	1.3	58.5	8.8	2.5	9.0	19.0
1973	5,977	68.8	100.0	3.7	2.2	65.2	10.5	1.6	8.3	8.7
25-34 years:										
1965	9,316	68.3	100.0	6.8	5.4	25.2	1.3	8.9	23.3	29.2
1970	10,484	68.6	100.0	7.9	7.3	34.7	9.7	5.6	13.4	21.4
1973	11,311	73.0	100.0	11.4	11.2	35.3	12.4	3.2	13.3	13.3
35-44 years:										
1965	10,070	61.9	100.0	10.2	6.6	9.8	0.7	13.9	23.8	35.0
1970	8,881	61.9	100.0	14.7	13.1	16.1	3.6	8.0	18.9	25.7
1973	9,358	66.4	100.0	19.4	17.0	17.7	5.3	5.1	17.4	18.0
White 15-44 years										
1965	22,382	64.9	100.0	6.3	5.4	24.0	1.0	10.4	22.4	30.3
1970	23,220	65.7	100.0	7.5	8.3	34.0	7.3	5.7	14.8	22.3
1973	24,249	70.7	100.0	11.6	11.8	35.5	9.4	3.6	14.1	13.9
15-24 years:										
1965	4,724	59.6	100.0	1.1	1.7	51.4	1.5	4.4	15.4	24.6
1970	5,595	63.8	100.0	0.7	1.3	58.9	8.2	2.6	9.3	19.1
1973	5,384	69.2	100.0	3.5	2.4	64.4	10.4	1.7	8.8	8.7
25-34 years:										
1965	8,387	69.4	100.0	6.2	5.7	25.0	1.1	9.4	23.6	29.1
1970	9,578	69.0	100.0	7.1	7.8	34.4	9.6	5.6	14.0	21.5
1973	10,347	73.7	100.0	11.1	11.7	34.9	12.1	3.2	13.8	13.2
35-44 years:										
1965	9,271	63.2	100.0	8.9	7.0	9.9	0.7	14.4	24.6	34.4
1970	8,047	63.5	100.0	12.9	14.0	16.1	3.6	8.1	19.5	25.8
1973	8,518	67.9	100.0	17.5	18.1	17.7	5.2	5.3	18.1	18.2

See footnote at end of table.

Table 10. Contraceptive use by currently married women 15-44 years of age, according to method of contraception, race, and age: United States, 1965, 1970, and 1973—Continued

(Data based on household interviews of samples of women in the childbearing ages)

Race, age, and year of survey	Number of currently married women in thousands	Percent using contraception	Method of contraception							
			Total	Wife sterilized	Husband sterilized	Pill	IUD	Diaphragm	Condom	All other
Black 15-44 years			Percent distribution of women using contraception							
1965	2,091	57.2	100.0	14.4	0.5	21.7	2.9	5.1	17.0	38.5
1970	2,031	59.2	100.0	19.3	1.1	37.4	7.6	5.2	6.7	22.7
1973	2,081	60.3	100.0	23.1	1.7	43.5	12.7	2.0	5.3	11.5
15-24 years:										
1965	555	61.5	100.0	3.2	0.6	27.8	5.7	3.2	17.7	41.7
1970	506	60.5	100.0	1.7	0.0	59.3	10.2	2.5	6.8	19.4
1973	547	66.2	100.0	6.5	0.1	73.5	11.9	0.1	2.1	5.8
25-34 years:										
1965	794	62.8	100.0	12.6	0.4	27.3	3.0	4.3	20.3	32.1
1970	787	67.3	100.0	16.7	1.0	39.2	8.3	5.4	5.4	24.1
1973	819	63.8	100.0	17.9	2.8	42.5	16.8	2.9	4.9	12.3
35-44 years:										
1965	742	47.9	100.0	27.9	0.6	7.9	0.0	7.9	11.5	44.1
1970	738	49.4	100.0	37.9	2.1	16.4	4.3	7.1	8.6	23.5
1973	715	51.9	100.0	46.8	1.6	15.9	7.7	2.7	9.1	16.3

[1] Includes all other races not shown separately.

NOTE: Data from 1965 and 1970 National Fertility Survey and 1973 National Survey of Family Growth.

SOURCE: Westoff, C. F.: Trends in contraceptive practice: 1965-1973. Fam. Plann. Perspect. 8(2):54-57, Mar./Apr. 1976. (Copyright: reprinted with permission.)

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Table 11. Live births by race, and percent distribution of live births by age of mother according to race: United States, selected years 1950-75
(Data are based on the National Vital Registration System)

Race and year	Number of live births	Age of mother													
		All ages	Under 15 years	15-19 years						20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
				Total	15	16	17	18	19						
		Percent distribution													
Total															
1950	3,554,149	100.0	0.1	11.9	0.4	1.1	2.1	3.5	4.8	31.8	28.8	16.8	8.3	2.1	0.1
1955	4,047,295	100.0	0.1	11.9	0.4	1.1	2.2	3.4	4.8	31.5	27.7	17.8	8.5	2.2	0.1
1960	4,257,850	100.0	0.2	13.9	0.5	1.3	2.6	4.0	5.5	33.5	25.7	16.2	8.5	2.2	0.1
1965	3,760,358	100.0	0.2	15.7	0.6	1.5	2.9	5.0	5.7	35.6	24.6	14.1	7.5	2.2	0.1
1970	3,731,386	100.0	0.3	17.3	0.8	1.9	3.3	4.9	6.4	38.0	26.7	11.5	4.8	1.3	0.1
1971	3,555,970	100.0	0.3	17.7	0.9	2.0	3.5	5.0	6.3	38.1	26.6	11.4	4.6	1.2	0.1
1972	3,258,411	100.0	0.4	18.9	1.0	2.4	3.9	5.3	6.3	36.0	27.6	11.5	4.3	1.1	0.1
1973	3,136,965	100.0	0.4	19.2	1.1	2.5	4.0	5.3	6.3	35.1	28.3	11.8	4.0	1.0	0.1
1974	3,159,958	100.0	0.4	18.8	1.1	2.4	3.9	5.2	6.2	35.1	29.2	11.8	3.7	0.9	0.1
1975	3,144,198	100.0	0.4	18.5	1.1	2.4	3.8	5.2	6.1	34.8	29.8	11.9	3.7	0.8	0.1
White															
1950	3,063,627	100.0	0.1	10.4	0.2	0.8	1.8	3.1	4.5	31.7	29.7	17.4	8.4	2.1	0.1
1955	3,458,448	100.0	0.1	10.9	0.3	0.9	1.9	3.1	4.7	31.5	28.3	18.3	8.7	2.2	0.1
1960	3,600,744	100.0	0.1	12.7	0.3	1.0	2.3	3.7	5.4	33.9	26.2	16.3	8.5	2.2	0.1
1965	3,123,860	100.0	0.1	14.2	0.3	1.1	2.5	4.7	5.6	36.2	25.3	14.3	7.6	2.2	0.1
1970	3,091,264	100.0	0.1	15.1	0.5	1.4	2.8	4.4	6.0	38.8	28.1	11.7	4.8	1.3	0.1
1971	2,919,746	100.0	0.1	15.2	0.5	1.5	2.9	4.4	5.9	38.9	28.2	11.7	4.5	1.2	0.1
1972	2,655,558	100.0	0.2	16.4	0.7	1.8	3.3	4.7	5.9	36.5	29.5	11.9	4.3	1.1	0.1
1973	2,551,030	100.0	0.2	16.7	0.7	1.9	3.4	4.8	5.9	35.4	30.4	12.3	4.0	1.0	0.1
1974	2,575,792	100.0	0.2	16.3	0.7	1.9	3.3	4.6	5.8	35.4	31.2	12.3	3.7	0.9	0.1
1975	2,551,996	100.0	0.2	16.1	0.7	1.8	3.3	4.6	5.7	35.1	31.7	12.5	3.7	0.8	0.0
All other															
1950	490,522	100.0	0.7	20.5	1.4	2.8	4.3	5.7	6.3	32.4	23.1	13.1	7.4	2.0	0.2
1955	588,847	100.0	0.6	19.0	1.4	2.6	3.9	5.1	6.0	31.1	24.1	15.2	7.7	2.0	0.1
1960	657,106	100.0	0.6	19.6	1.3	2.6	4.1	5.3	6.3	31.5	22.9	15.1	8.0	2.1	0.1
1965	636,498	100.0	0.8	23.2	1.8	3.4	5.0	6.4	6.6	32.3	21.1	13.1	7.3	2.1	0.1
1970	640,122	100.0	1.2	28.3	2.4	4.3	5.8	7.4	8.4	34.2	19.6	10.2	5.0	1.5	0.1
1971	636,224	100.0	1.2	28.6	2.5	4.5	6.1	7.4	8.1	34.7	19.3	10.2	4.7	1.4	0.1
1972	602,853	100.0	1.2	30.3	2.7	4.9	6.6	7.9	8.2	33.8	19.2	9.8	4.4	1.2	0.1
1973	585,935	100.0	1.4	30.6	2.8	5.0	6.7	7.8	8.3	33.7	19.5	9.7	4.1	1.1	0.1
1974	584,166	100.0	1.3	30.1	2.7	4.8	6.6	7.8	8.2	33.7	20.6	9.6	3.9	1.0	0.1
1975	592,202	100.0	1.3	29.1	2.6	4.6	6.2	7.6	8.1	33.6	21.6	9.7	3.7	1.0	0.1

Table 11. Live births by race, and percent distribution of live births by age of mother according to race: United States, selected years 1950-75—Continued
(Data are based on the National Vital Registration System)

Race and year	Number of live births	Age of mother													
		All ages	Under 15 years	15-19 years						20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
				Total	15	16	17	18	19						
All other—Continued		Percent distribution													
Black:															
1970	572,362	100.0	1.3	29.9	2.6	4.6	6.2	7.8	8.7	34.5	18.4	9.5	4.8	1.4	0.1
1971	564,960	100.0	1.3	30.4	2.7	4.8	6.5	7.8	8.6	35.0	17.9	9.4	4.5	1.3	0.1
1972	531,329	100.0	1.4	32.5	3.0	5.4	7.1	8.4	8.6	34.1	17.7	8.9	4.2	1.2	0.1
1973	512,597	100.0	1.5	32.9	3.1	5.4	7.3	8.4	8.7	34.1	17.8	8.7	3.8	1.1	0.1
1974	507,162	100.0	1.4	32.4	3.0	5.2	7.1	8.4	8.7	34.3	18.8	8.5	3.6	1.0	0.1
1975	511,581	100.0	1.4	31.5	2.8	5.1	6.7	8.2	8.6	34.4	19.7	8.5	3.4	0.9	0.1

NOTE: Figures for age of mother not stated are distributed. Registered births for all years. Figures for 1960, 1965, 1970, and 1971 based on a 50-percent sample of births; for 1972-75, based on 100 percent of births in selected States and on a 50-percent sample of births in all other States. Beginning 1970, births to nonresidents of the United States are excluded.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. I, for data years 1950-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 12. Total fertility rates by race, and birth rates according to age and race: United States, selected years 1950-75
(Data are based on the National Vital Registration System)

Race and year	Total fertility rate [1]	Age							
		10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
Total		Live births per 1,000 women							
1950	3,090.5	1.0	81.6	196.6	166.1	103.7	52.9	15.1	1.2
1955	3,573.7	0.9	90.3	241.6	190.2	116.0	58.6	16.1	1.0
1960	3,653.6	0.8	89.1	258.1	197.4	112.7	56.2	15.5	0.9
1965	2,928.0	0.8	70.4	196.8	162.5	95.0	46.4	12.8	0.8
1970	2,480.0	1.2	68.3	167.8	145.1	73.3	31.7	8.1	0.5
1971	2,274.6	1.1	64.7	150.6	134.8	67.6	28.7	7.1	0.4
1972	2,021.9	1.2	62.0	131.0	118.7	60.2	24.8	6.2	0.4
1973	1,895.6	1.3	59.7	120.7	113.6	56.1	22.0	5.4	0.3
1974	1,856.6	1.2	58.1	119.0	113.3	54.4	20.2	4.8	0.3
1975	1,799.0	1.3	56.3	114.7	110.3	53.1	19.4	4.6	0.3
White									
1950	2,976.8	0.4	70.0	190.4	165.1	102.6	51.4	14.5	1.0
1955	3,443.1	0.3	79.1	235.8	186.6	114.0	56.7	15.4	0.9
1960	3,532.9	0.4	79.4	252.8	194.9	109.6	54.0	14.7	0.8
1965	2,790.3	0.3	60.7	189.8	158.8	91.7	44.1	12.0	0.7
1970	2,385.0	0.5	57.4	163.4	145.9	71.9	30.0	7.5	0.4
1971	2,168.4	0.5	53.8	145.4	134.6	65.7	26.9	6.4	0.4
1972	1,918.2	0.5	51.2	125.6	118.4	58.8	23.3	5.6	0.3
1973	1,798.3	0.6	49.3	115.4	113.7	54.9	20.7	4.9	0.3
1974	1,767.5	0.6	48.3	114.2	113.5	53.5	18.9	4.4	0.2
1975	1,708.2	0.6	46.8	109.7	110.0	52.1	18.1	4.1	0.2
All other									
1950	3,928.3	5.1	163.5	242.6	173.8	112.6	64.3	21.2	2.6
1955	4,520.2	4.8	167.2	281.6	218.2	132.6	74.9	22.0	2.1
1960	4,522.1	4.0	158.2	294.2	214.6	135.6	74.2	22.0	1.7
1965	3,891.4	4.0	136.1	247.3	188.1	118.3	63.8	19.2	1.5
1970	3,066.7	4.8	133.4	196.8	140.1	82.5	42.2	12.6	0.9
1971	2,932.8	4.7	129.2	184.6	135.7	79.6	40.2	11.7	0.9
1972	2,650.5	4.7	125.0	164.5	120.9	69.4	34.9	10.0	0.7
1973	2,473.6	5.0	119.1	153.2	113.3	63.9	31.0	8.7	0.6
1974	2,376.8	4.7	113.3	147.4	112.3	60.7	28.9	7.6	0.5
1975	2,321.6	4.7	108.6	143.5	112.1	59.7	27.6	7.6	0.5
Black:									
1960	4,541.8	4.3	156.1	295.4	218.6	137.1	73.9	21.9	1.1
1965	3,867.5	4.3	140.6	247.8	183.2	114.9	62.7	18.7	1.4
1970	3,098.7	5.2	147.7	202.7	136.3	79.6	41.9	12.5	1.0
1971	2,913.6	5.1	135.1	187.3	129.0	75.1	38.8	11.6	0.9
1972	2,621.2	5.1	130.8	166.2	113.9	64.6	33.2	9.8	0.7
1973	2,437.0	5.4	124.5	154.6	105.9	58.6	29.2	8.6	0.6
1974	2,332.5	5.0	118.3	148.7	104.8	54.8	26.8	7.5	0.6
1975	2,284.0	5.1	113.8	145.1	105.4	54.1	25.4	7.5	0.5

[1] Sum of birth rates by age, multiplied by 5.

NOTE: Based on births adjusted for underregistration for 1950 and 1955; based on registered births for all other years. Figures for 1960, 1965, 1970, and 1971 based on a 50-percent sample of births; for 1972-1975, based on 100 percent of births in selected States and on a 50-percent sample of births in all other States. Beginning 1970, births to nonresidents of the United States are excluded.

SOURCE: National Center for Health Statistics: Vital Statistics of the United States, 1975, Vol. I. Health Resources Administration, DHEW, Rockville, Md. To be published.

Table 13. Birth rates for unmarried women, according to age and race: United States, selected years 1950-75

(Data are based on the National Vital Registration System)

Race and year	Total 15-44 years [1]	Age					
		15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years [2]
	Live births to unmarried women per 1,000 unmarried women						
Total							
1950	14.1	12.6	21.3	19.9	13.3	7.2	2.0
1955	19.3	15.1	33.5	33.5	22.0	10.5	2.7
1960	21.6	15.3	39.7	45.1	27.8	14.1	3.6
1965	23.5	16.7	39.9	49.3	37.5	17.4	4.5
1970	26.4	22.4	38.4	37.0	27.1	13.6	3.5
1971	25.6	22.4	35.6	34.7	25.3	13.3	3.5
1972	24.9	22.9	33.4	31.1	22.8	12.0	3.1
1973	24.5	22.9	31.8	30.0	20.5	10.8	3.0
1974	24.1	23.2	30.9	28.4	18.6	10.0	2.6
1975	24.7	24.2	31.6	28.0	18.1	9.1	2.6
White							
1950	6.1	5.1	10.0	8.7	5.9	2.0	
1955	7.9	6.0	15.0	13.3	8.6	2.8	
1960	9.2	6.6	18.2	18.2	10.8	3.9	
1965	11.6	7.9	22.1	24.3	16.6	4.9	
1970	13.9	10.9	22.5	21.1	14.2	7.6	2.0
1971	12.5	10.3	18.8	18.6	13.3	7.2	1.9
1972	12.0	10.5	16.7	16.6	12.1	6.4	1.6
1973	11.9	10.7	15.6	16.1	10.7	5.9	1.7
1974	11.8	11.1	15.2	14.9	9.6	5.5	1.5
1975	12.6	12.1	15.7	15.1	10.0	5.4	1.5
All other							
1950	71.2	68.5	105.4	94.2	63.5	20.0	
1955	87.2	77.6	133.0	125.2	100.9	25.3	
1960	98.3	76.5	166.5	171.8	104.0	35.6	
1965	97.6	75.8	152.6	164.7	137.8	39.0	
1970	89.9	90.8	121.0	93.8	69.8	32.0	10.7
1971	90.6	92.4	121.0	93.3	65.7	32.2	10.4
1972	86.9	92.7	113.1	84.5	56.3	29.0	8.2
1973	84.2	89.7	108.9	82.4	56.4	26.2	7.2
1974	81.5	88.8	104.3	78.8	51.6	23.3	6.7
1975	80.4	88.1	103.8	75.3	48.7	20.1	7.0
Black:							
1970	95.5	96.9	131.5	100.9	71.8	32.9	10.4
1971	96.5	99.1	131.1	100.4	69.0	32.7	9.4
1972	92.2	98.8	122.0	89.7	57.7	30.2	8.5
1973	89.5	96.0	117.2	86.0	58.1	27.4	7.7
1974	86.6	95.1	111.2	82.5	52.3	24.2	6.7
1975	85.6	95.1	109.9	78.1	51.0	20.3	7.2

[1] Rates computed by relating total births to unmarried women, regardless of age of mother, to unmarried women 15-44 years.

[2] Rates computed by relating births to unmarried women 40 years and over to unmarried women 40-44 years. Rates by color prior to 1970 are computed by relating births to unmarried women aged 35 years and over to unmarried women aged 35-44 years.

NOTE: National estimates are based on the States which required the reporting of legitimacy status in each year. Figures for age of mother not stated are distributed. Unmarried includes single, widowed and divorced. Figures for 1960, 1965, 1970, and 1971 based on a 50-percent sample of births; for 1972-75, based on 100-percent sample of births in selected States and on a 50-percent sample of births in all other States. Beginning 1970, excludes births to nonresidents of the United States.

SOURCE: National Center for Health Statistics: Vital Statistics of the United States, 1975, Vol. I. Health Resources Administration, DHEW, Rockville, Md. To be published.

Table 14. Births to unmarried women and percent first births by race, and percent distribution of births to unmarried women by age of mother according to race: United States, selected years 1950-75

(Data are based on the National Vital Registration System)

Race and year	Estimated number live births to unmarried women	Age of mother												Percent first births
		All ages	Under 15 years	15-19 years						20-24 years	25-29 years	30-34 years	35-39 years	40 years and over	
				Total	15	16	17	18	19						
Total		Percent distribution													
1950	141,600	100.0	2.3	39.7	---	20.3	---	19.4		30.4	14.8	7.6	4.2	1.2	---
1955	183,300	100.0	2.1	37.7	3.9	6.5	8.6	9.4	9.3	30.4	15.3	8.8	4.5	1.3	48.1
1960	224,300	100.0	2.1	38.8	3.9	6.7	8.9	9.7	9.6	30.3	14.3	8.4	4.7	1.3	47.9
1965	291,200	100.0	2.1	42.3	4.2	7.3	9.8	11.2	9.8	31.1	12.6	6.7	3.9	1.3	54.0
1970	398,700	100.0	2.4	47.6	4.8	8.5	10.7	11.9	11.7	31.8	10.2	4.8	2.4	0.8	62.7
1971	401,400	100.0	2.4	48.3	5.1	8.8	11.2	11.9	11.3	31.2	10.2	4.8	2.3	0.7	60.9
1972	403,200	100.0	2.5	50.1	5.6	9.5	11.8	12.2	11.0	29.7	10.2	4.7	2.1	0.7	61.6
1973	407,300	100.0	2.7	50.3	5.6	9.7	12.0	12.1	10.9	29.2	10.6	4.5	2.0	0.6	61.7
1974	418,100	100.0	2.5	50.7	5.5	10.0	11.9	12.3	11.0	29.3	10.7	4.4	2.0	0.6	62.0
1975	447,900	100.0	2.5	49.7	5.3	9.2	11.5	12.4	11.2	29.9	11.2	4.4	1.8	0.5	60.8
White															
1950	53,500	100.0	1.3	37.0	---	16.3	---	20.7		33.3	14.8	7.9	4.3	1.3	---
1955	64,200	100.0	1.4	36.9	2.8	5.6	8.1	9.8	10.6	32.7	14.2	8.4	4.7	1.6	65.6
1960	82,500	100.0	1.5	40.0	3.2	6.2	9.0	10.7	10.9	32.3	13.0	7.3	4.7	1.6	64.1
1965	123,700	100.0	1.1	41.0	2.7	5.7	9.0	12.3	11.3	35.1	12.0	5.8	3.6	1.3	67.3
1970	175,100	100.0	1.4	45.4	3.5	7.2	10.0	12.1	12.6	35.5	10.3	4.4	2.3	0.8	72.1
1971	163,800	100.0	1.5	46.5	4.0	7.6	10.6	12.2	12.1	33.8	10.5	4.8	2.3	0.8	69.9
1972	160,500	100.0	1.7	49.0	4.7	8.6	11.6	12.2	11.9	30.8	10.8	4.8	2.2	0.7	69.9
1973	163,000	100.0	1.2	49.8	5.0	9.3	11.7	12.5	11.3	29.6	11.2	4.7	2.1	0.7	70.0
1974	168,500	100.0	2.0	50.5	5.1	9.6	11.9	12.5	11.4	29.4	11.0	4.5	2.0	0.6	70.5
1975	186,400	100.0	1.9	50.4	5.1	9.3	11.8	12.7	11.5	29.2	11.4	4.6	1.9	0.5	69.0
All other															
1950	88,100	100.0	2.8	40.7	---	22.3	---	18.4		28.7	14.8	7.5	4.1	1.1	---
1955	119,200	100.0	2.5	38.0	4.5	7.0	8.8	9.1	8.6	29.1	15.9	9.0	4.4	1.2	41.7
1960	141,800	100.0	2.5	38.4	4.3	7.1	8.9	9.2	8.9	29.1	15.0	9.1	4.7	1.2	39.6
1965	167,500	100.0	2.7	43.2	5.3	8.4	10.3	10.4	8.8	28.2	13.1	7.4	4.1	1.2	45.5
1970	223,600	100.0	3.1	49.6	5.9	9.6	11.3	11.8	11.0	28.9	10.1	5.1	2.4	0.8	55.4
1971	237,500	100.0	3.0	49.8	5.9	9.8	11.6	11.7	10.8	29.4	10.0	4.8	2.4	0.7	54.9
1972	242,700	100.0	3.0	50.8	6.1	10.1	11.9	12.2	10.5	28.8	9.8	4.6	2.1	0.6	56.1
1973	244,300	100.0	3.2	50.6	6.1	10.0	12.1	11.8	10.6	29.0	10.2	4.5	2.0	0.6	56.1
1974	249,600	100.0	2.9	50.3	5.8	9.6	11.9	12.2	10.8	29.3	10.6	4.4	1.9	0.5	56.3
1975	261,600	100.0	2.9	49.2	5.5	9.2	11.3	12.2	11.0	30.4	11.1	4.3	1.7	0.5	54.9

Table 14. Births to unmarried women and percent first births by race, and percent distribution of births to unmarried women by age of mother according to race: United States, selected years 1950-75—Continued

(Data are based on the National Vital Registration System)

Race and year	Estimated number live births to unmarried women	Age of mother												Percent first births
		All ages	Under 15 years	15-19 years						20-24 years	25-29 years	30-34 years	35-39 years	40 years and over	
				Total	15	16	17	18	19						
All other—Continued		Percent distribution													
Black:															
1970	215,100	100.0	3.2	50.1	6.0	9.7	11.4	11.9	11.1	28.7	9.9	5.0	2.4	0.7	55.2
1971	229,000	100.0	3.0	50.1	5.9	9.9	11.7	11.8	10.8	29.3	9.8	4.8	2.3	0.7	54.7
1972	233,300	100.0	3.0	51.3	6.3	10.2	12.0	12.3	10.5	28.7	9.7	4.5	2.1	0.6	55.9
1973	234,500	100.0	3.2	51.1	6.2	10.1	12.2	11.9	10.7	28.8	10.0	4.4	1.9	0.6	55.9
1974	238,800	100.0	3.0	50.8	5.9	9.8	12.0	12.3	10.8	29.2	10.4	4.3	1.8	0.5	56.1
1975	249,600	100.0	2.9	49.6	5.5	9.3	11.4	12.3	11.1	30.3	10.9	4.2	1.7	0.5	54.6

NOTE: National estimates are based on the States which required the reporting of legitimacy status in each year. Figures for age of mother not stated are distributed. Figures for live-birth order refer only to births for which birth order is stated. Beginning 1970, excludes births to nonresidents of the United States. Figures for 1960, 1965, 1970, and 1971 based on a 50-percent sample of births, for 1972-75, based on 100 percent of births in selected States and on a 50-percent sample of births in all other States.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol I, for data years 1950-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 15. Live births and birth rates, according to geographic division and State: United States, 1975

(Data are based on the National Vital Registration System)

Geographic division and State	Number of live births	Rate per 1,000 population	Geographic division and State	Number of live births	Rate per 1,000 population
United States	3,144,198	14.8	East South Central	218,920	16.2
New England	148,024	12.1	Kentucky	54,680	16.1
Maine	15,279	14.4	Tennessee	62,347	14.9
New Hampshire	11,049	13.5	Alabama	58,086	16.1
Vermont	6,745	14.3	Mississippi	43,807	18.7
Massachusetts	68,309	11.7			
Rhode Island	10,727	11.6	West South Central	360,749	17.3
Connecticut	35,915	11.6	Arkansas	34,457	16.3
			Louisiana	67,933	17.9
Middle Atlantic	477,114	12.8	Oklahoma	42,694	15.7
			Texas	215,665	17.6
New York	236,178	13.0			
New Jersey	91,862	12.6	Mountain	176,801	18.3
Pennsylvania	149,074	12.6			
			Montana	12,058	16.1
East North Central	609,690	14.9	Idaho	16,243	19.8
			Wyoming	6,962	18.6
Ohio	158,701	14.8	Colorado	40,205	15.9
Indiana	82,433	15.5	New Mexico	21,036	18.3
Illinois	169,420	15.2	Arizona	39,578	17.8
Michigan	133,963	14.6	Utah	31,663	26.3
Wisconsin	65,173	14.1	Nevada	9,056	15.3
West North Central	245,750	14.7	Pacific	424,777	15.0
Minnesota	56,444	14.4	Washington	50,782	14.3
Iowa	41,378	14.4	Oregon	33,392	14.6
Missouri	68,519	14.4	California	317,423	15.0
North Dakota	10,596	16.7	Alaska	7,467	21.2
South Dakota	11,250	16.5	Hawaii	15,713	18.2
Nebraska	23,669	15.3			
Kansas	33,894	15.0			
South Atlantic	482,373	14.3			
Delaware	8,242	14.2			
Maryland	52,817	12.9			
District of Columbia	9,759	13.6			
Virginia	70,124	14.1			
West Virginia	28,086	15.6			
North Carolina	80,926	14.8			
South Carolina	46,697	16.6			
Georgia	79,990	16.2			
Florida	105,732	12.7			

NOTE: By place of residence. Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States. Rates per 1,000 estimated midyear population in each area.

SOURCE: National Center for Health Statistics: Vital Statistics of the United States, 1975, Vol. I. Health Resources Administration, DHEW, Rockville, Md. To be published.

C. Mortality

The 1975 United States death rate of 8.9 deaths per 1,000 population was the lowest ever recorded for this country. The drop of 2.9 percent from the death rate per 100,000 in 1974 was due to declines for all age groups, with the greatest percentage decrease for persons age 85 and older. Other age groups with decreases of 5 percent or more were children under 1, 5-9, and 10-14 and adults aged 45-49. Increases in the proportion of the population in the high risk older age groups partly offset the effect of the decline in the age-specific rates. If the age composition of the population between 1974 and 1975 had not changed, the decline would have been 4.5 percent instead of the 2.9 percent actually observed.

While death rates differ due to a number of factors, the overriding factor is the age differential. Death rates under 1 year of age were high (1,641.0 per 100,000) and then dropped rapidly so that the rate was only 35.7 per 100,000 children aged 5-14. The rates then rose steadily and inexorably. In 1975 there were 512.4 deaths per 100,000 people aged 45-49 years; 1,199.8 deaths at 55-59 years; 2,574.7 deaths at 65-69; and 6,205.1 deaths at 75-79.

In making comparisons between different time periods or different populations, it is important to take age differences into account. For example, even if the age-specific deaths are the same, an area with a high proportion of very old people, for whom death rates are high, will have a higher crude death rate than an area with a high proportion of young people, for whom death rates are low. In general, comparisons should be based on the age-adjusted death rates.

On the other hand, planning for health facilities requires knowledge of the actual number of deaths or the death rate for the population living at a specific time or in a specific area. Therefore, age-adjusted rates are not appropriate for this purpose.

Since these data will be used for different purposes, both rates are given, where possible.

In 1975, as in the previous 2 years, the age-adjusted death rate for the male population was 1.8 times the rate for the female population. The rate for persons other than white was 1.4 times the rate for the white population.

The life expectancy at birth for the U.S. population in 1975 was 72.5 years, a record high. Life expectancy (i.e., the average number of years of life a child born in 1975 could expect to live if the mortality rates prevailing in 1975 continued over his lifespan) increased over the 1974 values by 0.7 percent for males and 0.8 percent for females. Life expectancy increased by 0.7 percent for the white population and 1.3 percent for all others. The increase for all others was caused primarily by the increase of 1.1 years for females other than white.

As a result of these changes in expectation of life which are a continuation of changes which have been observed since 1900, the gap in life expectancy between males and females has increased, and that between the white population and all others has decreased. If the 1975 mortality rates were to prevail, white female children born in 1975 could expect to live 4.9 years longer than female children of all other races, 7.8 years longer than white male children, and 13.6 years longer than all other male children.

These differences remain at older ages. For example, the average number of years of life remaining at age 65 was greater in 1975 than in any previous year for each of the four population groups discussed here. The greatest change between 1974 and 1975 was for females other than white, but white females age 65 can expect more remaining years of life than members of the other three groups.

Infant mortality rates, which are frequently considered to be indicators of health status, continued to decline, as they have each year since 1962. The infant mortality rate of 16.1 per 1,000 live births in 1975 was 3.6 percent lower than the rate of 16.7 in 1974. In the 19 European countries for which 1974 data are available, the infant mortality rate ranged from a low of 9.2 per 1,000 live births in Sweden to a high of 40.4 deaths per 1,000 live births in Yugoslavia.

Although the forces responsible for the rapidly declining infant mortality rate are not readily discernible, factors that may be involved are: (1) more women receiving prenatal care early in pregnancy, (2) the declining proportion of higher order (thus higher risk) births, (3) establishment and utilization of regional perinatal centers, (4) increasing legal abortion rates, and (5) the availability of programs to improve the nutrition of pregnant women and infants.

Declines in the overall death rate were not consistent across the country, nor were the death rates equally low in all geographic areas or among all population subgroups. For example, the age-adjusted death rate per 100,000 for the United States declined by 9.9 percent between 1970 and 1975. Yet in the West South Central Division (consisting of Arkansas, Louisiana, Oklahoma, and Texas) the decline was only 8.1 percent. In the South Atlantic Division it was 11.8 percent. In 1975 the death rate in the East South Central Division, where death rates had declined at the same rate as the national average, was 15 percent higher than the rate in the Mountain Division, where the rates had declined much more rapidly than the national average.

The geographic differences are partly a function of the racial composition of the population and partly a function of the population density. In 1970 the age-adjusted death rates for black males were about 33 percent higher than the death rates for white males, and the death rates for black females were 45 percent higher than the death rates for white females. As a result an area in which a high proportion of the population is black will probably have higher death rates than an area in which a higher proportion of the population is white. In addition, death rates in the core counties of the large standard metropolitan statistical areas (SMSA's) were about 10 percent higher than death rates in the fringe counties, even when both rates were adjusted for age. This is a function of the socioeconomic conditions in the two kinds of counties, poverty being more prevalent in the core counties. In general, the death rates in areas outside SMSA's are higher than the rates in the fringe counties of the large SMSA's and in the smaller SMSA's.

These differences are particularly noticeable for children. Mortality rates for black children under the age of 5 are almost twice as high as they are for white children. Similarly, the rate in core counties of metropolitan areas is 32 percent higher than the rate in the fringe counties. The infant mortality rate in the South Atlantic Division is 32 percent higher than the rate in the Pacific Division. Again, some of these differences are a function of the racial composition of the populations involved. There is, however, no known biological reason why infant mortality rates should be higher in the black population than in the white population. The fact that infant mortality rates have historically been higher for black infants than for white infants is not a justification for the rates continuing to remain higher.

Of 202 health service areas (HSA's) where there were 1,000 or more live births in 1974-75 (a restriction used so that rates will be stable enough for analysis), 10 percent had infant mortality rates of 13.1 per 1,000 live births or lower, while the 10 percent with the highest rates had rates of 19.6 or higher. The lowest rate in any HSA was 11.5, and the highest was 27.8 infant deaths per 1,000 live births.

Much of the overall variation among the HSA's was due to the difference in rates between black and white births and the racial composition of the HSA's.

All of the 202 HSA's had 1,000 or more births of white babies in 1974-75; 139 had 1,000 or more births of black babies. When the HSA's were ranked according to their white mortality rates, the 10 percent of HSA's with the lowest white mortality rates had rates of 11.4-12.5, while the 10 percent with the highest rates had rates of 17.0-21.3. When they were ranked according to their black infant mortality rates, the 10 percent of HSA's with the lowest black mortality rates, had rates of 12.9-20.2, while the 10 percent with the highest rates had rates of 33.0-37.2 per 1,000 live births.

Black infant mortality rates in the HSA's with the best record were almost as high as white rates in the HSA's with the worst record. In total, 85 percent of the 139 HSA's where there were 1,000 or more births of black babies had black infant mortality rates higher than the worst white infant mortality rate observed in any HSA.

Along with the dramatic drop in the overall death rates over the past years, the ranking of the conditions causing death has changed enormously. The infectious and parasitic diseases which killed vast numbers of people 50 years ago are no longer among the leading causes of death. By 1975 two-thirds of the deaths in the United States were due to diseases of the heart, malignant neoplasms, and cerebrovascular disease. The last of these three is primarily a cause of death among older people. However, both diseases of the heart and malignant neoplasms

are among the leading causes of death at every age, and they are not as easy to eliminate as the infectious and parasitic diseases which formerly ravaged the population.

Among the very youngest members of the population, accidents are overwhelmingly the leading cause of death. Among children aged 1-4, 40 percent of the deaths are caused by accidents, 15 percent by motor vehicle accidents and 25 percent by all other accidents. Among children aged 5-14, 51 percent of the deaths are due to accidents, 24 percent to motor vehicle accidents and 26 percent to all other accidents.

The overwhelming impact of external causes of death is particularly apparent in the late teenage years. Although death rates at every age are higher for males than for females, the difference is particularly large among those aged 15-19, and the magnitude of the difference is due primarily to external causes of death. The leading cause of death for young white men is motor vehicle accidents. For young men of all other races, however, it is homicides. For both causes of death the rates in 1975 are lower than the rates in 1974, but the decrease in the rates is very slight. However, death rates from motor vehicle accidents generally dropped in the past 2 years since the speed limit 55 miles an hour was imposed, and there is reason to hope that the rates will never again reach the levels of the early 1970's.

The high death rates from external causes, accidents, suicides, and homicides account for part of the deficit in the expectation of life for all other males compared to white males.

By the middle years of life, ages 45-54, diseases of the heart and malignant neoplasms have replaced accidents and violence as the leading causes of death. This pattern becomes more pronounced with increasing age. Among people in the age group 55-64 years, diseases of the heart and malignant neoplasms assume tragically large proportions. For people of these ages, the death rate from diseases of the heart was 564.7 and the rate from malignant neoplasms was 430.7 per 100,000 in 1975. Death rates from diseases of the heart are 51 percent higher among white males and 65 percent higher among other males as compared with the heart disease death rate for all persons aged 55-64. For malignant neoplasms the rates are 14 percent higher among white males and 69 percent higher among other males as compared with the rate for this cause among all in the age group. If these two causes of death were eliminated, death rates among people aged 55-64 would be reduced by 67 percent, 69 percent for white males and 59 percent for all other males.

Death rates from diseases of the heart have declined at an appreciable rate for the past decade. The same cannot be said for deaths from malignant neoplasms. Although the death rates for neoplasms of some sites are declining, the rates for neoplasms of other sites, primarily of the respiratory system, continue to increase.

Table 16. Death rates, according to color, sex, and age: United States, 1975

(Data are based on the National Vital Registration System)

Age	Color								
	Total			White			All other		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Number of deaths per 100,000 resident population								
All ages[1]	888.5	1,013.2	770.3	896.8	1,015.3	783.8	833.6	999.1	682.5
Under 1 year	1,641.0	1,829.3	1,443.7	1,413.0	1,594.4	1,222.3	2,765.3	3,001.1	2,523.0
1-4 years	70.8	77.8	63.5	64.4	71.3	57.1	101.0	108.8	93.0
5-9 years	35.7	42.1	29.1	33.6	39.4	27.5	46.3	55.9	36.8
10-14 years	35.7	45.5	25.6	34.1	43.3	24.4	44.6	57.4	31.6
15-19 years	101.5	147.4	54.4	99.1	144.5	52.4	114.8	164.3	65.4
20-24 years	138.2	209.6	67.2	124.9	189.5	59.8	220.2	340.7	110.7
25-29 years	136.7	200.0	74.5	116.5	168.9	64.1	277.2	435.8	141.7
30-34 years	151.0	205.9	97.8	126.7	169.5	84.3	318.0	477.1	183.4
35-39 years	209.6	276.7	146.2	176.2	230.2	124.0	442.4	630.8	288.9
40-44 years	326.1	419.4	237.2	284.1	363.5	206.9	621.0	844.7	434.7
45-49 years	512.4	667.2	366.1	463.1	606.0	326.6	893.6	1,166.4	657.8
50-54 years	784.6	1,044.1	544.2	727.4	971.3	499.7	1,276.7	1,690.0	914.1
55-59 years	1,199.8	1,615.1	821.3	1,131.3	1,534.6	761.6	1,843.7	2,392.8	1,367.4
60-64 years	1,832.7	2,522.8	1,226.8	1,755.4	2,443.7	1,149.5	2,553.7	3,280.8	1,939.0
65-69 years	2,574.7	3,636.3	1,731.4	2,516.5	3,590.9	1,662.7	3,082.0	4,036.7	2,331.0
70-74 years	4,050.5	5,555.6	2,945.1	3,917.9	5,462.2	2,798.8	5,505.6	6,534.9	4,667.0
75-79 years	6,205.1	8,253.7	4,878.6	6,146.7	8,253.6	4,801.8	6,879.9	8,254.3	5,832.0
80-84 years	9,102.6	11,593.3	7,686.9	9,257.7	11,832.0	7,813.5	7,364.5	9,167.4	6,180.9
85 years and over	15,187.9	17,572.6	14,031.4	15,707.5	18,257.9	14,494.1	10,102.9	11,693.8	9,177.3

[1] Includes unknown age.

NOTE: Excludes deaths to nonresidents of the United States.

SOURCE: Division of Vital Statistics, National Center for Health Statistics.

Table 17. Age-adjusted death rates, according to color and sex: United States, selected years 1900-75

(Data are based on the National Vital Registration System)

Year	Color								
	Total			White			All other		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Age-adjusted death rate per 1,000 resident population								
1900 [1]	17.8	18.6	17.0	17.6	18.4	16.8	27.8	28.7	27.1
1910 [1]	15.8	16.9	14.6	15.6	16.7	14.4	24.1	24.8	23.2
1920 [1]	14.2	14.7	13.8	13.7	14.2	13.1	20.6	20.4	21.0
1930 [1]	12.5	13.5	11.3	11.7	12.8	10.6	20.1	21.0	19.2
1940	10.8	12.1	9.4	10.2	11.6	8.8	16.3	17.6	15.0
1945	9.5	11.1	8.0	9.1	10.7	7.5	13.1	14.5	11.9
1950	8.4	10.0	6.9	8.0	9.6	6.5	12.3	13.6	10.9
1955	7.7	9.3	6.1	7.4	9.1	5.7	10.4	11.9	9.1
1960	7.6	9.5	5.9	7.3	9.2	5.6	10.5	12.1	8.9
1965	7.4	9.4	5.7	7.1	9.1	5.3	10.3	12.4	8.5
1970	7.1	9.3	5.3	6.8	8.9	5.0	9.8	12.3	7.7
1971	7.0	9.2	5.2	6.7	8.8	4.9	9.6	12.1	7.5
1972	7.0	9.2	5.2	6.7	8.8	4.9	9.7	12.3	7.5
1973	6.9	9.1	5.1	6.6	8.7	4.8	9.5	12.1	7.4
1974	6.7	8.8	4.9	6.4	8.4	4.7	9.0	11.5	6.9
1975	6.4	8.5	4.7	6.1	8.1	4.5	8.5	11.0	6.5

[1] Death registration areas only. The death registration areas increased in number from 10 States and the District of Columbia in 1900 to the entire coterminous United States in 1933.

NOTE: Beginning in 1970, excludes deaths of nonresidents of the United States. Age-adjusted rates computed by the direct method, using as the standard population the age distribution of the total population of the United States as enumerated in 1940. Adjustment based on 11 age groups.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1900-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 18. Age-adjusted death rates, according to geographic division and State: United States, 1950, 1960, 1970, and 1975
(Data are based on the National Vital Registration System)

Geographic division and State	1950	1960	1970 [1]	1975 [1]
	Age-adjusted death rate per 100,000 resident population			
United States	860.7	797.8	769.3	692.9
New England	820.5	795.2	735.9	660.4
Maine	843.3	826.6	810.8	689.3
New Hampshire	848.6	799.1	763.4	673.9
Vermont	845.3	828.5	763.8	687.8
Massachusetts	811.4	805.0	739.7	664.8
Rhode Island	875.2	791.6	738.2	657.0
Connecticut	795.3	755.5	690.7	634.9
Middle Atlantic	892.7	821.2	785.0	696.2
New York	883.9	816.1	782.7	687.4
New Jersey	879.6	801.0	759.4	677.2
Pennsylvania	911.9	839.6	803.2	720.1
East North Central	862.8	796.1	778.0	709.3
Ohio	851.9	802.8	785.3	717.8
Indiana	861.7	796.7	775.9	705.6
Illinois	895.8	818.9	807.3	731.2
Michigan	855.3	780.9	769.0	708.3
Wisconsin	812.7	748.0	704.9	641.7
West North Central	795.9	743.8	727.0	662.9
Minnesota	773.1	713.5	681.9	619.3
Iowa	779.8	728.2	715.3	657.7
Missouri	853.3	798.8	795.6	713.3
North Dakota	772.9	712.9	697.6	630.8
South Dakota	779.0	753.4	708.7	657.2
Nebraska	749.6	710.8	708.8	647.8
Kansas	775.0	721.2	695.2	655.2
South Atlantic	909.1	838.4	800.8	706.4
Delaware	971.9	860.5	830.2	712.6
Maryland	934.4	867.8	791.1	704.5
District of Columbia	1,001.3	954.2	1,013.9	884.6
Virginia	930.3	846.1	785.6	709.9
West Virginia	867.5	819.1	861.9	777.2
North Carolina	865.7	850.2	814.8	730.8
South Carolina	981.6	934.9	869.8	784.0
Georgia	930.1	874.6	861.1	758.4
Florida	847.4	751.8	739.5	640.4
East South Central	902.0	837.3	828.8	747.1
Kentucky	873.5	815.5	820.4	753.1
Tennessee	879.2	808.9	802.1	723.0
Alabama	914.0	860.9	833.5	748.9
Mississippi	957.5	876.3	879.7	778.1

See footnote at end of table.

Table 18. Age-adjusted death rates, according to geographic division and State: United States, 1950, 1960, 1970, and 1975—Continued

(Data are based on the National Vital Registration System)

Geographic division and State	1950	1960	1970 [1]	1975 [1]
	Age-adjusted death rate per 100,000 resident population			
West South Central	815.8	775.5	769.4	707.4
Arkansas	760.4	768.6	765.9	713.9
Louisiana	900.8	875.8	848.3	783.4
Oklahoma	759.4	753.1	764.2	708.2
Texas	817.4	749.9	745.4	682.5
Mountain	834.0	761.2	731.6	647.7
Montana	857.0	802.6	778.3	698.8
Idaho	787.1	711.8	721.1	652.3
Wyoming	824.6	788.5	760.9	714.7
Colorado	798.5	746.7	713.1	627.8
New Mexico	885.1	766.6	754.4	665.9
Arizona	885.7	770.2	736.9	633.5
Utah	768.9	698.2	665.8	609.9
Nevada	947.0	890.7	810.1	718.8
Pacific	803.9	745.9	714.6	655.2
Washington	801.4	748.8	729.2	665.6
Oregon	778.8	737.6	705.3	648.2
California	807.8	745.9	715.7	658.0
Alaska	...	858.1	758.0	661.3
Hawaii	...	703.9	585.0	518.7

[1] Excludes deaths of nonresidents of the United States.

NOTE: Based on age-specific death rates per 100,000 estimated midyear population in each area. Computed by the direct method using as the standard population the age distribution of the total population of the United States as enumerated in 1940. Adjustment based on 5 age groups. Data not available for more detailed adjustment.

SOURCE: Division of Vital Statistics, National Center for Health Statistics.

Table 19. Life expectancy at specified ages, according to color and sex: United States, selected years 1900-75
(Data are based on the National Vital Registration System)

Specified age and year	Color				
	Total	White		All other	
		Male	Female	Male	Female
	Remaining life expectancy in years				
Birth					
1900 [1]	47.3	46.6	48.7	32.5	33.5
1960	69.7	67.4	74.1	61.1	66.3
1970	70.9	68.0	75.6	61.3	69.4
1971	71.1	68.3	75.8	61.6	69.7
1972	71.1	68.3	75.9	61.5	69.9
1973	71.3	68.4	76.1	61.9	70.1
1974	71.9	68.9	76.6	62.9	71.2
1975	72.5	69.4	77.2	63.6	72.3
Age 20					
1900-1902 [1]	42.8	42.2	43.8	35.1	36.9
1960	52.4	50.1	56.2	45.5	49.9
1970	53.1	50.3	57.4	44.7	52.2
1971	53.3	50.5	57.5	44.9	52.3
1972	53.3	50.4	57.5	44.6	52.5
1973	53.4	50.5	57.7	44.9	52.6
1974	53.9	51.0	58.1	45.7	53.6
1975	54.4	51.4	58.6	46.3	54.7
Age 65					
1900-1902 [1]	11.9	11.5	12.2	10.4	11.4
1960	14.3	12.9	15.9	12.7	15.2
1970	15.2	13.1	17.1	13.3	16.4
1971	15.2	13.2	17.2	13.2	16.3
1972	15.2	13.1	17.1	13.1	16.3
1973	15.3	13.2	17.3	13.1	16.2
1974	15.2	13.4	17.6	13.4	16.8
1975	16.0	13.7	18.1	13.7	17.5

[1] Death registration areas only. The death registration areas increased in number from 10 States and the District of Columbia in 1900 to the entire coterminous United States in 1933.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1900-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 20. Late fetal and perinatal mortality rates: United States, selected years 1950-75

(Data are based on the National Vital Registration System)

Year	Live births	Late fetal deaths [1]		Infant deaths under 7 days	Perinatal deaths [2]	
		Number	Rate per 1,000		Number	Rate per 1,000
1950	3,554,149	53,806	15.1	63,417	117,223	32.5
1955	4,047,295	52,940	13.1	68,654	121,594	29.7
1956	4,163,090	52,605	12.6	69,323	121,928	28.9
1957	4,254,784	53,197	12.5	71,085	124,282	28.8
1958	4,203,812	52,606	12.5	72,022	124,628	29.3
1959	4,244,796	51,975	12.2	71,745	123,720	28.8
1960	4,257,850	51,984	12.2	71,125	123,109	28.6
1961	4,268,326	51,797	12.1	70,276	122,073	28.3
1962	4,167,362	50,035	12.0	68,590	118,625	28.1
1963	4,098,020	48,402	11.8	67,175	115,577	27.9
1964	4,027,490	49,503	12.3	64,767	114,270	28.0
1965	3,760,358	45,476	12.1	59,678	105,154	27.6
1966	3,606,274	41,967	11.6	56,025	97,992	26.9
1967	3,520,959	40,524	11.5	52,650	93,174	26.2
1968	3,501,564	40,094	11.5	51,275	91,369	25.8
1969	3,600,206	36,319	10.1	50,704	87,023	23.9
1970	3,731,386	35,791	9.6	50,821	86,612	23.0
1971	3,555,970	32,294	9.1	45,573	77,867	21.7
1972	3,258,411	30,247	9.3	39,572	69,819	21.2
1973	3,136,965	27,602	8.8	35,859	63,461	20.1
1974	3,159,958	26,547	8.4	33,735	60,282	18.9
1975	3,144,198	24,801	7.8	31,396	56,197	17.7

[1] Late fetal deaths are fetal deaths of 28 weeks or more gestation. The rate is the number of late fetal deaths per 1,000 live births and late fetal deaths.

[2] Perinatal deaths are late fetal deaths plus infant deaths under 7 days. The rate is the number of perinatal deaths per 1,000 live births and late fetal deaths.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1950-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

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Table 21. Infant, late fetal, and perinatal mortality rates, according to geographic division and State: United States, 1975
(Data are based on the National Vital Registration System)

Geographic division and State	Mortality rate		
	Infant [1]	Late fetal [2]	Perinatal [3]
	Rate per 1,000		
United States	16.1	7.8	17.7
New England	14.0	6.8	16.2
Maine	13.2	4.8	13.2
New Hampshire	13.4	5.7	14.5
Vermont	13.3	5.6	14.6
Massachusetts	13.5	7.1	16.0
Rhode Island	14.5	10.2	18.7
Connecticut	15.5	6.7	17.9
Middle Atlantic	15.0	7.6	17.9
New York	16.0	7.6	18.0
New Jersey	15.0	7.8	17.1
Pennsylvania	16.4	7.4	18.2
East North Central	16.3	8.0	18.0
Ohio	15.8	8.1	18.1
Indiana	14.8	8.4	17.7
Illinois	18.4	8.8	20.1
Michigan	16.3	7.6	17.2
Wisconsin	13.6	6.1	14.3
West North Central	14.6	7.5	16.6
Minnesota	13.5	6.6	15.2
Iowa	13.5	7.3	16.0
Missouri	16.4	8.1	18.2
North Dakota	14.8	8.1	17.9
South Dakota	16.1	8.5	17.7
Nebraska	13.9	7.6	15.6
Kansas	14.0	7.4	16.5
South Atlantic	18.2	8.6	19.9
Delaware	14.4	9.0	18.6
Maryland	17.2	7.4	18.5
District of Columbia	29.0	9.7	30.0
Virginia	17.4	8.3	19.7
West Virginia	18.4	9.8	21.8
North Carolina	18.4	9.1	20.4
South Carolina	19.4	10.7	22.4
Georgia	18.3	7.9	18.6
Florida	17.7	8.3	19.0
East South Central	18.1	9.7	20.9
Kentucky	15.6	8.3	18.2
Tennessee	16.2	9.1	19.0
Alabama	19.5	10.3	22.6
Mississippi	22.3	11.4	24.7

See footnotes at end of table.

Table 21. Infant, late fetal, and perinatal mortality rates, according to geographic division and State: United States, 1975—Continued

(Data are based on the National Vital Registration System)

Geographic division and State	Mortality rate		
	Infant [1]	Late fetal [2]	Perinatal [3]
	Rate per 1,000		
West South Central	17.0	8.1	18.6
Arkansas	18.1	9.1	20.0
Louisiana	18.2	8.9	20.7
Oklahoma	16.2	7.4	17.4
Texas	16.6	7.8	17.9
Mountain	14.8	6.9	15.4
Montana	15.4	7.5	17.2
Idaho	13.2	6.8	14.7
Wyoming	17.4	8.1	19.4
Colorado	14.2	6.9	14.9
New Mexico	17.0	7.4	16.9
Arizona	14.8	7.0	15.0
Utah	13.1	5.9	13.8
Nevada	17.4	7.0	17.1
Pacific	13.8	7.0	14.8
Washington	15.8	6.5	15.4
Oregon	15.0	7.1	15.5
California	13.4	7.1	14.7
Alaska	14.5	6.4	13.7
Hawaii	12.9	6.1	14.3

[1] Number of deaths to infants under 1 year of age per 1,000 live births.

[2] Late fetal deaths are fetal deaths of 28 weeks or more gestation. The rate is the number of late fetal deaths per 1,000 live births and late fetal deaths.

[3] Perinatal deaths are late fetal deaths plus infant deaths under 7 days. The rate is the number of perinatal deaths per 1,000 live births and late fetal deaths.

SOURCE: Division of Vital Statistics, National Center for Health Statistics.

Table 22. Infant mortality rates, according to race: United States, 1950-75

(Data are based on the National Vital Registration System)

Year	All races	White	All other		Year	All races	White	All other	
			Total	Black				Total	Black
	Number of deaths under 1 year of age per 1,000 live births					Number of deaths under 1 year of age per 1,000 live births			
1950	29.2	26.8	44.5	43.9	1963 [1]	25.2	22.2	41.5	42.8
1951	28.4	25.8	44.8	44.3	1964	24.8	21.6	41.1	42.3
1952	28.4	25.5	47.0	46.9	1965	24.7	21.5	40.3	41.7
1953	27.8	25.0	44.7	44.5	1966	23.7	20.6	38.8	40.2
1954	26.6	23.9	42.9	42.9	1967	22.4	19.7	35.9	37.5
1955	26.4	23.6	42.8	43.1	1968	21.8	19.2	34.5	36.2
1956	26.0	23.2	42.1	42.4	1969	20.9	18.4	32.9	34.8
1957	26.3	23.3	43.7	44.2	1970	20.0	17.8	30.9	32.6
1958	27.1	23.8	45.7	46.3	1971	19.1	17.1	28.5	30.3
1959	26.4	23.2	44.0	44.8	1972	18.5	16.4	27.7	29.6
1960	26.0	22.9	43.2	44.3	1973	17.7	15.8	26.2	28.1
1961	25.3	22.4	40.7	41.8	1974	16.7	14.8	24.9	26.8
1962 [1]	25.3	22.3	41.4	42.6	1975	16.1	14.2	24.2	26.2

[1] Figures by race exclude residents of New Jersey.

NOTE: Beginning in 1970, data exclude births and infant deaths to nonresidents of the United States; 1967 data are based on a 20- to 50-percent sample of births; data for 1951-54, 1956-66, and 1968-71 are based on a 50-percent sample of births; 1972 data are based on a 50-percent sample of deaths, and on 100 percent of births in selected States and a 50-percent sample in all other States; 1973-74 data are based on 100 percent of births in selected States and on a 50-percent sample in all other States.

SOURCE: Division of Vital Statistics, National Center for Health Statistics.

Table 23. Age-adjusted death rates, according to race, sex, location of residence, and county characteristics: United States, 1970

(Data are based on the National Vital Registration System)

Location of residence and county characteristic	Total resident population in thousands	All races [1]			White		Black	
		Both sexes	Male	Female	Male	Female	Male	Female
		Age-adjusted death rate per 1,000 population						
United States	203,235	9.45	12.17	7.26	11.82	6.95	15.72	10.06
Within SMSA	148,867	9.42	12.16	7.28	11.78	6.97	15.79	10.07
Large SMSA	84,897	9.48	12.20	7.37	11.77	7.05	15.79	9.92
Core counties	59,843	9.74	12.57	7.56	12.02	7.16	15.98	10.01
Fringe counties	25,054	8.82	11.29	6.89	11.19	6.80	14.20	9.12
Medium SMSA	46,452	9.37	12.14	7.19	11.84	6.90	15.88	10.33
Other SMSA	17,517	9.26	11.99	7.08	11.69	6.76	15.57	10.37
Outside SMSA	54,368	9.53	12.26	7.20	11.97	6.91	15.55	10.07
Adjacent to SMSA	28,023	9.48	12.19	7.19	11.93	6.95	15.31	9.79
Urbanized	12,661	9.40	12.03	7.23	11.83	7.05	15.75	10.27
Less urbanized	13,094	9.56	12.36	7.17	12.05	6.87	15.33	9.74
Thinly populated	2,269	9.62	12.27	7.19	11.19	6.92	14.28	8.91
Not adjacent to SMSA	26,345	9.58	12.33	7.21	12.02	6.87	15.81	10.37
Urbanized	8,358	9.63	12.47	7.30	12.12	6.91	16.25	10.62
Less urbanized	13,633	9.62	12.40	7.21	12.10	6.88	15.92	10.38
Thinly populated	4,354	9.52	12.17	7.07	11.90	6.81	14.54	9.73

[1] Includes all other races not shown separately.

NOTE: Based on age-specific death rates in specified groups. Computed by the direct method, using as the standard population the age distribution of the resident population of the United States, April 1, 1970. Adjustment based on 11 age groups.

SOURCE: Division of Vital Statistics, National Center for Health Statistics.

Table 24. Death rates for persons under 5 years of age, according to race, sex, location of residence, and county characteristics: United States, 1970

(Data are based on the National Vital Registration System)

Location of residence and county characteristic	Total resident population under 5 years in thousands	All races [1]			White		Black	
		Both sexes	Male	Female	Male	Female	Male	Female
		Death rate per 1,000 population under five years of age						
United States	17,163	5.02	5.64	4.38	4.95	3.80	9.82	7.77
Within SMSA	12,637	4.87	5.47	4.26	4.78	3.66	9.53	7.64
Large SMSA	7,134	4.81	5.41	4.20	4.63	3.52	9.39	7.57
Core counties	4,948	5.20	5.81	4.57	4.87	3.75	9.38	7.58
Fringe counties	2,186	3.93	4.49	3.34	4.20	3.08	9.43	7.53
Medium SMSA	3,994	4.85	5.46	4.21	4.87	3.71	9.66	7.55
Other SMSA	1,509	5.21	5.76	4.65	5.20	4.15	10.07	8.30
Outside SMSA	4,525	5.44	6.12	4.74	5.42	4.19	10.81	8.22
Adjacent to SMSA	2,350	5.32	5.95	4.67	5.33	4.18	10.48	8.05
Urbanized	1,073	5.03	5.63	4.40	5.11	4.06	11.41	7.97
Less urbanized	1,091	5.56	6.21	4.88	5.57	4.29	9.98	8.25
Thinly populated	187	5.57	6.20	4.92	5.18	4.33	10.44	7.33
Not adjacent to SMSA	2,175	5.58	6.31	4.82	5.52	4.20	11.16	8.41
Urbanized	712	5.39	6.26	4.48	5.43	3.89	11.10	7.86
Less urbanized	1,116	5.67	6.35	4.96	5.59	4.30	11.13	8.72
Thinly populated	347	5.70	6.30	5.08	5.49	4.48	11.43	8.63

[1] Includes all other races not shown separately.

SOURCE: Division of Vital Statistics, National Center for Health Statistics.

Table 25. Death rates for persons 75 years of age and over, according to race, sex, location of residence, and county characteristics: United States, 1970

(Data are based on the National Vital Registration System)

Location of residence and county characteristic	Total resident population 75 years and over in thousands	All races [1]			White		Black	
		Both sexes	Male	Female	Male	Female	Male	Female
		Death rate per 1,000 population age 75 and over						
United States	7,530	97.85	116.36	86.08	117.80	86.84	103.96	78.52
Within SMSA	5,109	97.08	116.00	85.62	117.49	86.39	103.78	78.60
Large SMSA	2,923	97.31	115.86	86.26	117.34	87.13	103.91	78.41
Core counties	2,223	97.12	115.41	86.22	117.04	87.20	104.21	78.67
Fringe counties	700	97.91	117.31	86.41	118.24	86.91	101.61	76.26
Medium SMSA	1,562	97.21	116.67	85.22	118.24	85.88	103.71	79.45
Other SMSA	624	95.71	115.00	83.54	116.29	84.12	103.40	77.51
Outside SMSA	2,421	99.46	117.04	87.10	118.40	87.87	104.30	78.33
Adjacent to SMSA	1,230	99.36	116.71	87.38	118.22	88.37	101.55	75.02
Urbanized	503	99.38	116.41	88.08	117.48	88.55	101.38	81.22
Less urbanized	616	99.31	117.21	86.83	118.87	88.13	102.48	73.36
Thinly populated	111	99.49	115.32	87.02	117.98	88.88	*	69.88
Not adjacent to SMSA	1,191	99.56	117.38	86.82	118.60	87.35	107.16	81.75
Urbanized	305	99.15	118.38	86.65	120.23	87.24	103.73	81.12
Less urbanized	657	99.63	117.81	86.59	118.80	87.12	110.60	81.64
Thinly populated	229	99.90	115.03	87.77	116.22	88.18	101.11	83.54

[1] Includes all other races not shown separately.

SOURCE: Division of Vital Statistics, National Center for Health Statistics.

Table 26. Death rates for selected causes for persons 1-4 years of age, according to color: United States, selected years 1925-75
(Data are based on the National Vital Registration System)

Color and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
TOTAL	Number of deaths per 100,000 resident population 1-4 years														
All causes	641.0	563.6	440.9	289.6	203.0	139.4	113.4	109.1	92.9	84.5	82.6	80.9	79.5	73.9	70.8
Diseases and conditions															
Congenital anomalies	8.6	9.0	8.3	10.3	11.6	11.1	12.1	12.9	10.2	9.7	9.6	10.4	9.6	9.0	8.9
Malignant neoplasms	6.0	6.9	7.5	9.5	10.3	11.7	11.1	10.9	8.6	7.5	7.2	6.0	6.4	5.9	5.6
Leukemia	2.6	2.8	3.5	4.7	5.1	5.9	5.4	5.5	4.2	3.6	3.4	2.4	2.4	2.1	2.4
Of brain and other parts of nervous system	---	---	---	1.4	1.5	2.1	2.1	2.2	2.1	2.1	2.0	1.9	2.2	2.0	1.9
Diseases of heart	9.3	6.9	5.7	3.6	2.9	1.3	1.3	1.3	1.3	1.7	1.8	2.1	2.1	2.0	1.8
Accidents and violence															
Motor vehicle accidents [4]	12.0	14.5	13.7	12.4	11.2	11.5	10.5	10.0	10.5	11.5	11.2	11.6	12.3	9.9	10.3
All other accidents [4]	58.4	46.7	43.0	36.3	35.5	25.3	22.0	21.6	21.3	20.0	20.0	20.1	19.6	19.3	17.9
Homicide	0.6	0.9	0.5	0.6	0.7	0.6	0.5	0.7	1.1	1.9	2.2	1.8	2.5	2.2	2.5
WHITE															
All causes	592.2	516.7	409.2	261.6	185.8	124.1	100.1	95.2	81.4	75.1	74.3	73.4	71.4	67.1	64.4
Diseases and conditions															
Congenital anomalies	8.5	9.2	8.4	10.7	11.8	11.2	11.9	12.4	9.8	9.3	9.4	10.2	9.5	8.7	8.8
Malignant neoplasms	6.3	7.2	7.9	10.1	11.0	12.2	11.8	11.4	9.3	7.7	7.4	6.2	6.6	6.3	5.7
Leukemia	2.8	3.0	3.8	5.1	5.6	6.4	5.9	6.0	4.6	3.8	3.5	2.6	2.5	2.3	2.5
Of brain and other parts of nervous system	---	---	---	1.5	1.6	2.1	2.2	2.3	2.3	2.2	2.1	2.0	2.2	2.1	2.0
Diseases of heart	9.2	6.6	5.5	3.5	2.7	1.1	1.0	0.9	1.0	1.3	1.5	1.8	1.7	1.7	1.5
Accidents and violence															
Motor vehicle accidents [4]	12.6	15.2	14.1	12.9	11.6	11.7	10.2	9.8	9.9	10.9	10.4	10.9	11.2	9.4	9.6
All other accidents [4]	54.8	43.7	41.1	34.4	33.0	21.7	18.1	17.7	18.0	17.6	17.8	18.2	17.5	17.7	16.2
Homicide	0.6	0.8	0.5	0.6	0.7	0.5	0.4	0.6	0.9	1.3	1.4	1.3	1.7	1.5	1.6

See footnotes at end of table.

Table 26. Death rates for selected causes for persons 1-4 years of age, according to color: United States, selected years 1925-75—Continued

(Data are based on the National Vital Registration System)

Color and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
ALL OTHER	Number of deaths per 100,000 resident population 1-4 years														
All causes	1103.2	932.3	670.3	484.6	326.9	250.8	198.9	190.8	153.6	134.1	126.4	120.0	121.1	107.8	101.0
Diseases and conditions															
Congenital anomalies	9.6	7.3	7.4	7.8	10.1	10.3	13.5	15.6	12.1	11.9	10.6	11.2	10.0	10.0	9.5
Malignant neoplasms	3.8	3.8	4.0	4.7	5.6	7.7	6.5	7.6	5.0	6.3	5.7	4.8	5.4	4.0	4.9
Leukemia	0.7	1.0	1.3	2.0	1.9	2.4	2.2	2.5	2.1	2.0	2.4	1.6	2.0	1.3	1.8
Of brain and other parts of nervous system	---	---	---	0.7	0.8	1.8	1.3	1.7	1.2	1.7	1.6	1.5	1.8	1.5	1.3
Diseases of heart	10.6	9.8	7.1	4.7	4.1	2.5	3.3	3.3	2.7	3.8	3.5	3.4	4.2	3.5	3.0
Accidents and violence															
Motor vehicle accidents [4]	7.2	9.2	10.5	8.6	8.8	10.6	12.3	11.2	13.1	14.7	15.4	15.7	17.9	12.6	13.8
All other accidents [4]	93.0	69.9	56.8	49.8	53.6	51.1	47.6	44.5	38.9	32.5	31.7	30.4	30.5	27.1	26.0
Homicide	1.0	1.1	0.4	0.7	0.7	1.2	1.2	1.7	2.4	5.2	6.2	4.2	6.7	5.7	6.8

[1] Because of decennial revisions of the International List of Causes of Death and changes in rules of cause-of-death selection, there is lack of comparability to a varying degree for some causes from one revision to the next. The beginning dates of the revision are 1921, 1930, 1939, 1949, 1958, and 1968. In some instances data are omitted for earlier years because appropriate subcategories are not available by age of the decedent. Except for diseases which are epidemic in nature, abrupt changes at the beginning of the revision period are indicative of breaks in comparability. The cause-of-death titles are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States and in some instances have been considerably shortened.

[2] Population adjusted for age bias in races other than white.

[3] Based on a 50-percent sample of deaths.

[4] The "motor vehicle accident" rate can be added to the "other accident" rate to provide the single category "all accidents."

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1925-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 27. Death rates for selected causes for persons 5-14 years of age, according to color: United States, selected years 1925-75
(Data are based on the National Vital Registration System)

Color and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
	Number of deaths per 100,000 resident population 5-14 years														
TOTAL															
All causes	196.6	171.7	152.9	103.7	90.2	60.1	48.8	46.6	42.2	41.3	41.1	40.8	41.0	38.2	35.7
Diseases and conditions															
Malignant neoplasms	2.8	3.7	4.1	5.0	5.3	6.7	7.0	6.8	6.5	6.0	5.8	5.5	5.4	5.2	4.8
Leukemia	1.2	1.7	2.0	2.0	2.2	2.8	3.0	3.2	2.9	2.7	2.8	2.4	2.5	2.4	2.1
Of brain and other parts of nervous system	---	---	---	0.9	0.9	1.5	1.6	1.5	1.4	1.3	1.3	1.3	1.2	1.3	1.3
Congenital anomalies	1.4	1.4	1.8	2.1	2.3	2.4	2.7	3.6	2.8	2.2	2.3	2.4	2.2	2.1	2.0
Diseases of heart	16.5	12.1	10.1	8.0	5.9	2.1	0.8	1.3	0.9	0.8	1.0	1.0	1.0	0.9	0.9
Accidents and violence															
Motor vehicle accidents [4]	15.0	14.7	12.3	11.5	11.0	8.8	8.0	7.9	8.9	10.2	10.5	10.7	10.6	8.7	8.7
All other accidents [4]	26.9	21.4	19.9	17.1	20.5	13.8	12.2	11.3	9.8	9.9	9.6	10.0	10.2	9.7	9.4
Suicide	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5
Homicide	0.6	0.9	0.6	0.6	0.6	0.5	0.4	0.5	0.6	0.9	1.0	0.9	1.1	1.0	1.0
WHITE															
All causes	185.3	160.7	145.3	96.6	85.6	56.4	46.4	43.9	39.6	39.1	38.7	39.1	38.8	36.5	33.9
Diseases and conditions															
Malignant neoplasms	3.0	3.9	4.3	5.3	5.7	7.0	7.3	7.1	6.8	6.2	5.9	5.7	5.4	5.4	4.9
Leukemia	1.3	1.8	2.1	2.2	2.4	3.0	3.2	3.5	3.1	2.9	2.9	2.6	2.6	2.5	2.3
Of brain and other parts of nervous system	---	---	---	1.0	1.0	1.5	1.7	1.6	1.5	1.4	1.3	1.3	1.1	1.2	1.3
Congenital anomalies	1.4	1.4	1.9	2.2	2.4	2.4	2.8	3.7	2.8	2.2	2.3	2.4	2.1	2.2	2.0
Diseases of heart	16.7	12.0	9.9	7.5	5.4	1.8	0.7	1.0	0.7	0.7	0.8	0.8	0.9	0.8	0.8
Accidents and violence															
Motor vehicle accidents [4]	15.6	15.2	12.8	11.8	11.5	8.9	8.0	7.9	8.8	9.8	10.3	10.5	10.4	8.4	8.5
All other accidents [4]	25.7	20.3	18.7	16.2	19.7	12.6	11.1	9.9	8.6	9.0	8.6	9.3	9.2	9.0	8.5
Suicide	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.3	0.3	0.3	0.4	0.3	0.4	0.5	0.5
Homicide	0.5	0.7	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.8	0.8	0.8

See footnotes at end of table.

Table 27. Death rates for selected causes for persons 5-14 years of age, according to color: United States, selected years 1925-75—Continued

(Data are based on the National Vital Registration System)

Color and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
ALL OTHER	Number of deaths per 100,000 resident population 5-14 years														
All causes	301.6	260.9	210.9	154.0	121.0	86.0	66.0	64.3	58.0	53.7	54.3	49.9	53.0	47.3	45.4
Diseases and conditions															
Malignant neoplasms	2.0	2.1	2.6	2.4	2.5	4.9	5.0	4.8	4.7	4.5	5.0	4.2	5.1	4.5	4.4
Leukemia	0.7	0.6	1.0	0.7	1.1	1.6	1.6	1.8	1.6	1.6	2.0	1.6	1.8	1.7	1.6
Of brain and other parts of nervous system	—	—	—	0.4	0.1	1.3	0.9	1.3	1.2	1.2	1.3	1.0	1.4	1.3	1.2
Congenital anomalies	1.6	1.0	1.4	1.6	1.9	2.2	1.8	3.2	2.9	2.1	2.4	2.3	2.3	2.0	1.9
Diseases of heart	14.7	12.2	11.5	11.5	9.1	3.9	1.6	3.0	2.0	1.5	1.8	1.7	1.7	1.6	1.4
Accidents and violence															
Motor vehicle accidents [4]	8.9	10.1	8.3	9.8	8.0	8.6	7.9	8.3	9.8	12.4	12.1	11.7	11.3	10.0	9.8
All other accidents [4]	38.4	30.3	28.6	24.1	25.8	22.5	20.1	20.9	16.9	14.9	15.5	14.3	15.6	13.4	13.7
Suicide	0.1	0.1	0.2	0.2	—	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.2	0.3	0.1
Homicide	1.8	2.2	1.6	1.4	1.3	1.5	1.0	1.2	1.6	2.9	2.8	2.8	2.8	2.4	2.2

[1] Because of decennial revisions of the International List of Causes of Death and changes in rules of cause-of-death selection, there is lack of comparability to a varying degree for some causes from one revision to the next. The beginning dates of the revision are 1921, 1930, 1939, 1949, 1958, and 1968. In some instances data are omitted for earlier years because appropriate subcategories are not available by age of the decedent. Except for diseases which are epidemic in nature, abrupt changes at the beginning of the revision period are indicative of breaks in comparability. The cause-of-death titles are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States and in some instances have been considerably shortened.

[2] Population adjusted for age bias in races other than white.

[3] Based on a 50-percent sample of deaths.

[4] The "motor vehicle accident" rate can be added to the "other accident" rate to provide the single category "all accidents."

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1925-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 28. Death rates for selected causes for persons 15-19 years of age, according to sex and color: United States, selected years 1925-75
(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
TOTAL BOTH SEXES	Number of deaths per 100,000 resident population 15-19 years														
All causes	314.0	277.8	222.3	171.6	152.3	108.6	97.3	92.2	95.1	110.3	110.7	111.0	111.9	105.9	101.5
Diseases and conditions															
Malignant neoplasms	4.4	4.7	5.0	5.7	6.5	7.9	8.0	7.7	7.6	7.3	6.8	6.8	6.7	6.2	6.0
Leukemia	1.4	1.3	1.4	1.7	1.9	2.2	2.4	2.3	2.1	2.2	2.0	2.0	2.2	1.8	1.7
Of brain and other parts of nervous system	---	---	---	0.7	0.8	1.0	0.8	0.9	1.0	0.9	0.9	1.1	0.9	0.9	0.8
Of bone	---	---	---	---	---	1.1	1.1	1.0	1.0	1.0	0.8	0.9	0.9	0.8	0.7
Congenital anomalies	0.7	0.6	0.9	1.5	1.7	1.9	2.1	2.8	2.5	2.1	1.9	1.8	1.8	1.8	1.6
Diseases of heart	22.4	21.3	16.4	14.1	11.4	7.5	3.5	2.9	2.2	2.3	2.4	2.0	2.2	2.1	2.0
Accidents and violence															
Motor vehicle accidents [4]	13.4	24.0	24.2	24.2	23.4	29.6	35.2	33.9	40.2	43.6	43.5	45.8	45.5	40.5	38.4
All other accidents [4]	41.8	32.1	25.5	22.6	29.7	19.4	18.5	16.8	16.5	20.3	19.8	19.5	21.1	19.7	19.0
Suicide	3.5	4.6	4.2	3.5	2.8	2.7	2.6	3.6	4.0	5.9	6.5	6.9	7.0	7.2	7.6
Homicide	5.4	6.6	5.5	4.1	4.6	3.9	3.2	4.0	4.3	8.1	8.4	8.8	9.1	9.7	9.6
WHITE MALE															
All causes	278.4	254.3	217.9	168.0	184.5	130.5	132.1	125.2	130.8	147.1	148.1	151.4	156.6	150.0	144.5
Diseases and conditions															
Malignant neoplasms	5.2	5.7	5.9	7.0	9.1	9.3	9.4	9.7	9.3	8.9	8.3	8.3	8.1	7.5	7.1
Leukemia	2.0	1.8	1.9	2.2	3.0	2.8	2.8	2.9	2.5	2.5	2.5	2.2	2.8	2.3	2.1
Of brain and other parts of nervous system	---	---	---	0.7	1.1	1.2	1.0	1.0	1.2	1.0	1.1	1.2	1.0	0.9	0.9
Of bone	---	---	---	---	---	1.2	1.5	1.4	1.4	1.5	1.1	1.4	1.1	1.0	0.8
Congenital anomalies	0.9	0.6	1.0	1.8	2.1	2.2	2.8	3.4	2.9	2.3	2.4	2.0	2.1	2.0	1.7
Diseases of heart	22.1	20.0	16.4	13.8	13.4	6.7	3.3	2.8	2.0	2.4	2.5	2.1	2.2	2.4	2.2
Accidents and violence															
Motor vehicle accidents [4]	19.9	36.4	34.6	36.9	39.8	48.3	55.8	54.0	63.5	67.1	67.1	71.3	71.6	65.8	62.5
All other accidents [4]	66.3	51.7	39.6	35.3	53.0	30.5	31.1	27.0	26.6	31.7	30.5	30.2	34.2	32.1	30.8
Suicide	3.7	5.3	4.8	4.3	4.4	3.7	4.0	5.9	6.3	9.4	10.3	11.1	11.4	11.9	13.0
Homicide	4.1	4.7	3.4	2.0	3.2	2.6	2.3	3.2	3.0	5.2	5.5	6.3	7.1	7.7	8.2

See footnotes at end of table.

Table 28. Death rates for selected causes for persons 15-19 years of age, according to sex and color: United States, selected years 1925-75—Continued

(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
ALL OTHER MALE	Number of deaths per 100,000 resident population 15-19 years														
All causes	690.8	603.1	461.3	372.0	312.6	216.8	168.6	165.8	168.9	224.0	218.4	208.6	190.2	180.3	164.3
Diseases and conditions															
Malignant neoplasms	4.4	3.5	5.7	5.5	7.4	7.2	8.8	9.4	9.2	8.5	7.5	6.6	7.0	7.1	6.6
Leukemia	0.2	0.9	1.5	1.1	1.8	1.8	2.4	2.0	2.9	2.7	2.4	2.1	2.7	2.1	1.5
Of brain and other parts of nervous system	---	---	---	0.3	0.5	0.5	0.8	1.0	1.1	0.8	0.6	0.8	0.5	1.0	0.6
Of bone	---	---	---	---	---	1.9	0.9	1.3	1.4	1.3	0.6	0.8	0.9	0.8	1.1
Congenital anomalies	0.7	1.2	0.6	1.7	1.3	1.0	1.8	2.5	3.2	2.9	2.5	1.7	1.5	2.4	2.9
Diseases of heart	26.5	24.2	21.0	19.0	15.9	16.0	8.4	7.8	6.1	4.8	4.5	4.3	4.9	4.7	4.4
Accidents and violence															
Motor vehicle accidents [4]	16.6	32.7	32.7	28.6	26.6	30.9	36.9	34.8	43.2	45.4	42.0	44.0	38.3	33.2	28.3
All other accidents [4]	106.8	81.8	70.6	62.0	66.3	52.6	42.4	45.8	41.2	52.4	48.6	47.3	44.2	37.2	37.5
Suicide	2.8	2.4	2.5	3.0	1.9	2.2	4.0	3.4	5.2	5.4	6.8	9.5	6.8	6.2	7.0
Homicide	37.2	44.6	43.2	36.9	37.5	27.5	22.9	27.6	30.8	59.8	60.2	55.5	51.5	54.2	47.8
WHITE FEMALE															
All causes	249.2	206.4	163.8	117.7	89.8	62.3	53.9	50.3	50.1	57.8	57.6	58.3	57.9	53.8	52.4
Diseases and conditions															
Malignant neoplasms	3.8	3.8	4.2	4.6	4.7	6.6	6.8	6.0	5.7	5.9	5.3	5.6	5.4	4.9	5.1
Leukemia	1.1	0.9	1.0	1.3	1.2	1.8	2.2	2.0	1.7	1.9	1.7	1.8	1.8	1.5	1.4
Of brain and other parts of nervous system	---	---	---	0.7	0.7	0.9	0.7	0.8	0.8	0.9	0.7	1.0	0.8	0.8	0.9
Of bone	---	---	---	---	---	1.0	0.8	0.6	0.6	0.7	0.7	0.5	0.6	0.7	0.6
Congenital anomalies	0.5	0.7	1.0	1.4	1.5	1.6	1.6	2.5	2.1	1.9	1.5	1.7	1.6	1.6	1.5
Diseases of heart	20.6	20.4	15.3	12.5	8.6	5.8	2.4	1.8	1.6	1.4	1.4	1.3	1.5	1.2	1.2
Accidents and violence															
Motor vehicle accidents [4]	7.6	12.8	15.0	13.1	11.5	13.4	17.9	16.8	19.8	24.4	24.4	25.6	25.3	21.2	20.8
All other accidents [4]	12.6	9.0	7.6	6.1	8.2	5.0	4.5	4.0	4.1	5.0	5.4	5.7	5.9	5.9	5.6
Suicide	3.6	4.5	4.1	3.0	1.9	1.9	1.4	1.6	1.8	2.9	3.0	2.7	3.2	3.3	3.1
Homicide	2.5	2.6	2.1	0.8	0.9	1.2	0.8	1.2	1.3	2.1	2.1	2.8	3.1	3.2	3.2

See footnotes at end of table.

Table 28. Death rates for selected causes for persons 15-19 years of age, according to sex and color: United States, selected years 1925-75—Continued
(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
ALL OTHER FEMALE	Number of deaths per 100,000 resident population 15-19 years														
All causes	823.3	710.3	482.8	428.1	268.3	176.7	91.2	80.4	78.8	84.7	90.0	79.0	79.6	69.0	65.4
Diseases and conditions															
Malignant neoplasms	2.9	4.4	2.7	3.7	3.4	7.9	5.9	4.3	6.6	4.3	5.8	4.7	5.8	5.4	4.3
Leukemia	0.4	0.8	0.3	0.9	0.7	1.4	1.0	1.0	1.2	1.5	1.2	1.8	0.9	0.8	1.3
Of brain and other parts of nervous system	---	---	---	0.4	0.4	0.6	0.4	0.6	0.9	0.6	0.9	0.5	1.4	1.0	0.8
Of bone	---	---	---	---	---	0.8	1.2	0.5	0.6	0.2	0.6	---	0.6	0.6	0.4
Congenital anomalies	0.4	0.3	0.1	0.7	1.1	2.3	1.3	1.4	2.4	1.3	1.6	1.6	1.7	1.3	0.9
Diseases of heart	36.0	35.2	20.7	23.4	15.8	16.5	6.8	6.4	4.0	4.9	4.8	3.6	3.4	3.0	3.3
Accidents and violence															
Motor vehicle accidents [4]	4.5	6.5	5.7	6.1	5.1	9.7	11.2	10.7	14.3	12.4	14.1	12.9	13.7	9.2	8.9
All other accidents [4]	22.6	13.3	12.2	14.2	10.3	10.0	6.6	6.3	6.6	10.0	10.5	9.1	8.6	7.6	7.3
Suicide	1.4	2.2	1.6	1.8	0.3	1.5	1.0	1.5	2.4	2.9	3.6	3.4	2.7	2.8	2.1
Homicide	13.0	17.6	12.9	14.7	11.4	10.7	7.3	7.0	7.1	10.1	13.0	11.7	13.1	14.0	14.6

[1] Because of decennial revisions of the International List of Causes of Death and changes in rules of cause-of-death selection, there is lack of comparability to a varying degree for some causes from one revision to the next. The beginning dates of the revision are 1921, 1930, 1939, 1949, 1958, and 1968. In some instances data are omitted for earlier years because appropriate subcategories are not available by age of the decedent. Except for diseases which are epidemic in nature, abrupt changes at the beginning of the revision period are indicative of breaks in comparability. The cause-of-death titles are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States and in some instances have been considerably shortened.

[2] Population adjusted for age bias in races other than white.

[3] Based on a 50-percent sample of deaths.

[4] The "motor vehicle accident" rate can be added to the "other accident" rate to provide the single category "all accidents."

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1925-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 29. Death rates for selected causes for persons 45-54 years of age, according to sex and color: United States, selected years 1925-75
(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
	Number of deaths per 100,000 resident population 45-54 years														
TOTAL BOTH SEXES															
All causes	1216.7	1217.6	1160.4	1059.9	955.8	853.9	756.3	756.0	739.5	730.0	710.2	710.4	697.4	675.0	649.6
Diseases and conditions															
Diseases of heart	209.1	238.9	254.8	279.5	286.8	308.6	274.5	271.8	258.8	238.4	232.1	229.5	224.5	215.5	205.1
Malignant neoplasms	166.1	164.1	169.8	173.9	173.4	175.1	174.6	177.0	178.2	182.5	179.8	180.0	180.9	183.8	181.8
Of buccal cavity and pharynx	5.0	4.4	3.9	3.9	4.0	4.0	4.2	5.3	5.1	5.2	5.4	5.1	5.4	5.2	5.5
Of digestive organs and peritoneum	71.6	70.2	68.3	64.8	63.1	53.4	47.3	45.9	41.9	39.0	37.4	36.6	37.2	37.8	37.0
Of respiratory system	---	7.0	10.6	15.0	17.7	22.9	27.4	32.0	38.0	46.2	47.0	49.2	49.6	51.6	52.3
Of breast	21.2	21.3	22.0	23.3	23.0	23.7	25.2	26.2	26.8	27.4	26.7	27.5	27.0	26.9	26.1
Of genital organs	35.4	35.9	37.5	36.5	34.9	31.9	28.2	24.7	22.5	19.5	19.3	18.8	18.3	17.6	17.0
Of urinary organs	---	6.4	6.4	6.9	6.4	6.2	6.0	5.9	5.7	5.7	5.7	5.4	5.4	5.7	5.6
Of all other and unspecified sites	---	---	---	---	---	19.3	21.4	21.5	22.6	23.2	23.0	23.0	23.6	24.2	23.9
Leukemia	3.8	4.5	5.6	5.1	5.0	5.8	6.0	6.2	5.7	5.7	5.2	4.8	5.1	5.1	5.1
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	7.7	8.7	9.3	9.9	10.5	10.0	9.7	9.3	9.5	9.2
Accidents and violence															
Motor vehicle accidents [4]	19.1	32.2	35.6	29.1	20.2	22.2	22.8	21.4	25.4	25.5	23.6	24.7	22.9	18.3	17.2
All other accidents [4]	67.2	58.2	50.3	41.6	37.7	30.9	29.4	28.4	29.0	28.0	26.3	26.2	25.9	25.2	24.8
Suicide	25.2	33.0	28.6	27.7	19.2	20.9	19.6	20.7	20.7	20.0	19.8	19.9	19.5	19.6	20.1
Homicide	8.9	10.3	9.3	6.8	6.6	6.1	5.9	6.2	6.9	10.1	10.4	11.0	11.1	11.7	11.6
WHITE MALE															
All causes	1216.8	1231.2	1220.2	1138.6	1070.2	984.5	910.1	932.2	904.3	882.9	860.6	861.4	839.7	820.3	790.2
Diseases and conditions															
Diseases of heart	209.2	252.1	296.4	349.8	388.0	423.6	398.0	413.2	395.3	365.7	357.5	355.1	345.1	333.8	317.9
Malignant neoplasms	119.3	123.8	131.5	139.1	141.2	150.8	157.8	164.1	167.6	172.0	169.8	169.5	170.6	178.5	175.0
Of buccal cavity and pharynx	8.6	7.5	6.0	6.0	6.3	6.1	6.4	7.5	7.2	7.1	6.9	6.5	6.8	6.9	6.9
Of digestive organs and peritoneum	72.5	72.3	72.7	68.6	65.6	55.7	50.1	49.3	44.5	41.6	41.1	39.3	40.1	41.0	40.4
Of respiratory system	---	10.7	16.0	23.9	28.8	39.1	47.2	53.0	60.2	67.6	67.1	69.9	69.5	72.9	73.0
Of breast	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.2	0.4	0.4	0.4	0.2	0.3	0.2	0.2
Of genital organs	---	4.0	4.6	4.8	4.0	3.7	3.6	3.4	3.3	2.8	3.1	2.7	3.2	3.3	2.8
Of urinary organs	---	8.2	8.3	9.4	8.5	8.7	8.4	8.0	7.9	7.8	8.1	7.7	7.7	8.6	8.3
Of all other and unspecified sites	---	---	---	---	---	20.6	23.7	23.9	25.5	25.6	24.7	26.0	25.9	27.7	26.8
Leukemia	4.0	5.5	6.4	5.8	6.0	6.7	7.0	7.3	6.6	6.6	6.0	5.6	6.1	6.0	5.9
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	9.8	11.0	11.6	11.9	12.6	12.3	11.6	10.9	11.7	10.9

See footnotes at end of table.

Table 29. Death rates for selected causes for persons 45-54 years of age, according to sex and color: United States, selected years 1925-75—Continued
(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
	Number of deaths per 100,000 resident population 45-54 years														
WHITE MALE—Continued															
Accidents and violence															
Motor vehicle accidents [4]	27.6	46.9	54.3	43.8	31.5	31.6	32.0	29.7	35.4	34.6	32.5	32.9	31.1	26.2	24.0
All other accidents [4]	106.9	94.2	79.9	66.5	59.2	47.4	45.0	42.6	41.8	39.3	36.7	37.0	36.4	34.8	35.0
Suicide	40.3	55.7	47.0	44.1	29.0	34.1	31.7	33.7	30.8	29.5	28.6	29.7	28.4	28.3	29.7
Homicide	10.3	12.2	11.0	7.0	6.8	5.5	4.6	5.0	6.0	9.0	9.1	9.6	9.8	10.9	11.3
ALL OTHER MALE															
All causes	2567.9	2633.3	2445.0	2453.1	2082.5	1857.3	1589.0	1551.0	1590.4	1646.1	1572.0	1639.2	1591.5	1499.7	1418.9
Diseases and conditions															
Diseases of heart	519.6	563.3	525.2	579.2	526.6	603.0	538.4	487.4	494.5	473.2	450.7	473.7	458.7	429.2	401.1
Malignant neoplasms	103.5	107.8	114.4	160.6	176.5	207.4	221.9	233.6	252.4	288.2	274.2	285.1	296.2	294.8	292.4
Of buccal cavity and pharynx	5.9	3.0	5.6	6.0	8.2	8.4	8.1	12.1	12.7	15.1	16.3	16.6	18.5	15.9	19.6
Of digestive organs and peritoneum	69.2	71.7	69.0	93.6	97.2	100.3	93.1	89.6	88.6	85.3	76.2	83.9	79.6	81.1	82.3
Of respiratory system	---	3.0	8.4	16.8	23.5	40.6	56.3	70.4	84.5	113.1	113.2	115.1	130.6	128.7	122.9
Of breast	0.5	0.3	0.3	0.6	0.5	0.4	0.3	0.2	0.4	0.6	0.5	0.9	0.6	0.4	0.5
Of genital organs	---	7.6	9.6	13.3	15.1	15.4	12.7	10.1	9.4	9.0	7.7	8.1	7.6	6.6	7.0
Of urinary organs	---	6.0	7.3	6.4	9.0	8.9	8.0	11.0	8.4	10.0	9.0	8.8	8.4	8.3	6.5
Of all other and unspecified sites	---	---	---	---	---	19.4	26.4	23.3	29.1	34.0	32.9	30.8	33.0	34.4	35.6
Leukemia	3.2	3.2	4.3	4.2	4.3	5.0	6.4	5.5	5.6	6.3	6.1	6.9	5.6	5.6	5.8
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	9.0	10.4	11.3	13.7	14.7	12.2	13.9	12.3	13.8	12.1
Accidents and violence															
Motor vehicle accidents [4]	28.6	52.0	57.2	58.4	42.2	52.0	53.1	49.1	52.5	60.6	54.0	60.5	56.4	42.6	40.9
All other accidents [4]	128.0	106.1	89.8	88.4	87.9	77.8	83.6	78.8	84.4	86.3	78.1	73.8	74.6	73.0	69.3
Suicide	8.2	14.3	14.8	14.8	9.1	11.7	10.5	12.8	13.5	14.1	10.3	13.2	13.4	11.9	12.8
Homicide	66.5	66.3	65.5	56.5	59.4	52.8	53.0	51.5	58.7	90.3	91.8	99.0	92.3	96.8	87.7

See footnotes at end of table.

Table 29. Death rates for selected causes for persons 45-54 years of age, according to sex and color: United States, selected years 1925-75—Continued
(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
	Number of deaths per 100,000 resident population 45-54 years														
WHITE FEMALE															
All causes	986.1	924.6	867.4	746.8	654.2	546.4	464.3	458.8	463.1	462.9	450.6	444.3	439.9	426.4	414.8
Diseases and conditions															
Diseases of heart	156.4	160.4	160.1	154.7	144.5	141.9	110.8	103.4	100.1	91.4	89.7	84.1	84.6	80.1	78.1
Malignant neoplasms	214.5	206.9	208.9	203.0	198.0	185.8	176.5	175.7	175.1	177.3	173.6	173.3	172.0	172.4	171.9
Of buccal cavity and pharynx	1.2	1.4	1.5	1.4	1.3	1.6	1.8	2.7	2.4	2.6	2.9	2.5	2.6	2.3	2.6
Of digestive organs and peritoneum	70.7	68.3	63.5	57.6	56.6	44.1	38.3	36.8	33.3	30.9	29.1	27.5	28.3	29.1	27.8
Of respiratory system	---	3.7	5.6	6.3	6.8	6.5	6.8	9.8	14.6	22.1	23.4	25.3	24.4	25.7	27.7
Of breast	44.1	44.8	46.0	47.5	46.2	47.1	50.0	51.2	51.9	53.0	50.8	52.8	51.8	51.3	50.6
Of genital organs	70.1	66.7	68.5	64.8	61.4	54.3	46.7	41.4	37.6	32.5	31.8	31.6	29.8	29.5	28.4
Of urinary organs	---	4.5	4.4	4.4	4.1	3.5	3.4	3.0	3.4	3.3	3.2	2.9	3.0	2.9	3.3
Of all other and unspecified sites	---	---	---	---	---	17.9	18.1	18.6	19.2	19.9	20.1	19.1	20.5	20.0	20.0
Leukemia	3.6	3.7	5.1	4.7	4.4	5.2	4.9	5.2	4.9	4.9	4.4	4.1	4.3	4.4	4.4
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	5.7	6.4	7.0	7.7	8.1	7.8	7.6	7.3	7.3	7.1
Accidents and violence															
Motor vehicle accidents [4]	9.9	15.9	15.3	12.3	7.8	10.8	11.5	11.4	14.1	14.3	12.9	14.0	12.2	9.2	8.9
All other accidents [4]	21.1	16.3	15.9	12.4	12.2	10.6	9.4	10.0	12.1	12.3	12.0	11.9	11.7	11.4	11.2
Suicide	12.3	13.2	13.0	14.0	12.0	10.5	10.3	10.9	13.6	13.5	14.5	13.4	13.7	14.1	13.8
Homicide	2.0	2.2	1.7	1.5	1.2	1.6	1.9	1.9	2.0	2.2	2.5	2.6	2.8	2.8	3.0
ALL OTHER FEMALE															
All causes	2525.4	2518.5	2156.0	2108.9	1720.8	1554.9	1294.5	1144.9	1036.8	979.4	953.8	929.4	926.0	852.2	780.8
Diseases and conditions															
Diseases of heart	505.2	542.6	484.6	517.6	450.6	516.0	423.6	346.8	300.9	267.6	249.3	245.3	236.3	221.4	194.9
Malignant neoplasms	269.0	237.4	250.5	270.5	255.1	273.3	266.7	249.3	228.2	217.1	227.3	225.7	231.8	218.3	212.9
Of buccal cavity and pharynx	2.8	1.9	3.4	2.9	2.8	4.2	3.4	3.7	3.7	4.3	5.3	5.8	5.3	5.8	6.4
Of digestive organs and peritoneum	72.7	64.4	67.5	70.2	68.0	74.5	62.6	58.1	53.1	46.0	44.6	49.8	49.8	45.9	44.2
Of respiratory system	---	3.1	3.9	4.8	7.4	8.7	10.9	12.5	16.5	23.3	28.1	28.2	31.2	32.1	30.7
Of breast	41.4	36.8	36.8	47.5	44.2	45.3	45.8	53.0	50.8	49.2	53.7	52.5	53.6	56.2	48.7
Of genital organs	124.1	109.3	112.9	117.2	104.8	104.6	98.1	75.8	62.5	51.3	51.2	46.6	49.9	40.2	41.7
Of urinary organs	---	4.6	5.5	6.2	6.2	6.0	5.3	7.4	5.7	5.4	5.6	5.3	4.8	3.7	3.6
Of all other and unspecified sites	---	---	---	---	---	20.4	27.3	24.6	22.8	22.8	25.4	25.1	23.3	23.7	23.4
Leukemia	2.5	1.9	2.5	3.3	2.5	4.4	6.0	6.0	4.7	5.6	4.9	3.3	4.1	3.7	4.5
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	5.4	7.2	8.2	8.4	9.3	8.5	9.1	9.9	7.0	9.8

See footnotes at end of table.

Table 29. Death rates for selected causes for persons 45-54 years of age, according to sex and color: United States, selected years 1925-75—Continued

(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
ALL OTHER FEMALE—Continued	Number of deaths per 100,000 resident population 45-54 years														
Accidents and violence															
Motor vehicle accidents [4]	7.5	13.9	14.8	13.3	9.2	11.1	14.4	12.8	16.1	16.6	17.4	17.9	17.2	10.7	12.2
All other accidents [4]	33.8	32.2	34.1	24.6	23.1	19.8	21.1	22.0	20.2	20.0	19.3	18.6	19.1	21.1	17.8
Suicide	3.4	2.9	1.2	3.2	1.5	4.0	2.8	3.2	4.1	4.5	4.1	3.8	3.2	4.0	4.5
Homicide	6.2	10.2	7.9	9.3	7.4	8.7	10.2	12.3	12.5	16.1	17.2	15.1	16.9	15.2	16.3

[1] Because of decennial revisions of the International List of Causes of Death and changes in rules of cause-of-death selection, there is lack of comparability to a varying degree for some causes from one revision to the next. The beginning dates of the revision are 1921, 1930, 1939, 1949, 1958, and 1968. In some instances data are omitted for earlier years because appropriate subcategories are not available by age of the decedent. Except for diseases which are epidemic in nature, abrupt changes at the beginning of the revision period are indicative of breaks in comparability. The cause-of-death titles are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States and in some instances have been considerably shortened.

[2] Population adjusted for age bias in races other than white.

[3] Based on a 50-percent sample of deaths.

[4] The "motor vehicle accident" rate can be added to the "other accident" rate to provide the single category "all accidents."

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1925-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 30. Death rates for selected causes for persons 55-64 years of age, according to sex and color: United States, selected years 1925-75

(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
	Number of deaths per 100,000 resident population 55-64 years														
TOTAL BOTH SEXES															
All causes	2326.1	2402.7	2315.7	2215.5	2049.0	1901.0	1729.7	1735.1	1694.5	1658.8	1622.8	1631.1	1611.9	1549.2	1495.5
Diseases and conditions															
Diseases of heart	508.8	598.6	646.9	710.0	726.7	803.6	738.1	737.9	704.3	652.3	640.5	637.6	626.0	590.8	564.7
Malignant neoplasms	356.7	363.3	372.8	376.9	385.7	390.7	392.3	396.8	406.6	423.0	421.3	427.1	430.0	437.0	430.7
Of buccal cavity and pharynx	11.7	11.0	10.4	9.7	9.8	9.7	9.5	9.9	11.2	12.8	12.7	12.5	12.3	12.6	12.5
Of digestive organs and peritoneum	188.9	184.8	182.2	172.7	172.0	150.0	133.8	127.1	119.8	111.0	107.4	107.6	107.6	108.3	105.2
Of respiratory system	---	14.3	19.0	29.5	40.9	54.9	68.5	81.5	94.1	116.2	116.3	122.8	125.6	130.5	131.9
Of breast	30.3	36.0	37.3	37.0	35.9	35.3	36.6	37.0	39.9	41.2	42.0	42.8	43.0	43.2	42.1
Of genital organs	47.9	63.1	65.0	65.0	62.6	56.7	53.7	49.0	45.3	41.5	42.0	41.1	40.9	41.3	39.0
Of urinary organs	---	16.3	17.6	17.9	17.6	19.1	18.0	17.4	17.2	17.5	16.5	16.5	16.9	16.9	16.5
Of all other and unspecified sites	---	---	---	---	---	37.9	42.0	42.4	46.6	48.7	49.6	50.0	50.5	50.9	50.1
Leukemia	6.3	7.7	10.1	9.1	10.3	12.1	12.9	13.2	12.6	12.0	11.4	11.6	11.6	11.5	11.6
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	14.9	17.3	19.2	19.8	22.1	23.4	22.2	21.5	21.8	21.8
Accidents and violence															
Motor vehicle accidents [4]	27.5	44.3	47.5	41.1	28.7	29.0	28.0	25.1	29.0	27.9	26.1	26.2	24.8	19.5	18.1
All other accidents [4]	80.7	75.9	69.7	60.1	58.0	41.8	36.4	33.9	35.5	35.3	34.8	34.7	34.6	31.7	30.7
Suicide	30.3	41.2	34.9	34.3	23.5	26.8	24.8	23.7	23.8	21.4	21.5	21.4	20.3	19.7	20.0
Homicide	5.3	7.1	7.1	4.7	3.9	4.0	4.0	4.2	5.0	7.1	7.5	7.8	7.9	8.0	8.0
WHITE MALE															
All causes	2445.6	2552.2	2536.2	2521.9	2437.9	2304.4	2175.2	2225.2	2222.5	2202.6	2145.1	2160.3	2118.2	2026.1	1954.5
Diseases and conditions															
Diseases of heart	559.0	675.2	777.5	906.2	979.1	1081.7	1035.1	1056.0	1038.0	979.3	963.0	960.6	943.7	889.4	853.0
Malignant neoplasms	323.0	334.3	343.0	368.0	388.1	409.4	429.1	450.9	471.4	498.1	488.4	499.8	493.4	501.1	489.8
Of buccal cavity and pharynx	20.7	19.0	17.5	16.5	16.6	15.9	16.1	16.5	18.2	19.7	19.3	18.2	17.9	18.8	17.7
Of digestive organs and peritoneum	200.8	204.2	199.8	197.2	197.1	170.7	152.4	147.2	139.9	132.5	127.0	130.6	125.2	126.9	120.8
Of respiratory system	---	20.1	28.3	47.7	68.3	95.9	125.3	149.8	170.4	199.3	195.3	202.8	204.1	208.4	206.3
Of breast	1.2	0.7	0.7	0.8	0.9	0.8	1.0	0.9	0.6	0.6	0.9	0.7	0.8	0.8	0.7
Of genital organs	---	25.0	27.0	29.9	26.8	23.7	23.2	20.3	20.6	20.0	20.6	20.4	21.1	21.2	20.3
Of urinary organs	---	21.7	23.1	24.4	24.5	27.6	26.1	26.2	25.7	26.7	24.7	24.9	25.4	25.4	25.0
Of all other and unspecified sites	---	---	---	---	---	41.8	47.8	50.1	55.8	56.9	57.5	59.3	58.5	58.5	57.6
Leukemia	7.2	9.2	12.7	10.9	12.4	14.4	15.7	16.6	16.2	15.5	14.9	15.2	14.5	14.7	14.9
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	18.7	21.5	23.3	23.9	26.8	28.3	27.8	25.9	26.3	26.4

See footnotes at end of table.

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Table 30. Death rates for selected causes for persons 55-64 years of age, according to sex and color: United States, selected years 1925-75—Continued
(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
WHITE MALE—Continued	Number of deaths per 100,000 resident population 55-64 years														
Accidents and violence															
Motor vehicle accidents [4]	37.1	63.4	70.8	62.8	45.9	41.9	39.3	34.4	39.5	39.0	35.2	35.0	33.3	27.0	24.4
All other accidents [4]	120.2	112.6	100.6	87.8	87.7	61.9	53.8	49.7	52.1	51.1	50.3	49.5	48.9	44.3	43.6
Suicide	51.1	70.6	58.5	58.8	38.6	45.9	42.8	40.2	39.7	35.0	34.6	33.5	32.4	32.1	32.1
Homicide	7.5	9.9	10.0	6.2	5.2	4.4	4.1	4.3	5.2	7.7	7.6	8.2	8.5	8.1	8.9
ALL OTHER MALE															
All causes	3453.2	4039.4	3800.1	3710.7	3230.7	3480.8	3191.2	3151.5	3126.6	3046.6	3013.1	3073.2	3069.5	2942.3	2806.6
Diseases and conditions															
Diseases of heart	769.3	975.4	963.3	1029.6	962.2	1313.8	1218.2	1175.6	1147.8	1062.3	1048.3	1066.3	1061.2	1006.4	930.2
Malignant neoplasms	173.4	190.5	253.0	297.0	336.9	457.1	530.0	549.8	603.7	642.9	671.2	682.2	707.5	721.1	729.4
Of buccal cavity and pharynx	7.4	7.8	13.1	10.7	10.6	18.9	16.5	14.7	24.0	23.8	23.7	27.9	26.5	26.9	29.9
Of digestive organs and peritoneum	113.3	116.1	153.1	171.8	184.6	224.1	232.6	218.7	228.0	200.3	209.6	198.1	205.7	212.4	213.4
Of respiratory system	---	6.8	13.6	21.6	38.6	74.4	108.0	154.2	172.0	231.5	241.8	263.9	275.4	283.8	290.0
Of breast	0.8	0.3	0.6	1.0	1.9	1.7	0.5	1.6	0.8	0.8	0.6	2.4	1.5	1.0	1.1
Of genital organs	---	26.8	34.4	40.3	49.6	56.1	65.5	55.1	55.0	49.6	57.1	58.2	56.9	55.8	52.3
Of urinary organs	---	8.1	12.5	15.3	15.8	18.4	23.2	23.2	26.0	23.8	23.6	26.5	24.3	22.9	23.7
Of all other and unspecified sites	---	---	---	---	---	39.6	52.7	50.3	63.0	68.4	70.2	66.3	72.8	74.1	74.9
Leukemia	4.5	2.3	4.4	6.1	6.8	11.0	12.0	11.2	12.8	15.0	13.0	10.7	15.1	15.5	14.4
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	12.8	19.1	20.8	22.0	29.6	31.6	28.4	29.2	28.7	29.6
Accidents and violence															
Motor vehicle accidents [4]	25.1	58.2	71.9	57.8	48.8	57.0	55.8	47.6	58.2	59.9	62.4	62.0	57.9	45.4	44.8
All other accidents [4]	119.9	104.8	101.4	96.5	93.4	86.4	83.9	81.5	88.3	92.1	79.6	87.5	89.2	82.4	79.3
Suicide	9.1	16.5	17.8	12.6	9.1	16.8	12.7	16.9	14.2	10.5	11.9	11.9	12.2	12.5	11.5
Homicide	30.1	38.1	35.8	28.2	24.5	32.3	35.2	29.1	36.7	55.1	57.2	64.1	61.8	65.3	57.7

See footnotes at end of table.

Table 30. Death rates for selected causes for persons 55-64 years of age, according to sex and color: United States, selected years 1925-75—Continued

(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
	Number of deaths per 100,000 resident population 55-64 years														
WHITE FEMALE															
All causes	2029.2	1993.2	1863.7	1684.4	1489.1	1293.8	1119.4	1078.9	1024.2	1014.9	1003.3	1001.6	1000.7	973.6	944.6
Diseases and conditions															
Diseases of heart	416.1	458.0	462.4	462.7	442.8	460.2	395.6	383.0	344.6	317.7	315.0	305.9	300.8	284.9	272.3
Malignant neoplasms	407.3	408.1	411.8	393.3	387.3	362.5	343.6	329.0	327.3	338.6	339.6	342.3	348.6	354.5	351.9
Of buccal cavity and pharynx	2.8	3.2	2.9	2.9	3.4	3.1	3.2	3.7	4.1	6.1	6.4	6.5	6.4	6.4	6.8
Of digestive organs and peritoneum	186.0	174.0	168.9	151.3	148.7	123.0	107.7	98.6	90.4	83.0	80.3	78.3	81.4	80.7	80.3
Of respiratory system	---	9.5	10.5	12.8	15.6	15.5	14.8	16.7	23.6	39.3	41.8	46.8	49.7	54.7	58.9
Of breast	63.1	75.4	77.8	76.5	72.9	70.9	71.8	71.8	76.6	79.3	79.6	81.8	81.8	81.8	79.6
Of genital organs	97.5	101.0	101.3	97.7	93.6	83.1	75.8	68.8	61.2	55.1	55.1	54.0	52.7	53.8	50.7
Of urinary organs	---	11.9	12.7	11.9	11.3	11.0	10.4	8.8	9.0	9.4	8.8	8.6	9.2	9.3	8.7
Of all other and unspecified sites	---	---	---	---	---	33.9	35.4	33.9	36.6	39.6	40.4	40.2	41.3	41.7	41.0
Leukemia	5.7	6.9	8.2	7.9	8.9	10.3	10.8	10.6	9.6	9.0	8.6	8.8	8.8	8.5	8.6
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	11.7	13.7	16.1	16.2	17.7	18.5	17.3	17.3	17.7	17.2
Accidents and violence															
Motor vehicle accidents [4]	18.2	24.1	22.7	18.9	11.1	15.0	15.8	15.3	17.9	16.1	15.6	16.2	15.2	11.0	10.5
All other accidents [4]	36.5	34.9	35.7	29.2	26.3	18.5	15.8	14.4	15.9	16.9	17.6	17.5	18.0	16.3	15.3
Suicide	11.3	14.5	13.8	13.1	11.4	10.7	10.4	10.9	12.3	12.3	12.6	13.3	12.0	11.0	11.7
Homicide	1.1	1.5	1.6	1.2	0.9	1.3	1.1	1.5	1.6	2.0	2.3	2.0	2.1	2.4	2.4
ALL OTHER FEMALE															
All causes	3667.5	4142.8	3690.9	3318.3	2806.1	2763.0	2437.5	2409.7	2220.8	1886.9	1829.4	1830.2	1821.7	1716.3	1636.2
Diseases and conditions															
Diseases of heart	813.7	1022.9	936.1	915.0	814.0	1073.5	940.9	909.0	825.7	669.8	622.6	659.1	625.7	582.7	554.0
Malignant neoplasms	354.2	370.8	411.5	370.9	386.5	437.7	414.4	427.8	421.9	387.1	405.5	391.1	419.2	425.2	411.0
Of buccal cavity and pharynx	4.8	4.6	7.2	4.1	3.2	5.6	2.7	5.1	5.8	7.0	6.6	6.8	6.9	6.0	6.3
Of digestive organs and peritoneum	122.9	120.7	141.0	120.6	131.8	151.8	133.5	139.9	128.3	113.2	108.9	111.8	121.2	119.9	112.9
Of respiratory system	---	1.7	4.8	9.5	12.4	14.1	19.6	20.2	26.3	35.3	39.4	40.1	46.7	53.6	52.3
Of breast	46.5	55.9	56.5	53.8	52.9	58.1	60.7	61.1	69.2	61.9	71.4	67.1	71.1	74.9	75.2
Of genital organs	143.7	153.5	157.7	142.0	140.8	139.1	125.8	116.6	104.7	86.7	86.1	78.9	83.0	79.3	73.7
Of urinary organs	---	6.7	9.5	10.6	11.5	14.1	10.5	14.7	13.2	10.2	13.6	11.0	11.4	12.0	11.4
Of all other and unspecified sites	---	---	---	---	---	38.5	42.8	48.2	47.9	46.5	51.4	50.4	50.8	52.6	50.9
Leukemia	1.6	0.8	5.8	3.3	4.1	6.9	7.6	11.0	10.1	8.8	7.3	8.3	9.7	10.1	8.8
Of other lymphatic and hematopoietic tissues	---	---	---	---	---	9.5	11.3	11.1	16.5	17.6	20.8	16.7	18.3	16.8	19.5

See footnotes at end of table.

Table 30. Death rates for selected causes for persons 55-64 years of age, according to sex and color: United States, selected years 1925-75—Continued
(Data are based on the National Vital Registration System)

Sex, color, and cause of death [1]	1925	1930	1935	1940	1945	1950 [2]	1955	1960	1965	1970	1971	1972 [3]	1973	1974	1975
ALL OTHER FEMALE—Continued	Number of deaths per 100,000 resident population 55-64 years														
Accidents and violence															
Motor vehicle accidents [4]	12.3	22.7	19.8	15.7	8.3	13.9	17.4	14.4	15.7	16.7	15.8	14.3	14.2	13.9	12.7
All other accidents [4]	58.2	67.3	51.4	45.9	37.2	33.9	34.7	36.7	29.2	24.5	27.4	25.8	22.7	25.5	23.9
Suicide	1.6	2.9	2.0	1.4	1.1	1.2	2.6	3.4	2.8	2.2	3.0	3.7	4.4	3.4	4.1
Homicide	2.7	7.1	5.8	4.3	3.4	3.2	6.0	6.6	7.0	7.8	11.2	11.0	10.4	9.6	10.0

[1] Because of decennial revisions of the International List of Causes of Death and changes in rules of cause-of-death selection, there is lack of comparability to a varying degree for some causes from one revision to the next. The beginning dates of the revision are 1921, 1930, 1939, 1949, 1958, and 1968. In some instances data are omitted for earlier years because appropriate subcategories are not available by age of the decedent. Except for diseases which are epidemic in nature, abrupt changes at the beginning of the revision period are indicative of breaks in comparability. The cause-of-death titles are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States and in some instances have been considerably shortened.

[2] Population adjusted for age bias in races other than white.

[3] Based on a 50-percent sample of deaths.

[4] The "motor vehicle accident" rate can be added to the "other accident" rate to provide the single category "all accidents."

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, for data years 1925-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

D. Determinants of Health

Certain characteristics of the environment, of health services, of the family, and of the individual are associated with health status.

The Donora, Pa., smog of 1948 was a well-documented case of a change in the ambient environment being associated with excess morbidity and death; 5,910 people were ill and 20 died. (The London fog of 1952 resulted in 4,000 deaths and an unknown number of illnesses.) Immunization not only protects the immunized person but high levels of immunization in the population help to break the chain of contagion and thus protect even those individuals who have not been immunized. Quick access to medical care may save the life of a motor vehicle accident victim and continuing care may improve the quality of life for the person with a chronic condition or impairment. Smokers are more likely to die of lung cancer and alcoholics of cirrhosis of the liver than nonsmokers or nondrinkers.

Some of the determinants of health can be modified only by societal control. Others are subject to individual control. A few may be unchangeable by means now available.

Societal controls are required to reduce pollutants thought to be hazardous to health, and there is evidence from the Environmental Protection Agency that levels from some pollutants were reduced in the 5-year period 1970-75.

Consumer products are only partly subject to societal control; they require care in manufacturing, labeling, and in use. According to product hazard scores developed by the Consumer Product Safety Commission (based on emergency room utilization and severity data), sports and related equipment are very high on the hazard list. Stairs are the only nonsports related item rated among the top five hazards for both children under age 15 and people 15 years and over. For children under 15, bicycles and bicycle equipment are ranked first.

A decade ago the Surgeon General published a report compiling the evidence that cigarette smoking was dangerous to health. As smoking patterns change, especially as more smokers become former smokers, some of the relationships between cigarette smoking status and measures of health have blurred. Some of the statistics suggest that the former smoker is in the most disadvantaged health position. For example, the highest rate of heart trouble is found among older former smokers. However, it may be that the smokers with the most serious health problems are forced to join the ranks of the former smokers. They become nonsmokers because of poor health. In general, smokers and former smokers tend to have more disability and long-term illness than persons who have never smoked. They are also more likely to have had a hospital episode during the year. However, recent evidence indicates that the health status of former smokers improves with the duration of smoking cessation.

There is no question that cigarette smoking, a condition which is subject to control by the individual, decreases longevity. At every age and for both sexes, death rates are higher for people who smoke or who have smoked in the past than for people who have never smoked.

In general, the proportion of adults who smoke has declined, while the proportion of teenagers who smoke has not. In each age category the proportion of teenaged boys who smoke has remained fairly constant; the 1974 levels were about the same as the 1968 ones. Smoking among teenaged girls, however, appears to have increased. As a result, there was little difference in the proportion of boys and girls who smoked in 1974, although fewer girls than boys were smokers in 1968.

Among adults, the proportion who are cigarette smokers has declined from 1965 to 1975. The decline has been marked among men, who had been far more likely than women to smoke cigarettes. In 1975 they were still more likely to smoke than women were but the difference was much less. For example, 60 percent of the men aged 25-34 in 1964-66 were smokers; by 1975 only 47 percent of those same men, now aged 35-44, were smokers and only 44 percent of the young men aged 25-34 smoked. About 43 percent of women aged 25-34 smoked in the mid-1960's. By 1975 only 36 percent of those same women, now aged 35-44, were current cigarette smokers, and 35 percent of those aged 25-34 smoked. Many adults have quit smoking over this 10-year period.

Data on drinking levels and problem drinking are more difficult to obtain than data on smoking. The majority of the people in the United States drink alcohol at some time. Only 27 percent of high school students reported themselves

as abstainers on self-administered questionnaires; 23 percent reported drinking once a week or more often. The proportion of the students who were abstainers was higher for girls than for boys and higher among younger than among older students. Students with low grades were more likely to drink and to drink more often than those with high grades.

Adult problem drinkers, defined as those consuming more than 1.5 ounces of absolute alcohol daily and above the median on a problem drinking index, have slightly higher median income and education than the rest of the population and are less likely to be in blue-collar occupations. Survey data on problem drinking must be treated with caution as the methodological difficulties in obtaining data (such as failure to obtain any response or failure to obtain an honest response) may lead to biases.

Overweight is a personal characteristic thought to be associated with premature death and a contributing factor to disease and related problems which, without the overweight, might have remained latent. According to actual physical skinfold measurements, about 13 percent of the men and 23 percent of the women aged 20-74 were obese. About twice as many people rated themselves as overweight when asked. It appears that one's perception of being overweight is at least partly subjective and cosmetic.

Of those adults 17 years and over who rated themselves as overweight, almost two-thirds (64 percent) were trying to lose weight and 21 percent were trying not to gain. Young people who think they are overweight are more likely than older people to be trying to lose weight, and women are more likely than men. However, older overweight people are more likely than younger ones to be trying to lose because of a physician's advice.

Of those who were trying to lose weight, the majority were relying on diet and a substantial group were relying on a combination of diet and exercise. Very few (3 percent) were using medication to lose weight. Medication is very rarely reported for men and, even among young women, only 4 percent were using it as a means of losing weight.

Regular exercise is generally regarded as contributing to the maintenance of good health unless a preexisting condition makes it inadvisable. In 1975 almost half (48.6 percent) of the noninstitutionalized adults in the civilian population exercised regularly. Even among elderly people, 42.3 percent of those not in nursing homes or other institutions exercised.

The most frequently reported form of exercise was walking. It is especially common among the elderly, who are less likely to engage in other forms of exercise than younger people. Men, especially young men, were more likely than young women to have several forms of exercise. Jogging and weight lifting were much more frequently reported for men than for women, while the proportions bicycling and/or doing calisthenics were approximately the same.

Steady exercise which requires real effort is the recommendation for maintaining the cardiovascular system. Whether that level of exercise is being attained cannot be judged on the basis of these data.

One of the health care measures recommended to help prevent early childhood morbidity and mortality is early prenatal care. The proportion of births to mothers who received care before the end of the third month of pregnancy increased from 68 percent in 1970 to 72 percent in 1975. The proportion who received no care before the seventh month decreased from 8 to 6 percent.

Relatively little change occurred in prenatal care for white women. The majority were receiving care before the end of the third month in both 1970 and 1975 (72 and 76 percent, respectively). Less than half of the black women were receiving care before the end of the third month in 1970 (44 percent), but in 1975 over half (56 percent) were receiving early care.

Even in 1975, the women whose babies were most at risk of infant death, the youngest and the oldest, were the least likely to receive early care and the most likely to receive either no care or care only after the beginning of the seventh month.

In general, immunization levels in 1975 were not as high as one might wish. More young children were reportedly immunized against rubella in 1975 than in 1970 but levels for diphtheria, pertussis, tetanus (DPT), and polio were certainly no higher. Although these are no longer the dread diseases of a quarter of a century ago, they have not been eradicated, and high levels of immunization need to be maintained.

Having a continuing source of medical care

where the individual is known and followup to problems or potential problems can be provided is usually regarded as desirable.

Four-fifths of the civilian noninstitutionalized population are reported to have a usual place of medical care. Even higher proportions of children under 15 years and adults 65 years and over have a place where they usually go for care. Young adults, especially young men, are less likely than other groups to have a usual place for care. Probably many of them have not felt a need for medical care and have never looked for a provider.

The most common usual place for medical care in 1974 was a physician's office or group practice. Seventy percent of the people relied on these sources of care, with higher proportions for higher income people and for children. Only 4 percent relied on a hospital outpatient clinic as the usual source of medical care, although the proportions were higher for blacks and other racial minorities (12 percent) and for the population with family income under $5,000 (7 percent).

About 10 percent of the people reportedly had difficulty in obtaining medical care when they sought it. It is not known whether the efforts over the past decade to make care available to all those who seek it has made this proportion lower than it was before. Women in the childbearing ages were more likely to report barriers to care than any other age-sex group. Low-income people (under $5,000 family income) were more likely than people in other income groups to report barriers to medical care.

For the 21.6 million people with reported barriers to medical care, the most common problem was difficulty getting an appointment. This was primarily a problem for those aged 15-44, the age group least likely to have a usual place for care. Only 9 percent of the elderly had reported barriers to care; they cited transportation difficulties as well as trouble getting an appointment. Low-income people generally cited cost as well as trouble getting an appointment if any barriers to care were reported.

Cost was reported as a barrier to receiving needed care for only 2.5 percent of the civilian noninstitutionalized population. Availability (i.e., trouble getting an appointment, doctor not available when needed, and office hours not convenient) appeared to be the major problem.

The determinants discussed so far are factors which can be modified to some degree if society or the individual judges the change worth making. Air pollution can be reduced. Many adults including elderly ones, do manage to exercise regularly. People can quit smoking, and many overweight people can control their weight. Medical care can be made available to people if they need it and seek it. Reduction in air pollution and in the proportion of adults smoking, and increases in the proportion of pregnant women obtaining prenatal care are examples of changes which are documented in this report.

There are also factors known to be associated with high death rates which are not so amenable to change. For example, extremes of temperature are associated with unusually high death rates from coronary heart disease and from stroke. Death rates from motor vehicle accidents are much higher on holidays than on regular days. On New Year's Day death rates from motor vehicle accidents are almost twice as high as the average, and homicides are more than twice as high on both New Year's Day and Christmas Day. Death rates from motor vehicle accidents and homicides are higher on Saturdays and Sundays than on other days of the week.

We cannot control weather or holidays, or the days of the week. We can, however, be aware that deaths are more liable to occur under certain conditions and, if possible, take precautions to prevent them. Air conditioning can modify the effect of extremely high temperature for those at high risk of deaths from heart disease or stroke if people have air conditioning available and remain inside. On holidays, people can stay off the highways and speed limits can be rigidly enforced. Thus the effects of even these determinants can be modified to some extent.

Table 31. Consumer products with the highest product hazard index scores[1] listed in rank order, according to age of person injured: Contiguous United States, July 1, 1975-June 30, 1976

(Data are based on reporting by a sample of hospital emergency rooms)

Rank	All ages	Under 15 years	15 years and over
	Product category[2]		
1	Bicycles and bicycle equipment, including add-on features (baskets, horns, nonstandard seats, handlebars)	Bicycles and bicycle equipment, including add-on features (baskets, horns, nonstandard seats, handlebars)	Stairs (including folding stairs), steps, ramps, landings
2	Stairs (including folding stairs), steps, ramps, landings	Stairs (including folding stairs), steps, ramps, landings	Football, activity, related equipment and apparel
3	Football, activity, related equipment and apparel	Swings, slides, seesaws, and playground equipment	Baseball, activity, related equipment and apparel
4	Baseball, activity, related equipment and apparel	Nonglass tables and unspecified tables	Bicycles and bicycle equipment, including add-on features (baskets, horns, nonstandard seats, handlebars)
5	Swings, slides, seesaws, and playground equipment	Football, activity, related equipment and apparel	Basketball, activity, and related equipment
6	Nonglass tables and unspecified tables	Swimming, swimming pools, and related equipment	Cooking ranges, ovens, and related equipment
7	Swimming, swimming pools, and related equipment	Baseball, activity, related equipment and apparel	Liquid fuels, kindling, illuminating (including gasoline, kerosene, lighter fluid, fuel for chafing dishes and fondue pots, charcoal starter, etc.)
8	Beds, including springs, frames, bunk beds, and unspecified beds (excluding mattresses or box springs, water beds, sofa beds, infant beds, and special beds)	Beds, including springs, frames, bunk beds, and unspecified beds (excluding mattresses or box springs, water beds, sofa beds, infant beds, and special beds)	Home workshop powersaws and unspecified saws
9	Liquid fuels, kindling, illuminating (including gasoline, kerosene, lighter fluid, fuel for chafing dishes and fondue pots, charcoal starter, etc.)	Liquid fuels, kindling, illuminating (including gasoline, kerosene, lighter fluid, fuel for chafing dishes and fondue pots, charcoal starter, etc.)	Floors and flooring materials
10	Nails, carpet tacks and screws, thumbtacks	Nails, carpet tacks and screws, thumbtacks	Ladders and stools (excluding chain ladders)
11	Basketball, activity, and related equipment	Chairs, sofas, and sofa beds	Power lawnmowers and unspecified lawnmowers
12	Chairs, sofas, and sofa beds	Architectural glass, including glass doors	Nails, carpet tacks and screws, thumbtacks
13	Bleaches and dyes, cleaning agents, and caustic compounds	Skates, skateboards, and scooters	Bleaches and dyes, cleaning agents, and caustic compounds
14	Architectural glass, including glass doors	Bleaches and dyes, cleaning agents, and caustic compounds	Batteries, all kinds
15	Floors and flooring materials	Furnaces and floor furnaces	Chairs, sofas, and sofa beds
16	Cooking ranges, ovens, and related equipment	Charcoal	Architectural glass, including glass doors
17	Power lawnmowers and unspecified lawnmowers	Desks, storage cabinets, bookshelves, and magazine racks	Bathtubs, nonglass shower enclosures, and shower structures other than doors and panels

See footnotes at end of table.

Table 31. Consumer products with the highest product hazard index scores[1] listed in rank order, according to age of person injured: Contiguous United States, July 1, 1975-June 30, 1976—Continued

(Data are based on reporting by a sample of hospital emergency rooms)

Rank	All ages	Under 15 years	15 years and over
	Product category[2]		
18	Skates, skateboards, and scooters	Nonelectric fences and unspecified fences	Household chemical products other than bleaches and dyes, cleaning agents, caustic compounds, paints, solvents and lubricants, waxes, and polishes (e.g., fumigants, adhesives, photographic chemicals, carbon tetrachloride, acid, chemical deodorizer)
19	Furnaces and floor furnaces	Basketball, activity, and related equipment	Beds, including springs, frames, bunk beds, and unspecified beds (excluding mattresses or box springs, water beds, sofa beds, infant beds, and special beds)
20	Bathtubs, nonglass shower enclosures and shower structures other than doors and panels	Floors and flooring materials	Matches

[1] Based on a frequency severity index (FSI) computed by the Consumer Product Safety Commission. The FSI is derived from the estimated number of injuries treated in emergency rooms for a product category and the mean severity of those injuries.

[2] Excluded are products either not under Consumer Product Safety Commission jurisdiction or under questionable or shared jurisdiction, and products lacking in sufficient specificity to be meaningful.

NOTE: Data obtained through the National Electronic Injury Surveillance System.

SOURCE: U.S. Consumer Product Safety Commission: Annual Report, Fiscal Year 1976. Washington. U.S. Government Printing Office, Oct. 1976.

Table 32. Air pollution, according to source and type of pollutant: United States, 1970-75
(Data are based on reporting by air quality monitoring stations)

Type of pollutant and year	Source					
	All sources	Trans-portation	Stationary source fuel combustion	Industrial processes	Solid waste	Miscel-laneous
	Emissions in 10^6 tons/year					
Particulate matter						
1970	26.8	1.3	9.7	13.6	1.2	1.0
1971	24.9	1.3	8.8	12.8	0.9	1.1
1972	23.4	1.3	8.1	12.3	0.8	0.9
1973	21.9	1.3	7.5	11.7	0.7	0.7
1974	20.3	1.3	7.0	10.6	0.6	0.8
1975	18.0	1.3	6.6	8.7	0.6	0.8
Sulfur oxides						
1970	34.2	0.7	26.6	6.7	0.1	0.1
1971	32.3	0.7	25.2	6.2	0.1	0.1
1972	36.7	0.7	28.9	6.9	0.1	0.1
1973	35.6	0.7	28.0	6.7	0.1	0.1
1974	34.1	0.8	26.8	6.3	0.1	0.1
1975	32.9	0.8	26.3	5.7	0.0	0.1
Nitrogen oxides						
1970	22.6	9.3	12.3	0.6	0.3	0.1
1971	23.4	9.8	12.5	0.6	0.3	0.2
1972	24.5	10.4	13.1	0.7	0.2	0.1
1973	25.6	10.9	13.7	0.7	0.2	0.1
1974	24.9	10.6	13.3	0.7	0.2	0.1
1975	24.2	10.7	12.4	0.7	0.2	0.2
Hydrocarbons						
1970	33.9	14.1	1.6	3.6	1.9	12.7
1971	33.3	13.7	1.7	3.5	1.5	12.9
1972	34.1	14.0	1.7	3.8	1.2	13.4
1973	34.0	13.7	1.7	3.7	1.1	13.8
1974	32.9	12.5	1.7	3.7	1.0	14.0
1975	30.9	11.7	1.4	3.5	0.9	13.4
Carbon monoxide						
1970	113.7	88.0	1.5	11.5	6.8	5.9
1971	113.7	88.5	1.4	11.2	5.2	7.4
1972	115.8	93.5	1.4	11.2	4.4	5.3
1973	111.5	90.3	1.4	11.5	4.0	4.3
1974	103.3	82.1	1.4	11.0	3.5	5.3
1975	96.2	77.4	1.2	9.4	3.3	4.9

SOURCE: United States Environmental Protection Agency: National Air Quality Emissions Trends Report, 1975. EPA-450/1-76-002. Research Triangle Park, N.C., Nov. 1976.

Table 33. Current cigarette smoking among persons 12-18 years of age, according to sex and age: United States, selected years 1968-74

(Data are based on telephone interviews of samples of the noninstitutionalized population resident in private households with telephones)

Sex and age	1968	1970	1972	1974
	Percent in age group who are current cigarette smokers			
Male				
All ages 12-18 years	14.7	18.5	15.7	15.8
12-14 years	2.9	5.7	4.6	4.2
15-16 years	17.0	19.5	17.8	18.1
17-18 years	30.2	37.3	30.2	31.0
Female				
All ages 12-18 years	8.4	11.9	13.3	15.3
12-14 years	0.6	3.0	2.8	4.9
15-16 years	9.6	14.4	16.3	20.2
17-18 years	18.6	22.8	25.3	25.9

NOTE: A current smoker is a person who has smoked at least 100 cigarettes and who now smokes cigarettes on a regular basis at least weekly.

SOURCES: Regional Medical Programs Services, National Clearinghouse for Smoking and Health: Teenage Smoking, National Patterns of Cigarette Smoking Ages 12 Through 18, in 1968 and 1970, DHEW Pub. No. (HSM) 72-7508, Health Services and Mental Health Administration, Rockville, Md.; National Institutes of Health: Teenage Smoking, National Patterns of Cigarette Smoking, Ages 12 Through 18, in 1972 and 1974, DHEW Pub. No. (NIH) 76-931, Public Health Service, Bethesda, Md.

Table 34. Smoking status of persons 21 years of age and over, according to sex and age: United States, 1975

(Data are based on telephone interviews of a sample of the noninstitutionalized population resident in private households)

Sex and age	Smoking status			
	All statuses	Never	Former	Current
	Percent distribution			
Male				
All ages 21 years and over	100.0	31.5	29.2	39.3
21-24 years	100.0	42.7	16.0	41.3
25-34 years	100.0	33.6	22.5	43.9
35-44 years	100.0	27.0	25.8	47.1
45-54 years	100.0	22.9	36.0	41.1
55-64 years	100.0	27.6	38.8	33.7
65 years and over	100.0	39.6	36.2	24.2
Female				
All ages 21 years and over	100.0	56.6	14.5	28.9
21-24 years	100.0	56.1	9.9	34.0
25-34 years	100.0	48.1	16.5	35.4
35-44 years	100.0	45.9	17.7	36.4
45-54 years	100.0	51.8	15.5	32.8
55-64 years	100.0	59.0	15.0	25.9
65 years and over	100.0	79.1	10.7	10.2

NOTE: Smoking status is defined as: Never—never having smoked as many as 100 cigarettes; former—having smoked at least 100 cigarettes but not smoking cigarettes now; current—having smoked at least 100 cigarettes and smoking cigarettes now.

SOURCE: Center for Disease Control and National Institutes of Health: Adult Use of Tobacco, 1975. Public Health Service. Atlanta, Ga., June 1976.

Table 35. Smoking status of persons 21 years of age and over, according to sex and family income: United States, 1975

(Data are based on telephone interviews of a sample of the noninstitutionalized population resident in private households)

Sex and family income	Smoking status			
	All statuses	Never	Former	Current
	Percent distribution			
Male				
All incomes [1]	100.0	31.5	29.2	39.3
Less than $3,000	100.0	36.6	22.3	41.1
$3,000-$4,999	100.0	31.8	24.5	43.8
$5,000-$7,499	100.0	37.8	21.1	41.1
$7,500-$9,999	100.0	27.9	25.8	46.4
$10,000-$14,999	100.0	31.6	30.1	38.3
$15,000-$19,999	100.0	28.8	31.0	40.3
$20,000 or more	100.0	30.7	34.3	35.0
Female				
All incomes [1]	100.0	56.6	14.5	28.9
Less than $3,000	100.0	67.4	8.9	23.7
$3,000-$4,999	100.0	64.6	9.1	26.3
$5,000-$7,499	100.0	56.4	16.7	27.0
$7,500-$9,999	100.0	56.3	12.7	31.1
$10,000-$14,999	100.0	52.7	17.3	30.1
$15,000-$19,999	100.0	50.2	16.5	33.3
$20,000 or more	100.0	45.0	21.0	33.9

[1] Includes unknown family income.

NOTE: Smoking status is defined as: Never—never having smoked as many as 100 cigarettes; former—having smoked at least 100 cigarettes but not smoking cigarettes now; current—having smoked at least 100 cigarettes and smoking cigarettes now.

SOURCE: Center for Disease Control and National Institutes of Health: Adult Use of Tobacco, 1975. Public Health Service. Atlanta, Ga., June 1976.

Table 36. Current cigarette smoking among persons 21 years of age and over, according to sex and age: United States, 1964-66, 1970, and 1975

(Data are based on household interviews and telephone interviews of samples of the noninstitutionalized population resident in private households)

Sex and age	1964-66	1970	1975
	Percent in age group who are current cigarette smokers		
Male			
All ages 21 years and over	52.4	42.2	39.3
21-24 years	64.3	49.8	41.3
25-34 years	59.9	46.7	43.9
35-44 years	59.9	48.6	47.1
45-54 years	53.5	43.1	41.1
55-64 years	49.2	37.4	33.7
65 years and over	28.8	22.8	24.2
Female			
All ages 21 years and over	32.5	30.5	28.9
21-24 years	45.2	32.3	34.0
25-34 years	42.6	40.3	35.4
35-44 years	39.9	38.8	36.4
45-54 years	39.9	36.1	32.8
55-64 years	20.5	24.2	25.9
65 years and over	7.7	10.2	10.2

NOTE: A current smoker is a person who has smoked at least 100 cigarettes and who now smokes cigarettes on a regular basis at least weekly.

SOURCES: National Clearinghouse for Smoking and Health, Center for Disease Control: Adult Use of Tobacco, 1970, DHEW Pub. No. (HSM) 73-8727, Health Services and Mental Health Administration, Atlanta, Ga., June 1973; Center for Disease Control and National Institutes of Health: Adult Use of Tobacco, 1975, Public Health Service, Atlanta, Ga., June 1976.

Table 37. Selected measures of health, according to sex, age, and smoking status: United States, 1974
(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex, age, and smoking status	Disability			Reported conditions			Utilization of medical services	
	Restricted-activity days per person per year	Bed days per person per year	Work-loss days per person per year [1]	Percent with chronic condition(s) causing limitation of activity	Number reporting physician diagnosis of heart trouble per 1,000 persons	Number of acute respiratory conditions per 100 persons [2]	Percent with five or more physician visits in past year	Percent with one or more hospital episodes in past year
Both sexes								
All ages 17 years and over	19.8	7.5	4.6	18.6	89.5	75.0	24.8	13.1
Never smoked	19.3	7.5	4.0	18.9	94.3	72.6	26.1	12.7
Former smoker	21.8	7.3	4.7	22.4	129.2	72.2	27.0	14.4
Current smoker	20.2	7.3	5.3	17.3	77.8	84.0	23.7	13.5
17-44 years	13.4	5.4	4.4	8.8	42.2	95.7	22.0	12.3
Never smoked	11.8	4.9	3.7	8.0	41.3	94.2	22.3	12.0
Former smoker	13.8	4.9	4.1	9.4	47.4	90.5	23.4	11.7
Current smoker	15.4	6.1	5.5	9.8	48.3	105.6	23.0	13.8
45-64 years	23.3	8.1	5.2	23.7	111.1	52.6	25.5	12.9
Never smoked	22.8	8.4	5.0	22.3	99.0	59.0	27.2	12.1
Former smoker	21.5	6.5	5.3	24.7	149.0	54.3	26.4	15.1
Current smoker	25.9	8.6	5.2	26.2	115.7	50.3	24.3	12.3
65 years and over	37.8	13.9	*	45.8	229.3	41.0	34.2	16.5
Never smoked	35.4	13.3	*	44.7	233.3	31.0	34.9	15.3
Former smoker	41.8	14.6	*	49.2	284.8	66.0	37.1	19.7
Current smoker	38.7	11.8	*	46.3	178.8	36.1	27.0	16.5
Male								
All ages 17 years and over	17.1	6.1	4.5	18.7	89.0	68.4	17.9	10.2
Never smoked	13.6	5.1	3.4	17.3	83.8	74.3	17.3	8.3
Former smoker	20.3	6.1	5.0	23.5	137.8	62.3	22.9	12.8
Current smoker	18.8	6.7	5.1	18.7	81.7	74.1	16.9	10.5
17-44 years	11.3	4.2	4.2	9.0	38.3	86.3	13.4	7.0
Never smoked	8.0	2.9	3.0	8.4	36.3	90.9	13.1	5.3
Former smoker	11.1	3.6	4.2	8.8	46.5	78.6	16.1	8.0
Current smoker	14.6	5.3	5.5	10.0	45.4	95.3	14.1	8.6

See footnotes at end of table.

Table 37. Selected measures of health, according to sex, age, and smoking status: United States, 1974—Continued

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex, age, and smoking status	Disability			Reported conditions			Utilization of medical services	
	Restricted-activity days per person per year	Bed days per person per year	Work-loss days per person per year [1]	Percent with chronic condition(s) causing limitation of activity	Number reporting physician diagnosis of heart trouble per 1,000 persons	Number of acute respiratory conditions per 100 persons [2]	Percent with five or more physician visits in past year	Percent with one or more hospital episodes in past year
Male—Continued								
45-64 years	20.4	6.5	5.0	23.7	120.3	44.8	21.3	13.1
Never smoked	19.7	6.5	4.4	20.0	100.1	59.5	20.8	12.5
Former smoker	20.2	5.1	5.5	23.8	152.1	46.2	24.1	14.5
Current smoker	23.2	8.0	4.5	27.8	129.9	41.3	20.7	12.4
65 years and over	35.5	13.9	*	51.0	244.9	43.4	30.2	17.4
Never smoked	28.9	12.4	*	51.4	264.8	23.5	30.4	14.9
Former smoker	38.2	13.2	*	50.9	284.6	62.4	33.5	18.5
Current smoker	36.3	12.9	*	52.5	186.1	31.0	24.8	19.0
Female								
All ages 17 years and over	22.2	8.7	4.8	18.4	90.0	80.9	30.8	15.7
Never smoked	21.9	8.4	4.5	19.7	99.0	71.9	30.0	14.7
Former smoker	24.5	9.3	3.9	20.6	113.7	90.2	34.5	17.5
Current smoker	21.8	7.9	5.6	15.8	73.5	95.0	31.3	16.9
17-44 years	15.2	6.6	4.6	8.6	45.9	104.3	29.9	17.2
Never smoked	14.0	6.1	4.3	7.8	44.2	96.0	27.6	15.9
Former smoker	17.5	6.8	*	10.2	48.7	107.0	33.5	16.8
Current smoker	16.3	6.9	5.3	9.5	51.4	117.0	32.9	19.5
45-64 years	25.8	9.6	5.6	23.8	102.7	59.7	29.2	12.8
Never smoked	23.8	9.1	5.4	23.1	98.5	58.8	29.4	12.0
Former smoker	24.3	9.4	*	26.5	142.5	71.0	31.1	16.2
Current smoker	29.0	9.3	6.5	24.4	100.2	60.1	28.3	12.3
65 years and over	39.4	13.9	*	42.1	218.2	39.3	37.0	15.8
Never smoked	37.3	13.6	*	42.6	223.8	33.2	36.3	15.4
Former smoker	51.7	18.4	*	44.6	285.4	76.1	46.8	23.1
Current smoker	42.3	*	*	37.4	167.5	43.4	30.1	12.9

[1] Currently employed persons only.

[2] Number can exceed 100 because more than one condition may be reported per person.

NOTE: Smoking status is defined as: Never—never having smoked as many as 100 cigarettes; former—having smoked at least 100 cigarettes but not smoking cigarettes now; current—having smoked at least 100 cigarettes and smoking cigarettes now.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 38. Death rates for persons 35-84 years of age, according to age, sex, and smoking status: United States, 1966-68
(Data are based on questionnaires mailed to relatives of a sample of decedents)

Sex and smoking status [1]	Age-adjusted death rate per 100,000 population 35-84 years of age [2]	35-44 years	45-54 years	55-64 years	65-74 years	75-84 years
		Death rate per 100,000 population				
Male						
Total	1,973.7	412.3	990.7	2,422.9	5,066.4	10,491.1
Ever smoked	2,220.6	462.6	1,106.2	2,657.2	5,893.8	11,647.7
Current smoker	2,516.4	523.4	1,243.4	2,959.8	6,704.6	13,442.7
Ex-smoker	1,736.8	256.9	707.7	2,050.8	4,940.0	10,230.4
Never smoked	1,482.1	249.3	628.3	1,767.5	3,794.8	9,417.8
Female						
Total	1,121.5	239.0	527.5	1,099.9	2,868.6	7,478.3
Ever smoked	1,746.4	298.6	678.2	1,590.6	4,261.1	14,354.7
Current smoker	1,692.8	294.6	665.3	1,520.7	4,267.8	13,532.6
Ex-smoker	1,887.4	320.2	745.0	1,846.4	4,245.0	15,867.4
Never smoked	956.7	178.3	400.2	856.4	2,579.0	6,933.5

[1] "Ever smoked" means a lifetime history of having smoked 100 or more cigarettes. Ex-smokers are distinguished from current smokers by having quit cigarette smoking for at least 1 year.

[2] Age-adjusted by the direct method on the age distribution of the total population of the United States ages 35-84 as enumerated in the 1940 census.

SOURCE: Godley, F., and Kruegel, D. L.: Cigarette Smoking and Differential Mortality: New Estimates from Representative National Samples. Paper presented at the annual meeting of the Population Association of America, Seattle, Apr. 1975.

Table 39. Self-assessed drinking levels of junior and senior high school students, according to selected characteristics: United States, spring 1974

(Data are based on questionnaires administered in a sample of classrooms)

Characteristic	Drinking level						
	All levels	Abstainer	Infrequent	Light	Moderate	Moderate/ heavy	Heavy
	Percent distribution						
Total	100.0	27.3	16.3	16.6	15.5	13.7	10.6
Sex							
Male	100.0	23.2	13.7	15.6	16.4	16.0	15.1
Female	100.0	31.1	18.8	17.6	14.6	11.5	6.3
Race/ethnicity							
White	100.0	24.8	16.6	17.0	16.4	14.6	10.7
Black	100.0	40.9	17.6	14.8	11.4	9.5	5.7
Spanish American	100.0	31.6	14.7	18.1	13.0	11.8	10.9
American Indian	100.0	27.1	15.2	14.0	15.6	11.6	16.5
Oriental	100.0	34.5	9.3	21.5	16.4	4.8	13.5
Age							
Under 14 years	100.0	37.8	23.6	14.4	12.7	7.3	4.3
14 years	100.0	27.8	18.8	16.6	15.4	11.7	9.7
15 years	100.0	24.7	14.1	17.4	16.2	16.0	11.5
16 years	100.0	22.6	11.2	17.1	17.3	17.4	14.5
17 years	100.0	17.2	11.4	20.3	17.5	19.0	14.6
18 years and over	100.0	20.5	6.9	15.1	16.5	20.8	20.2
Parent's occupation							
Professional	100.0	25.9	16.2	16.7	16.4	15.1	9.8
Manager, owner, or administrator	100.0	23.8	17.9	17.3	16.9	13.7	10.5
Office worker or clerical	100.0	22.1	16.7	19.6	15.7	14.8	11.0
Skilled worker	100.0	28.0	17.1	17.5	14.6	13.0	9.9
Farmer	100.0	35.7	14.5	15.1	7.6	16.7	10.4
Semiskilled worker	100.0	30.5	14.7	13.9	15.7	14.0	11.1
Region of residence							
Northeast	100.0	22.6	19.2	17.5	17.1	13.6	10.1
North Central	100.0	24.5	17.1	16.9	15.6	14.3	11.6
South	100.0	35.1	14.5	15.1	13.8	12.9	8.7
West	100.0	24.7	14.4	17.8	16.0	14.3	12.8
Location of residence							
Metropolitan area	100.0	25.1	17.5	17.8	15.9	13.4	10.3
Nonmetropolitan area	100.0	29.2	15.2	15.6	15.1	14.0	10.9

NOTE: Drinking level is defined by the frequency and amount of alcohol consumed. Abstainers do not drink or drink less than once a year. Heavy drinkers drink at least once a week and consume 5 or more drinks per typical drinking occasion. The intermediate categories are defined by a combination of frequency of drinking and amount of alcohol consumed per typical drinking occasion.

SOURCE: Rachal, J. V., et al.: A National Study of Adolescent Drinking Behavior, Attitudes and Correlates. Research Triangle Park, N.C. Research Triangle Institute, Apr. 1975.

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Table 40. Self-assessed drinking levels of junior and senior high school students, according to marijuana use, use of hard drugs, and school grades: United States, spring 1974

(Data are based on questionnaires administered in a sample of classrooms)

Kind of drug use and school grades	Percent distribution for each category	Drinking level						
		All levels	Abstainer	Infrequent	Light	Moderate	Moderate/heavy	Heavy
		Percent distribution						
Total	100.0	100.0	27.3	16.3	16.6	15.5	13.7	10.6
DRUG USE IN PAST 6 MONTHS								
Marijuana								
None	71.0	100.0	37.7	19.5	17.2	13.4	7.7	4.6
1 or 2 times	6.9	100.0	8.4	9.7	19.7	24.1	22.0	16.0
3 or more times	22.1	100.0	3.2	3.7	11.8	21.2	29.7	30.5
Hard drugs								
None	96.4	100.0	28.8	15.7	16.6	15.9	13.1	9.9
1 or 2 times	1.6	100.0	3.0	3.6	7.1	15.2	32.5	38.6
3 or more times	2.0	100.0	5.3	4.1	6.1	13.5	23.8	47.1
SCHOOL GRADES								
A's	10.2	100.0	37.3	20.5	19.1	11.8	7.7	3.6
A's and B's	24.6	100.0	29.5	19.9	17.1	16.2	11.6	5.7
B's	16.3	100.0	25.9	15.6	20.2	16.1	12.8	9.5
B's and C's	28.5	100.0	25.8	15.5	15.8	16.8	14.3	11.8
C's	11.3	100.0	23.4	13.0	13.0	14.3	19.0	17.4
C's and D's	7.6	100.0	22.9	11.8	16.0	13.2	17.7	18.5
D's and F's	1.6	100.0	24.5	8.6	8.0	17.5	20.5	20.9

NOTE: Drinking level is defined by the frequency and amount of alcohol consumed. Abstainers do not drink or drink less than once a year. Heavy drinkers drink at least once a week and consume 5 or more drinks per typical drinking occasion. The intermediate categories are defined by a combination of frequency of drinking and amount of alcohol consumed per typical drinking occasion.

SOURCE: Rachal, J. V., et al.: A National Study of Adolescent Drinking Behavior, Attitudes and Correlates. Research Triangle Park, N.C. Research Triangle Institute, Apr. 1975.

Table 41. Consumption of alcohol by persons 18 years of age and over, according to selected characteristics: United States, January 1975

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Characteristic	Drinking level						
	All levels	Abstainers or less than 1 drink per year	Infrequent drinkers (1-6 drinks per year)	Drinkers, average daily consumption of absolute alcohol:			
				0.100 oz. or less	0.101-0.200 oz.	0.201-0.550 oz.	0.551 oz. or more
	Percent distribution						
Total	100	34	10	21	7	11	16
Sex							
Male	100	25	8	18	7	14	25
Female	100	43	11	25	6	8	7
Race							
White	100	33	10	22	7	11	16
Black	100	47	10	19	3	7	9
Family income							
Less than $5,000	100	53	10	16	3	5	11
$5,000-$9,999	100	39	11	15	4	11	16
$10,000-$14,999	100	28	10	25	9	12	15
$15,000 or more	100	16	8	27	10	16	21
Marital status							
Single	100	19	11	22	8	13	28
Married	100	33	9	22	8	11	15
Separated, divorced, or widowed	100	51	11	19	2	6	9
Education							
Less than high school graduate	100	50	9	16	3	6	13
High school graduate	100	27	10	23	8	13	18
Some college	100	22	13	26	8	12	18
College graduate	100	21	6	28	11	16	16

SOURCE: Calculated from tables in: Rappeport, M., Labaw, P., and Williams, J.: The Public Evaluates the NIAAA Public Education Campaign; A Study for the U.S. Department of Health, Education, and Welfare, Vols. I and II. Princeton. Opinion Research Corporation, July 1975.

Table 42. Selected characteristics of problem drinkers and of the general population 18 years of age and over, according to sex: United States, 1972-74

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Characteristic	Male		Female	
	General population	Problem [1] drinkers	General population	Problem [1] drinkers
	Percent of population with specified characteristic			
Abstainer [2]	26	...	44	...
Marital status:				
Single	20	37	10	17
Separated or divorced [3]	5	17	7	12
Black or Spanish American	12	17	12	14
Living in South	28	18	28	17
Unemployed [4]	4	12	13	30
Blue-collar occupation	60	54	56	29
Past family drinking [5]	32	54	33	46
Present household drinking [6]	12	32	17	63
	Other specified measure			
Daily consumption of absolute alcohol in oz.	0.9	4.4	0.4	5.0
Median age in years	43	33	39	40
Median annual household income	$10,000	$10,500	$9,250	$10,000
Median education in years	11.5	11.8	11.8	12.0

[1] A subgroup of the general population defined by the daily consumption of more than 1.5 ounces of absolute alcohol and above the median on the index of problem drinking.

[2] Drink once a year or less.

[3] Base = ever-married population.

[4] Base = labor force population. For females, heads of household only.

[5] While growing up, member of immediate family was a frequent or heavy drinker.

[6] Another member of present household is a frequent or heavy drinker.

SOURCE: Armor, D. J., Polich, J. M., and Stambul, H. B.: Alcoholism and Treatment. Rand Corporation, June 1974.

Table 43. Obesity among persons aged 20-74 years based on triceps skinfold measurements, according to sex and age: United States, 1971-74

(Data are based on physical examinations of a sample of the civilian noninstitutionalized population)

Sex and age	Percent of population classified as obese [1]
Male	
All ages 20-74 years	13.0
20-44 years	14.0
45-74 years	11.8
Female	
All ages 20-74 years	22.7
20-44 years	19.1
45-74 years	26.9

[1] Obesity is defined as falling above the sex-specific 85th-percentile measurements for ages 20-29 years.

SOURCE: Division of Health Examination Statistics, National Center for Health Statistics: Data from the Health and Nutrition Examination Survey.

Table 44. Self-assessed weight status among persons 17 years of age and over, according to sex and age: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex and age	Self-assessed weight status				
	Total	Under-weight	About right	Over-weight	No rating
	Percent distribution				
Male					
All ages 17 years and over	100.0	9.6	51.0	30.5	8.9
17-44 years	100.0	10.8	50.9	28.1	10.2
45-64 years	100.0	6.2	49.9	37.9	8.9
65 years and over	100.0	12.1	60.7	23.8	3.3
Female					
All ages 17 years and over	100.0	6.2	41.9	48.9	3.1
17-44 years	100.0	6.0	42.5	48.4	3.1
45-64 years	100.0	4.6	36.0	56.1	3.3
65 years and over	100.0	9.6	51.1	36.9	2.4

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 45. Weight control among persons 17 years of age and over who assess themselves as overweight, according to age and sex: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex and weight control	All ages 17 years and over	17-44 years	45-64 years	65 years and over
Both sexes	Number in thousands			
Persons overweight	58,063	31,193	20,341	6,529
	Percent distribution			
Total	100.0	100.0	100.0	100.0
Trying to lose	63.6	66.5	62.1	54.4
On physician's advice	23.2	18.0	28.3	31.8
Trying not to gain	20.5	19.2	21.8	22.4
On physician's advice	4.1	2.7	5.3	6.4
All other [1]	15.9	14.3	16.1	23.1
Male	Number in thousands			
Persons overweight	20,724	10,937	7,745	2,042
	Percent distribution			
Total	100.0	100.0	100.0	100.0
Trying to lose	55.4	55.6	55.7	53.2
On physician's advice	18.0	11.0	24.9	29.8
Trying not to gain	22.7	22.7	23.5	19.8
On physician's advice	4.3	2.6	6.2	6.3
All other [1]	21.9	21.7	20.8	26.9
Female	Number in thousands			
Persons overweight	37,339	20,256	12,596	4,487
	Percent distribution			
Total	100.0	100.0	100.0	100.0
Trying to lose	68.2	72.4	66.0	55.0
On physician's advice	26.0	21.8	30.4	32.8
Trying not to gain	19.2	17.3	20.8	23.6
On physician's advice	3.9	2.8	4.8	6.4
All other [1]	12.6	10.3	13.2	21.4

[1] Includes overweight persons not trying to control their weight and persons of unknown weight control status.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 46. Method of weight control of persons 17 years of age and over who assess themselves as overweight and are trying to lose weight, according to age and sex: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex and method of weight control	All ages 17 years and over	17-44 years	45-64 years	65 years and over
Both sexes	Number in thousands			
Overweight persons trying to lose weight	36,935	20,752	12,630	3,553
	Percent distribution			
Total	100.0	100.0	100.0	100.0
With medication	2.8	3.3	2.3	*
Without medication	93.4	92.8	93.9	94.7
Diet	57.4	49.3	66.4	73.0
Exercise	4.5	6.0	2.5	2.5
Diet and exercise	31.5	37.5	25.1	19.2
Other and unknown	3.8	3.8	3.8	3.8
Male	Number in thousands			
Overweight persons trying to lose weight	11,482	6,078	4,316	1,087
	Percent distribution			
Total	100.0	100.0	100.0	100.0
With medication	1.4	1.4	*	*
Without medication	94.8	94.4	95.3	95.3
Diet	53.1	43.1	63.7	67.2
Exercise	7.8	11.2	3.7	*
Diet and exercise	33.9	40.1	27.8	23.1
Other and unknown	3.8	4.2	3.2	*
Female	Number in thousands			
Overweight persons trying to lose weight	25,453	14,673	8,314	2,466
	Percent distribution			
Total	100.0	100.0	100.0	100.0
With medication	3.4	4.1	2.7	*
Without medication	92.8	92.2	93.3	94.4
Diet	59.4	51.9	67.8	75.6
Exercise	3.0	3.9	1.9	*
Diet and exercise	30.4	36.5	23.6	17.5
Other and unknown	3.8	3.6	4.1	4.1

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 47. Persons exercising regularly and type of exercise, according to sex and age: United States, 1975

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex and age	Civilian noninstitutionalized population in thousands	Percent exercising regularly [1]	Type of exercise						
			Ride bicycle	Do calisthenics	Jog	Lift weights	Swim	Walk	All other
			Percent of population engaging in specific type of exercise						
Both sexes									
All ages 20 years and over	135,655	48.6	10.9	13.5	4.8	3.4	11.8	33.8	6.8
20-44 years	71,084	53.7	16.1	17.3	7.3	5.4	16.9	33.8	6.9
45-64 years	43,145	43.4	6.5	10.8	2.7	1.5	8.0	32.9	6.5
65 years and over	21,426	42.3	2.9	6.1	1.2	*	2.8	35.7	6.9
Male									
All ages 20 years and over	63,665	48.5	10.8	13.5	7.2	6.3	13.3	32.5	6.4
20-44 years	34,268	52.7	14.9	17.5	10.6	10.1	18.8	31.4	6.2
45-64 years	20,567	42.0	6.7	10.1	3.8	2.6	8.1	31.4	5.9
65 years and over	8,830	47.3	4.3	5.9	2.1	*	4.1	39.4	8.1
Female									
All ages 20 years and over	71,990	48.7	11.1	13.5	2.7	0.8	10.5	35.0	7.1
20-44 years	36,816	54.6	17.2	17.1	4.1	1.1	15.0	36.0	7.5
45-64 years	22,579	44.6	6.4	11.4	1.6	*	7.8	34.2	7.1
65 years and over	12,595	38.7	1.8	6.3	*	*	1.9	33.0	6.0

[1] Regular exercise is defined as any exercise on a weekly basis.

NOTE: More than one type of exercise can be reported per person.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Provisional data from the Health Interview Survey.

Table 48. Live births by month of pregnancy during which prenatal care began according to race: United States, reporting areas, 1970-75

(Data are based on the National Vital Registration System)

Race and year	Month of pregnancy prenatal care began									
	Total	1st or 2d month	3d month	4th month	5th month	6th month	7th month	8th month	9th month	No prenatal care
	Percent distribution									
All races[1]										
1970	100.0	41.2	26.7	12.1	7.3	4.8	3.4	2.0	0.8	1.7
1971	100.0	41.4	27.2	12.2	7.2	4.7	3.1	1.8	0.7	1.6
1972	100.0	42.4	27.0	12.0	7.1	4.5	3.0	1.7	0.7	1.6
1973	100.0	43.8	27.0	11.6	6.8	4.2	2.8	1.7	0.7	1.5
1974	100.0	44.9	27.2	11.4	6.4	3.9	2.6	1.6	0.6	1.4
1975	100.0	45.5	26.8	11.4	6.3	3.9	2.6	1.5	0.6	1.3
White										
1970	100.0	44.5	27.9	11.3	6.2	3.9	2.7	1.6	0.7	1.2
1971	100.0	44.7	28.3	11.3	6.1	3.8	2.6	1.5	0.6	1.1
1972	100.0	45.7	27.9	11.1	6.0	3.7	2.4	1.4	0.6	1.1
1973	100.0	47.1	27.8	10.6	5.7	3.4	2.3	1.4	0.6	1.1
1974	100.0	48.0	27.9	10.4	5.4	3.2	2.2	1.3	0.5	1.0
1975	100.0	48.5	27.4	10.5	5.4	3.2	2.2	1.3	0.5	1.0
Black										
1970	100.0	23.7	20.6	16.2	13.1	9.8	6.9	3.8	1.5	4.4
1971	100.0	24.8	21.8	16.5	13.0	9.2	6.1	3.3	1.2	4.0
1972	100.0	26.4	22.6	16.7	12.5	8.5	5.5	3.0	1.1	3.6
1973	100.0	28.2	23.2	16.3	11.9	7.9	5.0	2.8	1.2	3.4
1974	100.0	30.1	23.8	16.1	11.3	7.3	4.7	2.6	1.1	3.0
1975	100.0	31.6	24.2	16.0	10.8	6.9	4.4	2.4	1.0	2.7

[1] Includes all other races not shown separately.

NOTE: In 1970 and 1971 month of pregnancy prenatal care began was reported by 39 States and the District of Columbia, in 1972 by 40 States and the District of Columbia, and in 1973-75 by 42 States and the District of Columbia. Figures for 1970 and 1971 based on a 50-percent sample of births; for 1972-75, based on 100 percent of births in selected States and on a 50-percent sample of births in all other States.

SOURCE: National Center for Health Statistics: Vital Statistics of the United States, Vol. I, for data years 1970-72, Washington, U.S. Government Printing Office; for 1973 and 1974, Health Resources Administration, DHEW, Rockville, Md., in preparation; and for 1975, Health Resources Administration, DHEW, Rockville, Md., to be published.

Table 49. Live births by race and age of mother, and percent distribution of live births by month of pregnancy during which prenatal care began according to race and age of mother: United States, reporting areas, 1975

(Data are based on the National Vital Registration System)

Race and age of mother	Number of live births	Month of pregnancy prenatal care began [1]					
		Total	1st or 2d month	3d month	4th-6th month	7th-9th month	No prenatal care
		Percent distribution					
All races [2]	3,144,198	100.0	45.5	26.8	21.6	4.7	1.3
Under 15 years	12,642	100.0	14.5	16.4	48.0	16.2	4.9
15-19 years	582,238	100.0	27.8	25.5	35.8	8.5	2.3
20-24 years	1,093,676	100.0	46.1	27.3	20.8	4.5	1.3
25-29 years	936,786	100.0	54.3	27.1	15.0	2.8	0.8
30-34 years	375,500	100.0	51.7	27.2	16.9	3.3	1.0
35-39 years	115,409	100.0	43.3	27.0	23.0	5.0	1.7
40-44 years	26,319	100.0	34.9	26.1	28.6	7.8	2.7
45-49 years	1,628	100.0	26.4	23.1	37.1	8.4	5.0
White	2,551,996	100.0	48.5	27.4	19.1	3.9	1.0
Under 15 years	5,073	100.0	15.2	15.3	46.4	17.7	5.5
15-19 years	410,129	100.0	30.0	26.7	33.5	7.9	1.9
20-24 years	894,676	100.0	48.8	27.9	18.5	3.8	1.0
25-29 years	808,906	100.0	56.3	27.3	13.4	2.3	0.6
30-34 years	318,149	100.0	53.7	27.5	15.2	2.8	0.8
35-39 years	93,266	100.0	45.1	27.7	21.3	4.5	1.4
40-44 years	20,560	100.0	36.8	26.5	26.9	7.3	2.5
45-49 years	1,237	100.0	28.1	24.6	33.3	8.5	5.5
Black	511,581	100.0	31.6	24.2	33.7	7.8	2.7
Under 15 years	7,315	100.0	14.1	17.3	49.3	14.9	4.4
15-19 years	161,044	100.0	22.5	22.7	41.6	9.9	3.2
20-24 years	175,915	100.0	33.5	24.6	31.8	7.4	2.6
25-29 years	100,966	100.0	40.7	25.7	26.2	5.4	2.0
30-34 years	43,567	100.0	39.0	25.2	27.8	5.8	2.3
35-39 years	17,579	100.0	33.1	24.5	32.3	7.0	3.1
40-44 years	4,859	100.0	27.6	24.1	36.1	9.1	3.1
45-49 years	336	100.0	21.2	18.4	50.6	7.1	2.7

[1] In 1975 month of pregnancy during which prenatal care began was reported for 2,707,551 births by 42 States and the District of Columbia.

[2] Includes all other races not shown separately.

SOURCE: National Center for Health Statistics: Vital Statistics of the United States, 1975, Vol. I. Health Resources Administration, DHEW, Rockville, Md. To be published.

Table 50. Persons with history of rubella vaccine, according to age and color for 1970-75 and age and geographic division for 1975: United States

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Color, year, and geographic division	1-4 years	5-9 years	10-12 years
	Percent of population with history of rubella vaccine		
COLOR			
Total			
1970	37.2	46.5	29.5
1971	51.2	63.2	47.3
1972	56.9	66.8	55.2
1973	55.6	64.9	54.1
1974	59.8	68.0	57.5
1975	61.9	70.0	60.9
White			
1970	38.3	47.4	29.0
1971	51.8	63.5	46.7
1972	57.8	67.4	54.8
1973	57.0	65.8	54.0
1974	61.0	69.0	57.9
1975	63.9	71.3	61.1
All other			
1970	31.8	41.7	32.0
1971	48.2	61.6	51.2
1972	52.6	63.7	57.7
1973	48.5	59.8	54.2
1974	53.6	62.9	55.2
1975	52.0	63.3	59.9
GEOGRAPHIC DIVISION, 1975			
New England	61.7	60.6	55.7
Middle Atlantic	69.2	75.3	70.1
East North Central	64.2	68.8	59.4
West North Central	63.8	72.7	60.3
South Atlantic	60.0	69.9	61.0
East South Central	54.0	66.2	50.4
West South Central	61.3	74.1	67.7
Mountain	57.6	69.2	59.2
Pacific	56.8	66.1	54.5

SOURCE: Center for Disease Control: Data from the U.S. Immunization Surveys.

Table 51. Persons with history of measles vaccine and/or measles infection, according to age and color for 1970-75 and age and geographic division for 1975: United States

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Color, year, and geographic division	1-4 years	5-9 years	10-13 years
	Percent of population with history of measles vaccine and/or measles infection		
COLOR			
Total			
1970	62.3	79.8	80.9
1971	66.6	81.3	81.6
1972	66.0	81.3	82.1
1973	64.1	79.6	81.6
1974	66.6	80.8	81.1
1975	67.7	80.4	80.5
White			
1970	64.9	82.1	82.6
1971	67.7	82.4	83.1
1972	67.1	82.9	83.5
1973	66.1	81.4	83.1
1974	68.6	82.4	83.2
1975	70.0	82.2	82.0
All other			
1970	50.0	67.8	70.3
1971	61.3	75.5	72.7
1972	60.5	73.0	74.0
1973	54.2	70.1	73.3
1974	56.3	72.4	69.4
1975	57.2	71.2	72.5
GEOGRAPHIC DIVISION, 1975			
New England	70.7	81.2	82.7
Middle Atlantic	73.3	81.8	82.4
East North Central	67.9	79.1	80.5
West North Central	67.4	82.8	83.9
South Atlantic	66.7	79.4	79.4
East South Central	63.6	80.4	77.8
West South Central	68.3	82.9	85.9
Mountain	62.3	79.1	75.3
Pacific	64.8	78.3	75.3

SOURCE: Center for Disease Control: Data from the U.S. Immunization Surveys.

Table 52. Persons with 3 or more doses of diphtheria-tetanus-pertussis vaccine, according to age and color for 1970-75 and age and geographic division for 1975: United States

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Color, year, and geographic division	1-4 years	5-9 years	10-13 years
	Percent of population with 3 or more doses of diphtheria-tetanus-pertussis vaccine		
COLOR			
Total			
1970	76.1	85.9	87.0
1971	78.7	86.4	87.4
1972	75.6	85.4	87.2
1973	72.6	81.9	83.8
1974	73.9	84.7	85.5
1975	75.2	84.4	84.0
White			
1970	79.7	87.6	88.8
1971	81.6	88.1	89.2
1972	78.8	87.3	88.7
1973	75.8	83.4	85.5
1974	76.8	86.7	87.5
1975	78.5	86.5	86.1
All other			
1970	58.8	77.5	76.4
1971	65.1	77.7	77.1
1972	58.7	75.0	78.5
1973	56.7	74.3	74.0
1974	59.6	74.2	74.8
1975	59.4	73.8	72.9
GEOGRAPHIC DIVISION, 1975			
New England	79.1	84.4	84.3
Middle Atlantic	76.2	81.9	83.0
East North Central	75.9	82.1	82.7
West North Central	80.6	89.1	85.5
South Atlantic	73.8	84.7	84.6
East South Central	75.3	87.3	84.5
West South Central	74.3	89.6	90.2
Mountain	74.9	81.6	81.3
Pacific	70.8	83.7	81.6

SOURCE: Center for Disease Control: Data from the U.S. Immunization Surveys.

Table 53. Persons with 3 or more doses of polio vaccine, according to age and color for 1970-75 and age and geographic division for 1975: United States

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Color, year, and geographic division	1-4 years	5-9 years	10-14 years	15-19 years
COLOR				
Total	Percent of population with 3 or more doses of polio vaccine			
1970	65.9	82.3	85.3	77.8
1971	67.3	81.2	83.9	77.0
1972	62.9	78.9	81.8	75.4
1973	60.4	71.4	69.3	59.1
1974	63.1	73.5	69.8	60.2
1975	64.8	76.7	71.5	59.9
White				
1970	69.2	83.8	86.6	79.5
1971	70.5	82.8	85.9	79.0
1972	66.3	81.6	83.7	77.3
1973	64.4	73.5	71.1	61.0
1974	66.7	76.0	71.8	62.1
1975	68.8	79.6	73.7	61.7
All other				
1970	50.1	74.8	76.7	67.7
1971	51.9	72.9	71.9	65.0
1972	45.2	64.7	71.5	63.7
1973	39.8	60.3	59.0	47.8
1974	45.0	60.4	59.1	49.3
1975	46.1	61.7	59.6	49.4
GEOGRAPHIC DIVISION, 1975				
New England	75.5	83.0	75.4	57.3
Middle Atlantic	65.4	79.0	70.2	59.0
East North Central	63.2	68.9	63.0	54.8
West North Central	66.5	79.0	72.3	55.5
South Atlantic	62.8	76.5	73.5	59.9
East South Central	61.0	80.8	73.8	63.1
West South Central	63.6	78.1	78.3	69.3
Mountain	67.3	75.1	76.1	64.9
Pacific	65.5	79.2	73.5	62.7

SOURCE: Center for Disease Control: Data from the U.S. Immunization Surveys.

Table 54. Persons with a usual place of medical care, according to age, sex, color, and family income: United States, 1974
(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex, color, and family income	All ages	Under 15 years	15-44 years	45-64 years	65 years and over
	Percent of population with a usual place of medical care				
Total	80.5	89.8	74.1	79.7	85.0
Sex					
Male	75.6	90.1	65.7	74.1	82.3
Female	85.0	89.5	81.9	84.8	86.9
Color					
White	81.2	91.2	75.0	80.0	85.1
All other	75.2	82.4	67.7	76.9	84.2
Family income[1]					
Less than $5,000	77.9	82.9	68.2	79.0	85.3
$5,000-$9,999	79.8	87.1	72.6	80.1	88.6
$10,000-$14,999	81.7	92.1	75.2	80.4	85.3
$15,000 or more	83.2	93.7	77.8	82.1	82.7

[1] Excludes unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 55. Persons with barriers to medical care, according to age, sex, color, and family income: United States, 1974
(Data are based on household interviews of sample of the civilian noninstitutionalized population)

Sex, color, and family income	All ages	Under 15 years	15-44 years	45-64 years	65 years and over
	Percent of population with one or more barriers to medical care				
Total	10.4	7.8	12.4	10.0	9.0
Sex					
Male	8.5	7.6	9.3	8.0	8.5
Female	12.1	8.0	15.3	11.8	9.3
Color					
White	10.3	7.9	12.4	9.8	8.7
All other	10.5	7.4	12.2	11.6	11.8
Family income[1]					
Less than $5,000	14.2	10.8	18.4	15.6	10.7
$5,000-$9,999	11.6	9.2	14.6	10.7	8.0
$10,000-$14,999	9.1	7.0	11.0	8.8	5.1
$15,000 or more	8.7	6.3	10.5	8.2	7.8

[1] Excludes unknown family income.

NOTE: See following table for types of barriers.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 56. Persons with barriers to medical care, according to type of barrier, age, sex, color, and family income: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age, sex, color, and family income	Type of barrier to care						
	Doctor not available when needed	Cost too much	Did not know where to go	No way to get to doctor	Office hours not convenient	Trouble getting appointment	Other [1]
	Percent of population with specified barrier to care						
ALL AGES							
Total	2.7	2.5	1.0	1.2	1.7	5.0	0.6
Sex							
Male	2.3	2.1	0.7	0.8	1.6	3.8	0.5
Female	3.1	3.0	1.2	1.6	1.7	6.0	0.6
Color							
White	2.8	2.4	1.0	1.1	1.7	5.1	0.6
All other	2.1	3.3	1.1	2.1	1.7	3.9	0.5
Family income [2]							
Less than $5,000	3.2	5.1	1.3	3.6	1.7	5.1	0.8
$5,000-$9,999	2.9	3.8	1.3	1.4	1.9	5.2	0.5
$10,000-$14,999	2.6	1.8	0.9	0.6	1.7	4.9	0.5
$15,000 or more	2.6	0.8	0.6	0.3	1.6	5.2	0.5
UNDER 15 YEARS							
Total	2.3	1.8	0.6	1.1	1.5	3.3	0.4
Sex							
Male	2.2	1.7	0.8	1.0	1.7	3.3	0.5
Female	2.3	2.0	0.5	1.2	1.2	3.4	0.3
Color							
White	2.5	1.9	0.6	0.9	1.3	3.5	0.4
All other	1.1	1.7	*	2.1	2.1	2.6	*
Family income [2]							
Less than $5,000	2.5	3.7	1.2	3.7	1.5	3.9	*
$5,000-$9,999	2.6	2.9	0.9	1.3	2.0	3.6	*
$10,000-$14,999	2.4	1.2	0.5	0.7	1.6	3.1	*
$15,000 or more	1.9	0.6	*	*	1.0	3.4	*
15-44 YEARS							
Total	3.1	2.9	1.3	1.0	2.3	6.8	0.5
Sex							
Male	2.4	2.3	0.8	0.4	1.9	4.6	0.4
Female	3.8	3.4	1.8	1.6	2.6	8.8	0.8
Color							
White	3.2	2.8	1.3	0.9	2.3	6.9	0.6
All other	2.5	3.9	1.3	1.9	1.9	5.6	*

See footnotes at end of table.

Table 56. Persons with barriers to medical care, according to type of barrier, age, sex, color, and family income: United States, 1974—Continued

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age, sex, color, and family income	Type of barrier to care						
	Doctor not available when needed	Cost too much	Did not know where to go	No way to get to doctor	Office hours not convenient	Trouble getting appointment	Other [1]
	Percent of population with specified barrier to care						
15-44 YEARS—Continued							
Family income [2]							
Less than $5,000	4.6	6.0	1.9	3.6	2.9	8.8	0.7
$5,000-$9,999	3.4	5.0	1.6	1.3	2.4	7.1	0.7
$10,000-$14,999	2.7	2.3	1.3	0.6	2.1	6.5	0.5
$15,000 or more	3.0	0.9	0.9	0.3	2.2	6.5	0.5
45-64 YEARS							
Total	2.7	3.0	0.7	0.9	1.2	4.4	0.7
Sex							
Male	2.3	2.0	0.5	0.5	1.1	3.5	0.7
Female	3.0	3.8	0.9	1.2	1.2	5.2	0.7
Color							
White	2.6	2.8	0.6	0.8	1.2	4.6	0.7
All other	3.0	4.7	*	1.6	*	2.8	*
Family income [2]							
Less than $5,000	3.3	8.6	1.3	3.1	*	3.3	1.5
$5,000-$9,999	2.7	3.7	1.0	1.2	1.4	4.3	*
$10,000-$14,999	2.6	1.7	*	*	1.3	4.3	*
$15,000 or more	2.7	0.9	0.5	*	1.2	5.1	0.6
65 YEARS AND OVER							
Total	2.2	2.0	1.0	2.8	0.8	2.7	0.7
Sex							
Male	2.2	2.1	1.0	2.1	0.8	2.5	*
Female	2.1	2.0	1.0	3.2	0.8	2.8	0.9
Color							
White	2.1	1.9	1.0	2.7	0.8	2.8	0.8
All other	2.7	*	*	3.9	*	*	*
Family income [2]							
Less than $5,000	1.8	2.6	0.9	3.7	1.0	2.8	*
$5,000-$9,999	2.3	2.0	1.7	2.2	*	3.0	*
$10,000-$14,999	2.4	*	*	*	*	*	*
$15,000 or more	3.0	*	*	*	*	3.4	*

[1] Includes both "other specified" and "other unspecified" responses.
[2] Excludes unknown family income.

NOTE: A person can report more than one barrier to care.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

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Table 57. Usual place of medical care, according to age, sex, color, and family income: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age, sex, color, and family income	Population in thousands	Usual place of medical care										
		All places	Private doctor's office or doctors' clinic	Group practice	Hospital outpatient clinic	Hospital emergency room	Company or industry clinic	Home	Other place of care	Usual place unknown	No regular place of care	Unknown whether regular source of care
		Percent distribution										
ALL AGES												
Total	207,334	100.0	50.5	21.9	3.8	0.4	0.3	0.2	2.2	1.2	14.9	4.7
Sex												
Male	100,024	100.0	47.2	20.4	3.6	0.4	0.3	0.2	2.2	1.2	17.7	6.7
Female	107,309	100.0	53.6	23.2	4.0	0.3	0.2	0.2	2.2	1.2	12.2	2.8
Color												
White	180,725	100.0	52.2	22.7	2.6	0.3	0.3	0.2	1.9	1.2	14.3	4.5
All other	26,608	100.0	39.4	16.4	12.4	1.1	0.4	*	4.3	1.1	18.8	6.0
Family income [1]												
Less than $5,000	32,316	100.0	47.0	17.3	7.2	0.6	0.2	0.3	4.1	1.1	19.1	2.9
$5,000-$9,999	47,398	100.0	50.1	19.9	4.8	0.6	0.3	0.2	2.8	1.2	16.6	3.6
$10,000-$14,999	51,666	100.0	51.9	23.3	3.0	0.3	0.3	0.1	1.6	1.2	14.1	4.2
$15,000 or more	63,265	100.0	52.4	25.4	2.1	0.1	0.3	0.2	1.4	1.3	11.6	5.2
UNDER 15 YEARS												
Total	54,588	100.0	52.5	27.1	5.2	0.5	0.2	0.1	2.8	1.5	8.7	1.5
Sex												
Male	27,827	100.0	52.0	27.8	5.3	0.5	0.1	*	2.8	1.5	8.5	1.4
Female	26,761	100.0	52.9	26.4	5.2	0.5	0.2	*	2.7	1.6	8.9	1.6
Color												
White	45,831	100.0	55.4	28.3	3.1	0.3	0.1	0.1	2.2	1.6	7.5	1.3
All other	8,758	100.0	36.9	20.7	16.4	1.3	*	*	5.7	1.3	15.0	2.6
Family income [1]												
Less than $5,000	6,746	100.0	43.0	20.3	11.3	1.0	*	*	5.8	1.1	15.4	1.6
$5,000-$9,999	12,853	100.0	50.2	23.7	7.0	0.8	*	*	3.8	1.3	11.3	1.6
$10,000-$14,999	15,394	100.0	55.7	27.7	4.0	0.4	*	*	2.3	1.8	6.5	1.4
$15,000 or more	16,685	100.0	55.4	32.7	2.5	*	*	*	1.2	1.5	5.2	1.0

See footnote at end of table.

Table 57. Usual place of medical care, according to age, sex, color, and family income: United States, 1974—Continued
(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age, sex, color, and family income	Population in thousands	Usual place of medical care										
		All places	Private doctor's office or doctors' clinic	Group practice	Hospital outpatient clinic	Hospital emergency room	Company or industry clinic	Home	Other place of care	Usual place unknown	No regular place of care	Unknown whether regular source of care
		Percent distribution										
15-44 YEARS												
Total	89,143	100.0	46.2	20.1	3.4	0.4	0.3	0.1	2.5	1.0	19.6	6.3
Sex												
Male	43,201	100.0	41.7	17.1	2.7	0.5	0.4	0.2	2.2	1.0	24.8	9.5
Female	45,942	100.0	50.5	22.9	4.1	0.4	0.2	0.1	2.9	1.0	14.7	3.4
Color												
White	77,506	100.0	47.5	21.1	2.4	0.3	0.2	0.1	2.4	1.0	18.9	6.0
All other	11,637	100.0	37.7	13.2	10.0	1.3	0.5	*	3.8	1.0	23.8	8.5
Family income [1]												
Less than $5,000	10,746	100.0	37.5	14.6	7.1	1.0	*	*	6.7	0.9	26.9	4.9
$5,000-$9,999	20,041	100.0	45.0	18.1	4.4	0.6	0.3	0.2	3.0	1.0	22.4	5.0
$10,000-$14,999	24,194	100.0	47.2	22.1	2.7	0.4	0.3	*	1.6	0.9	19.3	5.5
$15,000 or more	29,541	100.0	49.9	22.5	2.0	0.1	0.3	0.2	1.6	1.1	15.2	7.0
45-64 YEARS												
Total	42,862	100.0	52.7	20.2	3.4	0.1	0.4	0.1	1.5	1.1	14.4	6.0
Sex												
Male	20,419	100.0	48.2	18.5	3.5	0.2	0.5	*	1.9	1.1	16.8	9.1
Female	22,443	100.0	56.8	21.8	3.4	*	0.4	*	1.0	1.2	12.2	3.1
Color												
White	38,514	100.0	53.8	20.7	2.6	0.1	0.4	0.1	1.2	1.1	14.2	5.9
All other	4,348	100.0	43.4	16.3	11.1	*	*	*	3.9	1.4	16.3	6.8
Family income [1]												
Less than $5,000	6,001	100.0	49.8	17.4	8.1	*	*	*	2.1	1.0	18.3	2.7
$5,000-$9,999	9,016	100.0	52.9	19.1	4.1	*	0.4	*	2.1	1.0	15.3	4.5
$10,000-$14,999	9,957	100.0	55.4	20.0	2.5	*	0.5	*	1.0	1.0	14.0	5.6
$15,000 or more	14,807	100.0	53.3	23.5	2.0	*	0.5	*	1.3	1.4	11.7	6.2

See footnote at end of table.

Table 57. Usual place of medical care, according to age, sex, color, and family income: United States, 1974—Continued

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age, sex, color, and family income	Population in thousands	Usual place of medical care										
		All places	Private doctor's office or doctors' clinic	Group practice	Hospital outpatient clinic	Hospital emergency room	Company or industry clinic	Home	Other place of care	Usual place unknown	No regular place of care	Unknown whether regular source of care
65 YEARS AND OVER		Percent distribution										
Total	20,740	100.0	59.5	19.2	2.8	0.2	0.2	0.8	0.7	1.5	12.0	3.0
Sex												
Male	8,578	100.0	57.8	18.3	3.4	*	0.4	*	0.6	1.5	14.1	3.6
Female	12,163	100.0	60.8	19.8	2.4	*	*	1.2	0.8	1.6	10.5	2.6
Color												
White	18,875	100.0	60.2	19.5	1.8	*	0.2	0.8	0.6	1.6	12.0	2.9
All other	1,866	100.0	52.7	16.0	12.3	*	*	*	*	*	11.5	4.3
Family income [1]												
Less than $5,000	8,823	100.0	59.7	18.2	3.7	*	*	0.6	1.1	1.6	13.1	1.6
$5,000-$9,999	5,488	100.0	63.9	18.9	2.1	*	*	0.7	*	2.0	9.5	2.0
$10,000-$14,999	2,122	100.0	61.0	20.2	2.2	*	*	*	*	*	10.4	4.3
$15,000 or more	2,231	100.0	56.5	21.5	1.7	*	*	*	*	*	11.6	5.7

[1] Excludes unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 58. Deaths from coronary heart disease and stroke, according to weather on day of death and on days preceding death: United States, selected groups of SMSA's, 1962-66

(Data are based on the National Vital Registration System)

Day and weather condition	Coronary heart disease		Stroke	
	17 snow areas[1]	9 warm areas[2]	17 snow areas[1]	9 warm areas[2]
	Average index number[3]			
Day of death				
Average temperature under 40F, with snowfall	112	...	108	...
Average temperature under 40F, with no snowfall	106	[4]121	105	[4]122
Average temperature 40-59F	100	110	98	107
Average temperature 60-79F	93	98	95	97
Average temperature 80F and over	104	96	116	99
Day of death and day preceding death				
Average temperature under 40F, with snowfall	114	...	110	...
Average temperature under 40F, with no snowfall	105	[5]123	105	[5]120
Average temperature 40-59F	100	112	98	107
Average temperature 60-79F	93	98	94	96
Average temperature 80F and over	[6]109	95	[7]128	100
Day of death and two days preceding death				
Average temperature under 40F, with snowfall	116	...	[8]114	...
Average temperature under 40F, with no snowfall	105	—	104	—
Average temperature 40-59F	100	—	96	—
Average temperature 60-79F	92	—	93	—
Average temperature 80F and over	[9]112	—	[10]132	—

[1] Includes Boston, Buffalo, Chicago, Cleveland, Denver, Detroit, Milwaukee, Minneapolis, New York, Omaha, Philadelphia, Pittsburgh, Rochester, St. Louis, Salt Lake City, Syracuse, and Washington, D. C.

[2] Includes Atlanta, Dallas, Houston, Memphis, Miami, New Orleans, Phoenix, San Antonio, and Tampa.

[3] Index numbers were first calculated for each area by dividing the average daily coronary heart disease (CHD) (and stroke) deaths in given weather categories by the average daily CHD (and stroke) deaths in the 5-year period and multiplying by 100. Averages were then obtained by summing the appropriate index numbers and dividing by the number of areas in the group.

[4] Based on 8 areas.

[5] Based on 6 areas.

[6] Based on 15 areas.

[7] Based on 14 areas.

[8] Based on 16 areas.

[9] Based on 12 areas.

[10] Based on 11 areas.

SOURCE: Rogot, E., and Padgett, S.: Associations of coronary and stroke mortality with temperature and snowfall in selected areas of the United States, 1962-66. Am. J. Epidemiol. 103(6), June 1976. (Copyright: reprinted with permission.)

Table 59. Deaths, according to specified holiday and selected causes of death: United States, 1962-66

(Data are based on the National Vital Registration System)

Cause of death	Holiday					
	New Year's Day	Memorial Day	Independence Day	Labor Day	Thanksgiving Day	Christmas Day
	Ratio of average deaths per day on specified holiday to average deaths per day for month in which holiday occurs[1]					
Total	1.06	0.98	1.07	0.99	1.02	1.07
Coronary heart disease	1.05	0.95	1.08	0.96	1.00	1.11
Stroke	1.05	0.96	1.01	0.94	1.05	1.05
Influenza-pneumonia	1.01	0.93	1.15	1.00	1.12	1.10
Diabetes	1.01	0.91	1.09	0.95	1.08	1.11
Cancer	0.99	0.98	0.98	0.97	1.00	1.01
Motor vehicle accident	1.95	1.32	1.34	1.58	1.58	1.35
Non-motor-vehicle accident	1.15	1.13	1.32	1.15	1.07	1.05
Suicide	1.22	0.88	0.98	0.92	0.93	0.94
Homicide	2.17	1.26	1.70	1.73	1.80	2.10

[1] This procedure was modified for Labor Day and Thanksgiving Day. Labor Day was compared to the average for all Mondays in September. Thanksgiving Day was compared to the average for all Thursdays in November.

NOTE: Based on 5-year average, 1962-66.

SOURCE: Rogot, E., Fabsitz, R., and Feinleib, M.: Daily variations in USA mortality. Am. J. Epidemiol. 103(2):198-211, Feb. 1976. (Copyright: reprinted with permission.)

Table 60. Deaths, according to day of the week and selected causes of death: United States, 1962-66

(Data are based on the National Vital Registration System)

Cause of death	Day of week						
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	Ratio of average deaths per day on specified day to average deaths per day for all days						
Total	1.01	0.99	0.99	0.99	1.00	1.02	1.01
Coronary heart disease	1.03	0.99	0.99	0.99	1.00	1.01	1.00
Stroke	1.01	1.00	0.99	0.99	0.99	1.01	1.00
Influenza-pneumonia	1.02	1.00	0.99	0.99	0.99	1.00	1.02
Diabetes	1.01	1.01	0.99	0.99	1.00	1.01	1.01
Cancer	1.00	1.00	1.00	1.00	1.01	1.00	1.00
Motor vehicle accident	0.85	0.77	0.79	0.83	1.03	1.44	1.31
Non-motor-vehicle accident	0.98	0.96	0.96	0.97	0.98	1.09	1.08
Suicide	1.09	1.05	0.98	0.98	0.98	0.95	0.96
Homicide	0.85	0.70	0.70	0.74	0.96	1.70	1.44

NOTE: Based on 5-year average, 1962-66.

SOURCE: Rogot, E., Fabsitz, R., and Feinleib, M.: Daily variations in USA mortality. Am. J. Epidemiol. 103(2):198-211, Feb. 1976. (Copyright: reprinted with permission.)

E. Measures of Health

Most people believe good health to be one of their most important goals or desires. While many people are able to identify or describe a healthy person, our conception of health is questioned when an apparently healthy person dies unexpectedly. It is even more difficult to categorize groups of persons as to their health status. Yet, one of the major purposes of this volume is to describe the health status of the American people.

The measurement of health status is elusive. The extreme opposite of good health, that is death, is often used as an indicator of the health status of a people. The total death rate of a country is a commonly used indicator, as are life expectancy and infant mortality. In the absence of any single, well-accepted measure of health status, a number of different measures are sometimes used as indicators. These include self-perceived health status, measures of disability, and the incidence and prevalence of selected diseases.

The interpretation of these indicators is seldom straightforward. If, for example, the number of diseases people report increases over time, it might be concluded that overall health status is deteriorating. However, improvements in the health care system might have resulted in more frequent physician contacts and identification of previously undiagnosed illnesses. It might also reflect changes in diagnostic procedures used by physicians or changes in levels of awareness or concern. None of these measures would necessarily reflect an actual change in health status, only a change in how it is measured.

One way to measure health status, used annually in the Health Interview Survey, is simply to ask people "Compared to other persons your age, would you say your health is excellent, good, fair, or poor?" In 1975 an estimated 87 percent of the civilian noninstitutionalized population were reported as being in excellent or good health. However, marked differences were noted according to age and family income. Among persons 45-64 years of age, only 53 percent of those in families with incomes of less than $5,000 reported excellent or good health, while 89 percent of those in families with $15,000 or more income reported excellent or good health. Clearly, the poor perceive themselves to be in worse health than the nonpoor.

Reporting of self-assessed health status coincides closely with other indicators of health status and health care utilization as shown in table A for persons aged 45-64.

Table A. Percent of persons aged 45-64 with specified characteristics, by health status: United States, 1975

Characteristic	Health status	
	Excellent	Poor
	Percent	
With 10 or more doctor visits in past year	4.6	45.6
With 1 or more hospitalizations in past year	7.0	35.6
With limitation in major activity	3.2	86.0

Persons who view themselves as being in poor health report many more health-related events than do persons who perceive themselves to be in excellent health.

The impact of illness is another way of assessing health status. How much disability does illness cause? While the current state of medical knowledge may not be able to prevent certain diseases, progress has been made in reducing the disability caused by diseases. However, the improved medical care results in more people surviving formerly fatal illness, but surviving with some form of disability. Therefore, improved medical care can both decrease and increase levels of disability, one of the primary measures of health status.

Data from the Health Interview Survey showed an estimated 17.9 restricted activity days (i.e., when a person cuts down on the things he usually does) per person per year in 1975 as a result of illness or injury. This included 6.6 days in bed and 5.2 days lost from work. At each age, more disability days were reported for women than for men.

There are clear patterns of the poor reporting more disability days than the more affluent. For instance, persons between the ages of 45 and 64 in families with less than $5,000 annual income report over 3 times as much restricted activity and bed disability as those in families with over $15,000 income. The differences in work-loss days are not as marked, partly because people tend to drop out of the labor force as illness becomes more severe and are therefore not subject to having work-loss days. Differences also are apparent in the disability rates between occupation and industry groups. In general, blue-collar and service workers report more disability

from all illness and injury, not just occupationally related illnesses, than do white-collar workers. As with other measures of health status, some of the differences are due to the nature of work and variations in sick leave programs, rather than true differences in health status. For example, the high level of disability among persons employed in public administration is due partly to more liberal sick leave plans in this sector. When the impact of direct occupationally related injury and illness is examined, it is found, as might be expected, that workers in construction and manufacturing have the highest rate of occupational illness and injury. Two-thirds of the cases of occupational illness and injury do not result in work loss.

Chronic illness often has a long-term impact on people, changing their life style to the extent that they can no longer carry on their major activity, such as working or keeping house, or they are limited in the kind or amount of their activities. In 1974 almost 7 million people or 3.3 percent of the population were unable to perform what would be considered their major activity: 7.3 percent were limited in the kind or amount of major activity, and 3.5 percent were limited in other activities as a direct result of chronic diseases. In total an estimated 30 million persons had some degree of limitation of activity as a result of chronic diseases. Heart conditions, arthritis and rheumatism, and orthopedic impairments are major causes of limitation of activity.

The interpretation of data on the prevalence of chronic and acute diseases depends to a large extent on the source of the data. Household interview surveys can provide data on a wide range of illnesses and have the advantage of providing important socioeconomic background data about the respondents. Their major disadvantage is that data on specific diagnostic categories of disease are difficult to obtain from interviews since respondents can report only conditions they are aware that they have. Therefore, conditions that are undiagnosed because of problems of access to medical care are not counted. Surveys which include physical examinations of a probability sample of the population, such as the Health and Nutrition Examination Survey, are very expensive to conduct and are usually limited to diseases that can be detected within a single examination. Data also are obtained from reporting systems, such as those operated by the Center for Disease Control, in which physicians report, often on a voluntary basis, certain diseases that they diagnose in their patients. Such systems suffer from their voluntary nature and the fact that they only include diseases for which people sought medical attention. Certain diseases, such as venereal disease, are required to be reported. However, compliance is not uniform because of the stigma attached to the disease.

Information from the Health Interview Survey on the estimated prevalence rates of selected chronic diseases by age, sex, and family income indicated that chronic diseases are more prevalent among the poor. This is especially true among middle-aged adults where rates for the poor were about twice those of the more affluent. The prevalence alone of a chronic disease is only a partial indicator of health status, since the severity and impact of a condition also should be considered. Thus while hearing impairments are one of the more frequently reported conditions, they cause only a relatively small amount of long-term limitation of activity.

On the other hand, heart conditions and arthritis both have high prevalence rates and are also major causes of limitation of activity. These data also showed striking differences by sex in the prevalence of selected chronic diseases. At all ages females reported markedly higher levels of arthritis and diabetes, while males reported higher rates of hearing impairments.

A person's general health status is not usually measured in terms of short-term acute illness, but certain types of acute illnesses can have a major disruptive influence on our lives and society. Influenza is one such illness. Trend data are available on influenza and other acute upper respiratory diseases, along with the associated restricted-activity and bed days, from 1969 to 1975. These data clearly showed the seasonal variation in influenza and the epidemic winters of 1971-72 and 1974-75, as well as the different impact of influenza on different age groups.

Information on notifiable disease collected by the Center for Disease Control is very useful in following trends in diseases and in identifying epidemics, although caution should be used when interpreting the actual level of a disease since there is known to be serious underreporting of some diseases. The impact of certain immunization programs, especially in the child-

hood diseases, can also be determined from these data. The number of reported cases of rubella was cut to one-third the number reported 10 years ago, and the number of reported measles cases was only one-tenth the number a decade ago.

The gradual decline in many of the notifiable diseases is in contrast to the striking increase in gonorrhea. Although males have a higher rate of gonorrhea, the increases are greater among women. While the rate of gonorrhea has tripled since the early 1960's, the reported cases of syphilis have dropped to almost a tenth of the level 35 years ago.

Tuberculosis has dropped from one of the major diseases in the early 1900's to a relatively minor level today. Still the rate of tuberculosis among blacks and other minorities is more than 4 times higher than among whites, and the rate in large metropolitan areas is more than twice that in small metropolitan and nonmetropolitan areas.

Finally, several measures, while not adequate indicators of health status by themselves, can be used as indicators or predictors of health status when found to deviate markedly from normal levels and in combination with other measures. For example, low birth weight (below 2,500 grams) has been associated with poor health of the mother, lack of proper prenatal care, and future health problems of the child. Very young mothers tend to have more children of low birth weight, indicating potential health problems for both the mother and child. Departures from the normal growth patterns of children also can be indicative of health problems. Data in this report, based on the National Health and Nutrition Examination Survey, show only the national distribution of children from ages 2 to 18 by height and weight. More detailed analysis of these data indicates differences by socioeconomic groups. For instance, both boys and girls living in families with income below the poverty level tend to be shorter and weigh less than children in families above the poverty level.

Table 61. Self-assessment of health, according to age, sex, and family income: United States, 1975
(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age, sex, and family income	Level of health				
	All levels [1]	Excellent	Good	Fair	Poor
	Percent distribution				
ALL AGES					
Total	100.0	48.6	38.4	9.7	2.8
Sex					
Male	100.0	51.7	36.5	8.5	2.8
Female	100.0	45.7	40.1	10.8	2.8
Family income [2]					
Less than $5,000	100.0	31.9	41.7	17.9	7.8
$5,000-$9,999	100.0	40.9	42.8	12.3	3.4
$10,000-$14,999	100.0	51.9	38.1	8.0	1.5
$15,000 or more	100.0	60.3	33.3	5.0	1.0
UNDER 15 YEARS					
Total	100.0	59.9	35.3	3.7	0.4
Sex					
Male	100.0	60.0	35.0	4.0	0.5
Female	100.0	59.8	35.6	3.5	0.4
Family income [2]					
Less than $5,000	100.0	41.6	49.1	7.5	1.1
$5,000-$9,999	100.0	52.0	42.5	4.5	0.5
$10,000-$14,999	100.0	63.2	32.9	3.1	0.4
$15,000 or more	100.0	71.2	26.0	2.0	*
15-44 YEARS					
Total	100.0	52.5	38.2	7.3	1.4
Sex					
Male	100.0	56.9	35.5	5.8	1.3
Female	100.0	48.4	40.8	8.8	1.6
Family income [2]					
Less than $5,000	100.0	38.4	42.9	14.0	4.0
$5,000-$9,999	100.0	44.0	43.9	9.8	1.8
$10,000-$14,999	100.0	53.9	38.0	6.8	0.9
$15,000 or more	100.0	61.8	33.1	4.0	0.7
45-64 YEARS					
Total	100.0	35.9	41.5	16.1	5.9
Sex					
Male	100.0	39.3	39.1	14.6	6.4
Female	100.0	32.8	43.8	17.4	5.4
Family income [2]					
Less than $5,000	100.0	18.8	34.3	28.5	17.7
$5,000-$9,999	100.0	26.4	42.2	22.2	8.5
$10,000-$14,999	100.0	35.4	44.9	15.2	3.9
$15,000 or more	100.0	47.8	41.1	9.0	1.8

See footnotes at end of table.

Table 61. Self-assessment of health, according to age, sex, and family income: United States, 1975—Continued
(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age, sex, and family income	Level of health				
	All levels[1]	Excellent	Good	Fair	Poor
65 YEARS AND OVER	Percent distribution				
Total	100.0	28.6	40.3	21.5	8.6
Sex					
Male	100.0	28.1	40.0	21.4	9.4
Female	100.0	28.9	40.6	21.6	8.0
Family income[2]					
Less than $5,000	100.0	23.3	38.7	24.9	12.2
$5,000-$9,999	100.0	29.8	41.3	21.4	6.8
$10,000-$14,999	100.0	31.6	42.7	19.9	5.1
$15,000 or more	100.0	38.7	40.3	13.9	5.8

[1] Includes unknown level of health.
[2] Excludes unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 62. Occupational injury and illness in the private sector, according to industry: United States, 1974
(Data are based on reporting by industries)

Industry [1] and SIC code [2]	1974 annual average employment in thousands [3]	Type of case			Lost workdays
		Total cases [4]	Lost workday cases	Nonfatal cases without lost workdays	
		Incidence rate per 100 full-time workers [5]			
All industries in private sector	65,387.4	10.4	3.5	6.9	54.6
Agriculture, forestry, and fisheries	1,469.0	9.9	4.5	5.3	73.8
Agricultural production 01	---	9.1	4.3	4.8	70.1
Agricultural services, forestry, and fisheries 07-09	---	12.1	5.2	6.9	84.9
Mining	694.4	10.2	5.1	5.0	94.7
Metal mining [6] 10	94.0	7.5	4.8	2.7	70.3
Anthracite mining [6] 11	3.4	22.3	8.9	13.3	115.9
Bituminous coal and lignite mining [6] 12	172.7	10.6	5.7	4.8	96.4
Oil and gas extraction 13	304.5	11.9	5.5	6.4	117.7
Nonmetallic minerals, except fuels [6] 14	119.8	6.8	3.7	3.0	50.8
Contract construction	3,957.1	18.3	5.9	12.4	99.8
General building contractors 15	1,225.6	19.1	5.7	13.4	93.2
Heavy construction contractors 16	778.1	18.1	6.0	12.1	112.7
Special trade contractors 17	1,953.4	17.8	6.0	11.8	97.9
Manufacturing	20,045.5	14.6	4.7	9.9	72.7
Durable goods	11,894.6	16.0	5.1	11.0	77.2
Ordnance and accessories 19	176.5	7.7	2.1	5.6	35.7
Lumber and wood products 24	626.2	22.2	9.0	13.2	156.5
Furniture and fixtures 25	516.7	17.8	5.3	12.6	78.6
Stone, clay, and glass products 32	690.2	18.2	6.3	11.8	107.3
Primary metal industries 33	1,343.5	19.7	6.8	12.9	110.8
Fabricated metal products 34	1,505.3	21.2	6.8	14.4	99.0
Machinery, except electrical 35	2,217.8	16.8	4.8	12.0	65.2
Electrical equipment and supplies 36	2,030.2	10.2	2.8	7.3	43.3
Transportation equipment 37	1,821.1	15.1	4.7	10.4	69.5
Instruments and related products 38	519.5	8.0	2.2	5.8	31.6
Miscellaneous manufacturing industries 39	447.6	12.6	3.8	8.8	58.9
Nondurable goods	8,150.9	12.6	4.1	8.4	65.9
Food and kindred products 20	1,712.5	19.6	7.4	12.2	107.7
Tobacco manufactures 21	79.5	8.5	2.8	5.6	39.9
Textile mill products 22	988.1	11.1	2.5	8.5	49.3
Apparel and other textile products 23	1,347.7	7.1	1.8	5.3	26.6
Paper and allied products 26	701.8	15.1	4.4	10.7	85.8
Printing and publishing 27	1,112.3	7.5	2.4	5.0	33.5
Chemicals and allied products 28	1,056.6	9.5	2.9	6.5	48.3
Petroleum and coal products 29	198.6	9.3	3.0	6.3	59.0
Rubber and plastics products [7] 30	675.9	18.0	7.1	10.8	117.2
Leather and leather products 31	277.9	11.3	3.6	7.7	53.0
Transportation and public utilities	4,695.9	10.5	4.8	5.7	89.8
Railroad transportation [6] 40	583.2	8.5	4.0	4.5	99.9
Local and interurban passenger transit 41	272.7	8.2	4.2	3.9	74.4
Trucking and warehousing 42	1,186.2	18.0	8.4	9.5	152.2
Water transportation 44	203.6	15.5	7.9	7.6	266.9
Transportation by air 45	367.7	14.4	6.9	7.5	77.6
Pipeline transportation 46	16.4	5.1	1.6	3.5	27.9

See footnotes at end of table.

Table 62. Occupational injury and illness in the private sector, according to industry: United States, 1974—Continued
(Data are based on reporting by industries)

Industry[1] and SIC code[2]	1974 annual average employment in thousands[3]	Type of case			Lost workdays
		Total cases[4]	Lost workday cases	Nonfatal cases without lost workdays	
		Incidence rate per 100 full-time workers[5]			
Transportation services 47	133.9	6.4	2.6	3.7	33.1
Communication 48	1,190.1	3.1	1.4	1.7	25.8
Electric, gas, and sanitary services 49	742.1	10.1	3.5	6.6	56.8
Wholesale and retail trade	17,016.7	8.4	2.8	5.6	37.4
Wholesale trade 50	4,223.0	9.3	3.4	5.9	46.3
Building materials and farm equipment 52	626.2	11.1	3.6	7.5	54.6
Retail general merchandise 53	2,561.4	8.5	2.7	5.8	33.5
Food stores 54	1,947.4	11.6	3.7	7.9	52.4
Automotive dealers and service stations 55	1,697.0	9.0	2.6	6.4	34.6
Apparel and accessories stores 56	796.8	2.0	0.7	1.3	9.7
Furniture and home furnishings stores 57	532.1	6.0	2.2	3.8	29.6
Eating and drinking places 58	3,198.8	7.8	2.4	5.4	27.1
Miscellaneous retail stores 59	1,434.0	4.1	1.5	2.6	24.5
Finance, insurance, and real estate	4,208.0	2.4	0.8	1.6	10.2
Banking 60	1,252.6	1.6	0.5	1.1	4.8
Security, commodity brokers, and services 62	175.1	1.1	0.5	0.6	4.7
Insurance carriers 63	1,103.3	1.8	0.6	1.1	8.1
Real estate 65	815.7	6.6	2.1	4.5	28.9
Services	13,300.8	5.8	1.9	3.9	28.3
Hotels and other lodging places 70	941.1	8.3	2.6	5.7	38.4
Personal services 72	862.1	3.6	1.4	2.2	21.2
Miscellaneous business services 73	1,998.2	5.4	1.8	3.5	29.8
Auto repair, services, and garages 75	438.6	10.5	3.5	7.1	45.4
Miscellaneous repair services 76	226.3	12.4	4.1	8.3	59.9
Motion pictures 78	206.8	3.9	1.1	2.8	21.0
Amusement and recreation services[7] 79	577.7	8.3	2.8	5.5	57.9
Medical and other health services 80	3,926.9	7.2	2.3	4.9	34.8
Educational services 82	1,169.8	4.1	1.2	2.9	14.6
Nonprofit membership organizations 86	1,754.0	3.9	1.5	2.4	16.7
Miscellaneous services 89	852.1	2.3	0.7	1.6	6.5

[1] Industry division totals include data for industries not shown separately.

[2] SIC codes are from Standard Industrial Classification Manual, 1967 edition.

[3] Annual average employment for nonagricultural industries is based on the establishment survey conducted by the U.S. Department of Labor's Bureau of Labor Statistics (BLS) in cooperation with State agencies. Annual average employment for the agriculture, forestry, and fisheries division is a composite of estimates from the BLS survey and estimates provided by the Statistical Reporting Service, U.S. Department of Agriculture.

[4] Includes fatalities. Because of rounding, the difference between the total and the sum of the rates for lost workday cases and nonfatal cases without lost workdays may not reflect the fatality rate.

[5] The incidence rates represent the number of injuries and illnesses per 100 full-time workers and were calculated as: $(N/EH) \times 200{,}000$, where

N = number of injuries and illnesses
EH = total hours worked by all employees during calendar year
200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[6] Data conforming to Occupational Safety and Health Administration definitions for coal and lignite mining (SIC 11 and 12) and metal and nonmetal mining (SIC 10 and 14) and for railroads (SIC 401), which is included in railroad transportation (SIC 40), were provided by the Mining Enforcement and Safety Administration, U.S. Department of the Interior, and by the Federal Railroad Administration, U.S. Department of Transportation, respectively.

[7] Not elsewhere classified.

NOTE: 3 percent of the total cases were illnesses.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor: Chartbook on Occupational Injuries and Illnesses, 1974. Report 460, 1976.

Table 63. Selected chronic conditions causing limitation of activity, according to age and degree of limitation: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Chronic condition	All ages				45-64 years of age			
	All degrees of activity limitation	With limitation but not in major activity [1]	With limitation in amount or kind of major activity [1]	Unable to carry on major activity [1]	All degrees of activity limitation	With limitation but not in major activity [1]	With limitation in amount or kind of major activity [1]	Unable to carry on major activity [1]
	Number in thousands							
All persons limited in activity	29,292	7,295	15,078	6,919	10,327	2,219	5,715	2,393
	Percent of persons limited in activity who are limited because of specified condition							
Tuberculosis, all forms	0.4	*	0.4	0.7	0.5	*	*	*
Malignant neoplasms	2.2	1.2	1.9	3.7	3.2	*	3.0	5.1
Benign and unspecified neoplasms	0.9	0.5	1.0	1.1	0.9	*	1.0	*
Diabetes	4.9	3.7	4.7	6.9	5.8	5.2	5.5	7.0
Mental and nervous conditions	5.1	3.7	4.7	7.6	5.8	4.2	4.9	9.4
Heart conditions	16.2	7.9	16.6	24.1	19.9	12.3	20.0	27.0
Cerebrovascular disease	2.7	0.6	1.6	7.4	2.8	*	1.9	6.6
Hypertension without heart involvement	6.7	4.8	7.8	6.6	8.8	8.3	9.5	7.7
Varicose veins	0.9	0.9	1.2	*	1.2	1.6	1.5	*
Hemorrhoids	0.3	*	0.3	*	*	*	*	*
Other conditions of circulatory system	3.9	2.3	3.8	6.0	4.0	3.4	4.1	4.5
Chronic bronchitis	1.0	0.7	1.1	1.1	1.0	*	0.9	*
Emphysema	2.8	1.1	2.0	6.3	3.5	1.9	2.3	7.6
Asthma, with or without hay fever	4.9	7.9	4.5	2.5	3.0	2.6	3.1	3.1
Hay fever, without asthma	0.7	1.5	0.7	*	0.3	*	*	*
Chronic sinusitis	0.7	0.7	0.6	0.7	0.7	*	0.6	*
Other conditions of respiratory system	2.1	1.6	1.9	3.0	2.3	1.8	1.8	4.1
Peptic ulcer	1.9	1.6	1.8	2.3	2.3	2.2	2.2	3.0
Hernia	2.4	1.5	2.6	2.6	2.9	2.2	3.2	2.8
Other conditions of digestive system	3.2	1.9	3.3	4.6	3.7	2.3	3.4	5.8
Diseases of kidney and ureter	1.2	0.7	1.3	1.6	1.3	*	1.3	1.8
Other conditions of genitourinary system	1.7	1.2	1.9	1.7	1.6	*	1.9	*
Arthritis and rheumatism	15.0	10.3	16.9	15.8	17.4	14.5	18.7	17.0
Other musculoskeletal disorders	5.9	5.5	6.8	4.3	7.9	7.5	8.7	6.2
Visual impairments	5.9	6.4	4.6	8.1	4.0	4.7	3.2	5.0
Hearing impairments	2.4	4.4	1.8	1.7	1.7	3.2	1.3	*

See footnote at end of table.

Table 63. Selected chronic conditions causing limitation of activity, according to age and degree of limitation: United States, 1974—Continued

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Chronic condition	All ages				45-64 years of age			
	All degrees of activity limitation	With limitation but not in major activity [1]	With limitation in amount or kind of major activity [1]	Unable to carry on major activity [1]	All degrees of activity limitation	With limitation but not in major activity [1]	With limitation in amount or kind of major activity [1]	Unable to carry on major activity [1]
	Number in thousands							
Paralysis, complete or partial	3.3	2.1	2.3	6.9	3.4	1.8	2.4	7.1
Impairments (except paralysis) of back or spine	7.0	7.6	8.0	4.2	7.3	7.2	8.2	5.3
Impairments (except paralysis and absence) of upper extremities and shoulders	2.1	2.7	2.1	1.2	2.1	3.1	2.0	*
Impairments (except paralysis and absence) of lower extremities and hips	6.4	9.4	5.5	5.4	5.7	7.9	5.3	4.5

[1] Major activity refers to ability to work, keep house, or engage in school or preschool activities.

NOTE: Only selected conditions causing limitation of activity are shown. More than one condition was reported for some individuals.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 64. Chronic conditions among persons 17 years of age and over, according to type of condition, age, sex, and family income: United States, 1969-73
(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Age, sex, and family income	Type of chronic condition and year								
	Arthritis, 1969	Asthma, 1970	Chronic bronchitis, 1970	Diabetes, 1973	Heart conditions, 1972	Hypertensive disease,[1] 1972	Impairments of back or spine (except paralysis), 1971	Hearing impairments, 1971	Vision impairments, 1971
	Prevalence per 1,000 population								
17-44 YEARS									
Total	40.3	26.2	23.2	8.9	24.6	37.8	49.0	42.4	31.9
Sex									
Male	28.0	24.6	16.7	6.9	19.5	36.4	51.9	51.4	44.7
Female	51.3	27.6	29.1	10.8	29.3	39.1	46.4	34.2	20.3
Family income[2]									
Less than $5,000	46.9	34.1	28.4	11.4	32.5	48.9	59.4	55.4	43.2
$5,000-$9,999	40.5	23.6	22.3	9.1	23.3	40.8	50.5	44.0	31.7
$10,000-$14,999	38.7	24.4	21.8	8.4	22.5	35.9	47.4	39.3	28.7
$15,000 or more	35.9	26.8	23.7	8.0	24.3	29.8	42.4	35.8	30.9
45-64 YEARS									
Total	204.2	33.1	35.4	42.6	88.8	126.7	68.2	114.1	63.0
Sex									
Male	148.0	29.3	28.5	40.6	97.4	101.3	68.2	140.2	73.6
Female	255.3	36.7	41.6	44.4	81.0	149.6	68.2	90.5	53.4
Family income[2]									
Less than $5,000	297.8	53.5	44.2	74.1	139.3	172.7	102.8	158.9	114.1
$5,000-$9,999	200.3	33.5	38.7	43.8	92.5	125.4	67.2	118.1	57.4
$10,000-$14,999	163.7	23.7	29.0	37.8	74.3	121.3	62.3	107.3	45.9
$15,000 or more	159.8	22.7	30.3	30.5	66.6	105.3	52.2	85.9	48.9

See footnotes at end of table.

Table 64. Chronic conditions among persons 17 years of age and over, according to type of condition, age, sex, and family income: United States, 1969-73—Continued

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Age, sex, and family income	Type of chronic condition and year								
	Arthritis, 1969	Asthma, 1970	Chronic bronchitis, 1970	Diabetes, 1973	Heart conditions, 1972	Hypertensive disease,[1] 1972	Impairments of back or spine (except paralysis), 1971	Hearing impairments, 1971	Vision impairments, 1971
65 YEARS AND OVER	Prevalence per 1,000 population								
Total	380.3	35.8	41.2	78.5	198.7	199.4	67.1	294.3	204.6
Sex									
Male	287.0	42.3	47.3	60.3	199.3	141.2	54.6	338.2	183.1
Female	450.1	31.1	36.6	91.3	198.3	240.9	76.3	262.1	220.4
Family income[2]									
Less than $5,000	411.7	41.4	45.4	82.0	219.0	216.1	78.7	232.0	232.0
$5,000-$9,999	353.3	32.6	37.2	76.1	190.0	179.5	57.3	271.6	163.2
$10,000-$14,999	310.9	*	27.4	81.1	158.9	192.6	39.3	247.3	181.3
$15,000 or more	300.8	*	40.7	62.7	174.8	161.4	48.5	259.2	169.2

[1] Without heart involvement.

[2] Excludes unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Selected reports from the Health Interview Survey, Vital and Health Statistics, Series 10, and unpublished data from the Health Interview Survey.

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Table 65. Influenza and other upper respiratory conditions, according to age and quarter of year: United States, 1969-75

(Data are based on household interviews of samples of the civilian noninstitutionalized population and include only cases involving either restricted activity or medical attention)

Year and quarter	Influenza (470-474) [1]						Other upper respiratory (460-465, 501, 508) [1]					
	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over
	Incidence per 100 persons per quarter											
1969												
January-March	18.9	19.0	24.3	17.8	17.8	12.2	21.0	37.0	35.9	15.2	12.6	6.6
April-June	4.9	5.8	5.8	5.3	3.6	*	12.0	24.4	17.1	10.6	5.1	4.7
July-September	3.9	3.7	3.8	5.4	2.2	*	10.3	22.3	11.5	8.7	8.9	*
October-December	11.9	13.1	15.5	13.1	8.2	5.1	22.5	49.9	33.0	18.3	11.1	6.9
1970												
January-March	20.7	21.7	22.4	23.1	18.1	12.1	21.8	40.0	34.0	16.3	14.4	8.2
April-June	4.6	5.5	4.7	5.6	3.6	*	11.2	26.1	13.6	9.9	6.3	4.3
July-September	4.0	5.8	4.5	4.9	2.3	*	9.6	20.8	13.8	8.0	4.2	4.5
October-December	10.8	13.0	12.9	11.8	8.3	4.8	21.1	42.4	29.8	18.5	11.2	8.3
1971												
January-March	17.5	19.0	24.8	17.7	13.4	6.2	21.9	39.1	36.4	16.6	11.9	10.7
April-June	6.7	8.5	9.3	7.4	3.4	3.4	12.6	27.0	19.1	10.1	6.3	4.7
July-September	4.5	6.7	5.4	4.8	3.1	*	10.1	22.4	12.6	9.6	4.8	4.1
October-December	12.7	14.0	15.1	14.2	10.4	4.8	25.0	59.5	36.0	19.5	12.9	8.9
1972												
January-March	25.8	21.4	33.8	27.7	22.8	11.8	19.6	36.6	28.9	16.1	13.1	8.4
April-June	4.5	5.2	6.1	4.9	3.1	*	13.2	32.6	17.3	11.0	6.5	6.8
July-September	5.3	7.2	5.9	5.9	4.4	*	10.0	24.7	10.5	10.2	5.2	3.5
October-December	14.5	18.2	15.9	17.3	10.4	5.3	21.9	50.8	29.1	19.3	11.5	8.7

See footnote at end of table.

Table 65. Influenza and other upper respiratory conditions, according to age and quarter of year: United States, 1969-75—Continued

(Data are based on household interviews of samples of the civilian noninstitutionalized population and include only cases involving either restricted activity or medical attention)

Year and quarter	Influenza (470-474) [1]						Other upper respiratory (460-465, 501, 508) [1]					
	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over
	Incidence per 100 persons per quarter											
1973												
January-March	19.3	20.1	22.2	21.1	16.2	12.1	16.4	33.6	27.5	13.4	7.0	6.2
April-June	4.4	5.6	5.7	4.7	3.2	*	8.3	19.6	12.2	6.6	4.0	4.5
July-September	4.8	6.3	3.8	6.8	2.8	*	8.2	22.0	10.3	7.8	3.0	*
October-December	9.9	10.4	11.9	11.8	7.5	*	16.0	35.3	23.1	13.5	7.8	8.1
1974												
January-March	19.2	26.0	31.8	17.9	11.9	6.5	16.0	30.6	25.0	14.5	8.0	5.9
April-June	5.5	7.2	6.8	6.5	3.4	*	8.0	15.9	11.7	7.1	4.0	4.3
July-September	5.3	7.9	6.2	6.3	3.1	*	8.1	23.3	9.3	7.8	4.0	*
October-December	14.8	19.2	18.1	17.2	9.7	4.8	13.6	32.5	18.8	11.7	6.8	6.8
1975												
January-March	24.0	27.4	31.7	25.7	19.2	8.3	19.7	46.7	29.6	15.8	10.7	7.6
April-June	5.1	5.1	6.2	5.9	3.7	*	10.6	21.7	14.8	9.6	6.5	4.3
July-September	4.4	5.6	4.8	6.0	1.9	*	10.0	25.1	10.7	10.0	5.7	4.1
October-December	13.3	17.0	14.6	16.3	8.6	5.3	19.0	49.3	26.2	16.3	9.3	7.7

[1] Code numbers according to the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 66. Restricted-activity days associated with influenza and with other upper respiratory conditions, according to age and quarter of year: United States, 1969-75—Continued

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Year and quarter	Influenza (470-474) [1]						Other upper respiratory (460-465, 501, 508) [1]					
	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over
	Days of restricted activity per 100 persons per quarter											
1969												
January-March	109.9	92.7	102.8	81.5	154.3	158.9	62.7	115.7	104.6	38.7	41.7	34.8
April-June	19.7	*	19.0	16.3	26.2	*	30.8	57.6	43.0	25.3	16.6	*
July-September	11.3	*	*	14.3	*	*	30.2	60.9	27.9	27.5	27.1	*
October-December	40.3	35.4	42.2	39.7	38.6	47.2	63.0	141.5	83.9	49.1	34.4	37.2
1970												
January-March	101.3	66.1	77.6	98.7	122.1	162.7	61.7	106.8	88.1	43.1	54.4	33.4
April-June	16.6	*	13.4	15.5	18.8	*	29.3	64.7	30.9	24.6	18.6	*
July-September	11.6	*	*	12.6	*	*	24.9	60.8	31.4	18.2	14.5	*
October-December	38.6	48.5	33.3	41.6	36.8	32.6	56.4	116.6	66.4	45.7	38.6	44.7
1971												
January-March	71.5	78.6	90.5	63.8	65.1	62.0	59.4	112.6	92.2	41.0	37.3	41.2
April-June	24.4	*	29.8	26.3	16.4	*	33.3	67.9	46.0	24.3	18.6	32.1
July-September	15.0	*	13.9	16.0	*	*	23.8	50.9	25.0	24.1	*	*
October-December	46.7	59.1	45.5	44.2	50.8	36.9	67.9	178.1	80.6	48.7	42.2	47.3
1972												
January-March	130.1	93.9	136.4	120.0	144.8	161.6	61.2	111.6	78.4	42.8	51.1	62.0
April-June	18.7	*	13.7	16.4	23.6	*	35.4	83.8	37.9	28.0	21.1	38.4
July-September	15.5	*	12.5	19.3	14.4	*	25.7	63.6	24.0	25.3	17.1	*
October-December	50.8	60.0	51.3	54.8	43.6	40.4	65.5	157.0	70.6	55.3	37.3	58.7

See footnote at end of table.

Table 66. Restricted-activity days associated with influenza and with other upper respiratory conditions, according to age and quarter of year: United States, 1969-75—Continued

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Year and quarter	Influenza (470-474) [1]						Other upper respiratory (460-465, 501, 508) [1]					
	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over
	Days of restricted activity per 100 persons per quarter											
1973												
January-March	108.7	96.2	95.0	106.9	115.0	144.9	50.9	104.6	75.5	38.2	29.2	37.4
April-June	18.9	*	21.9	14.9	22.2	*	28.2	71.2	34.7	22.0	*	28.2
July-September	14.4	*	*	19.9	*	*	26.4	63.8	32.0	23.8	14.4	*
October-December	44.0	40.0	37.8	49.2	42.1	45.2	60.1	133.3	78.5	51.5	30.9	42.4
1974												
January-March	103.0	130.4	149.3	83.6	81.6	98.6	62.0	102.9	96.1	46.5	37.2	61.8
April-June	26.6	40.2	22.0	26.7	23.4	29.8	26.1	50.5	33.2	20.6	19.3	*
July-September	18.6	*	14.5	24.1	15.8	*	25.8	60.9	25.9	23.9	16.0	*
October-December	62.6	63.8	55.0	60.1	71.0	69.1	46.5	93.5	60.3	35.4	31.3	47.7
1975												
January-March	120.1	129.9	125.7	111.9	121.5	128.4	57.4	127.9	75.6	46.7	39.1	34.1
April-June	18.7	*	15.0	14.8	26.8	28.4	31.5	57.1	39.0	27.8	26.3	*
July-September	12.5	*	*	16.8	*	*	27.8	54.1	25.0	25.6	24.2	*
October-December	44.4	50.8	36.9	48.7	41.7	41.7	53.5	136.3	71.4	41.5	35.9	25.8

[1] Code numbers according to the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

NOTE: Excluded from these statistics are all conditions involving neither medical attention nor restricted activity.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 67. Bed-disability days associated with influenza and with other upper respiratory conditions, according to age and quarter of year: United States, 1969-75—Continued

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Year and quarter	Influenza (470-474) [1]						Other upper respiratory (460-465, 501, 508) [1]					
	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over
	Days of bed disability per 100 persons per quarter											
1969												
January-March	64.3	51.3	68.3	50.7	85.8	75.4	28.4	40.5	53.7	19.2	16.9	*
April-June	12.5	*	14.6	8.7	16.8	*	13.4	*	23.7	9.9	*	*
July-September	6.0	*	*	8.7	*	*	12.6	*	16.0	10.7	*	*
October-December	24.6	*	27.9	22.8	25.1	*	24.0	47.3	38.3	17.5	*	*
1970												
January-March	62.4	43.9	53.8	57.6	78.4	87.7	31.1	40.4	47.2	20.3	32.0	*
April-June	8.4	*	*	8.6	*	*	12.1	*	14.4	11.8	*	*
July-September	7.4	*	*	8.4	*	*	9.9	26.0	16.8	*	*	*
October-December	22.3	*	22.6	22.8	23.2	*	21.9	42.2	29.9	18.9	*	*
1971												
January-March	42.7	39.5	58.4	38.0	41.7	29.1	25.1	40.7	42.6	19.4	14.2	*
April-June	14.2	*	19.3	14.3	*	*	14.0	27.6	20.9	8.8	*	*
July-September	6.5	*	*	8.2	*	*	8.3	*	*	7.9	*	*
October-December	27.1	38.1	30.7	25.3	26.5	*	26.5	56.0	40.3	20.3	*	*
1972												
January-March	76.1	56.0	89.4	72.8	75.8	80.8	23.3	39.1	33.7	18.6	16.8	*
April-June	10.0	*	*	9.3	*	*	13.6	32.7	17.7	10.2	*	*
July-September	8.6	*	*	10.2	*	*	8.9	*	*	9.6	*	*
October-December	28.4	29.8	30.3	32.5	23.8	*	24.5	56.9	28.8	22.8	*	*

See footnote at end of table.

Table 67. Bed-disability days associated with influenza and with other upper respiratory conditions, according to age and quarter of year: United States, 1969-75—Continued

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Year and quarter	Influenza (470-474) [1]						Other upper respiratory (460-465, 501, 508) [1]					
	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over
	Days of bed disability per 100 persons per quarter											
1973												
January-March	66.3	53.7	67.0	65.6	66.5	80.1	22.4	38.8	36.7	15.9	14.5	*
April-June	10.1	*	13.2	8.7	*	*	10.7	*	15.3	7.9	*	*
July-September	8.0	*	*	10.7	*	*	11.5	*	14.3	10.8	*	*
October-December	23.5	*	22.0	24.2	23.7	*	23.8	49.4	35.2	20.0	*	*
1974												
January-March	61.7	81.1	99.1	48.7	47.3	44.0	25.3	39.7	45.5	18.7	16.0	*
April-June	14.8	*	14.1	16.6	*	*	9.9	*	17.4	7.6	*	*
July-September	10.9	*	*	13.8	*	*	10.3	*	*	9.7	*	*
October-December	34.3	*	30.9	37.3	35.8	35.8	18.2	33.3	23.9	14.3	13.2	*
1975												
January-March	67.9	62.0	82.4	67.2	60.6	61.8	24.1	40.3	33.4	20.4	17.5	*
April-June	9.7	*	*	9.2	*	*	12.1	*	18.8	11.7	*	*
July-September	7.7	*	*	10.1	*	*	9.8	*	*	9.5	*	*
October-December	25.7	*	25.1	28.6	23.0	*	22.3	47.2	29.5	19.5	16.6	*

[1] Code numbers according to the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

NOTE: Excluded from these statistics are all conditions involving neither medical attention nor restricted activity.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 68. Disability days, according to type of disability day, age, sex, and family income: United States, 1975
(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age, sex, and family income	Civilian noninstitutionalized population		Type of disability day		
	Total	Currently employed, 17 years and over	Restricted activity	Bed disability	Work loss [1]
	Number in thousands		Days per person per year		
ALL AGES					
Total	209,065	83,218	17.9	6.6	5.2
Sex					
Male	100,865	50,062	15.6	5.4	4.9
Female	108,199	33,156	20.0	7.6	5.7
Family income [2]					
Less than $5,000	31,750	7,164	32.4	11.5	7.3
$5,000-$9,999	45,273	16,212	20.2	7.5	6.7
$10,000-$14,999	47,103	20,205	14.4	5.3	5.2
$15,000 or more	69,868	33,865	12.4	4.6	4.2
UNDER 15 YEARS					
Total	53,587	...	11.3	4.6	...
Sex					
Male	27,323	...	11.3	4.4	...
Female	26,264	...	11.4	4.7	...
Family income [2]					
Less than $5,000	7,002	...	13.8	5.4	...
$5,000-$9,999	12,025	...	11.2	4.7	...
$10,000-$14,999	13,506	...	11.3	4.2	...
$15,000 or more	17,949	...	10.9	4.6	...
15-44 YEARS					
Total	91,096	53,716	13.9	5.4	5.0
Sex					
Male	44,223	31,858	11.6	3.9	4.6
Female	46,873	21,858	16.1	6.8	5.5
Family income [2]					
Less than $5,000	11,079	4,541	21.7	8.6	6.6
$5,000-$9,999	18,598	10,668	17.2	6.6	6.7
$10,000-$14,999	22,272	13,737	12.5	4.9	4.8
$15,000 or more	33,680	21,800	10.8	4.0	4.0
45-64 YEARS					
Total	43,094	26,703	24.2	8.4	5.8
Sex					
Male	20,539	16,395	22.0	7.1	5.5
Female	22,556	10,308	26.2	9.6	6.2
Family income [2]					
Less than $5,000	5,312	1,852	52.5	18.7	10.0
$5,000-$9,999	8,733	4,751	29.8	10.7	7.0
$10,000-$14,999	9,188	6,121	19.6	6.6	6.1
$15,000 or more	15,788	11,506	15.7	5.1	4.6

See footnotes at end of table.

Table 68. Disability days, according to type of disability day, age, sex, and family income: United States, 1975—Continued

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age, sex, and family income	Civilian noninstitutionalized population		Type of disability day		
	Total	Currently employed, 17 years and over	Restricted activity	Bed disability	Work loss [1]
65 YEARS AND OVER	Number in thousands		Days per person per year		
Total	21,287	2,800	38.4	12.9	4.3
Sex					
Male	8,780	1,810	34.3	12.2	5.1
Female	12,507	990	41.4	13.4	*
Family income [2]					
Less than $5,000	8,357	772	49.6	15.9	5.0
$5,000-$9,999	5,917	793	33.7	10.8	4.7
$10,000-$14,999	2,137	347	31.1	11.4	*
$15,000 or more	2,452	560	23.5	8.8	*

[1] Work-loss rates are based on the currently employed population 17 years of age and over.
[2] Excludes unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 69. Disability days and acute conditions per currently employed person per year, according to sex, industry, and occupation: United States, 1975

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex, industry, and occupation	Number of currently employed persons in thousands	Type of disability day			Acute conditions per 100 currently employed persons per year
		Restricted activity	Bed disability	Work loss	
		Number of days per currently employed person per year			
BOTH SEXES					
Total [1]	83,218	12.0	4.0	5.2	168.9
Industry					
Agriculture	3,015	9.9	2.3	3.7	98.9
Forestry and fisheries	70	*	*	*	*
Mining	656	*	*	*	120.1
Construction	5,042	10.9	3.2	4.6	146.8
Manufacturing	19,149	12.9	4.0	6.1	163.5
Transportation and public utilities	5,541	11.8	4.2	6.1	165.4
Wholesale and retail trade	16,155	10.8	3.4	4.7	163.3
Finance, insurance, and real estate	4,765	10.7	3.8	3.9	170.3
Service and miscellaneous	23,055	12.4	4.6	4.8	187.9
Public administration	5,086	14.9	5.6	7.1	202.1
Occupation					
White-collar workers	41,405	11.1	3.9	4.3	170.8
Professional and technical	12,691	11.0	3.9	4.1	187.3
Managers and administrators, except farm	9,221	10.4	3.3	3.7	154.4
Clerical and kindred workers	14,229	12.1	4.7	5.1	191.2
Salesworkers	5,264	9.8	3.0	4.0	104.5
Blue-collar workers	27,320	12.5	4.0	6.2	159.8
Craftsmen and kindred workers	11,205	12.1	4.0	5.8	158.8
Operatives, except transport	12,646	12.7	3.9	6.5	155.9
Laborers, except farm	3,469	12.8	4.7	6.6	177.1
Service workers	11,157	14.7	4.9	6.3	184.7
Private household workers	1,080	19.6	5.6	4.7	140.6
Other service workers	10,077	14.1	4.8	6.5	189.4
Farmworkers	2,641	10.3	2.6	4.0	95.6
Farmers and farm managers	1,546	10.2	*	2.7	87.8
Farm laborers and farm foremen	1,095	10.4	*	5.8	106.6
MALE					
Total [1]	50,062	10.8	3.3	4.9	149.5
Industry					
Agriculture	2,497	9.6	*	3.5	83.6
Forestry and fisheries	61	*	*	*	*
Mining	588	*	*	*	126.7
Construction	4,695	11.0	3.1	4.8	145.4
Manufacturing	13,570	11.8	3.5	5.6	150.4
Transportation and public utilities	4,261	11.1	4.2	6.6	166.5
Wholesale and retail trade	9,012	9.0	2.7	4.1	143.9
Finance, insurance, and real estate	2,229	9.2	3.1	2.9	142.9
Service and miscellaneous	9,318	11.0	3.7	4.5	158.9
Public administration	3,432	13.4	4.4	6.3	184.1

See footnote at end of table.

Table 69. Disability days and acute conditions per currently employed person per year, according to sex, industry, and occupation: United States, 1975—Continued

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex, industry, and occupation	Number of currently employed persons in thousands	Type of disability day			Acute conditions per 100 currently employed persons per year
		Restricted activity	Bed disability	Work loss	
		Number of days per currently employed person per year			
MALE—Continued					
Occupation					
White-collar workers	20,802	9.2	2.9	3.6	143.9
Professional and technical	7,329	9.4	2.9	3.5	163.9
Managers and administrators, except farm	7,184	9.4	2.9	3.3	144.3
Clerical and kindred workers	3,231	9.2	3.4	4.9	151.7
Salesworkers	3,058	8.5	2.4	3.4	86.6
Blue-collar workers	22,392	11.8	3.7	5.9	153.7
Craftsmen and kindred workers	10,542	11.8	3.7	5.6	155.3
Operatives, except transport	8,709	11.8	3.6	6.0	148.5
Laborers, except farm	3,141	12.3	3.9	6.4	162.9
Service workers	4,189	14.3	4.3	6.9	170.3
Private household workers	*	*	*	*	*
Other service workers	4,160	14.4	4.4	6.9	171.4
Farmworkers	2,249	10.0	2.6	3.9	85.9
Farmers and farm managers	1,464	9.9	*	2.9	79.1
Farm laborers and farm foremen	786	10.3	*	5.8	98.5
FEMALE					
Total [1]	33,156	13.7	5.1	5.7	198.3
Industry					
Agriculture	518	11.4	*	*	173.0
Forestry and fisheries	*	*	*	*	*
Mining	68	*	*	*	*
Construction	347	*	*	*	*
Manufacturing	5,579	15.4	5.3	7.4	195.4
Transportation and public utilities	1,279	14.2	*	4.6	161.8
Wholesale and retail trade	7,144	13.1	4.3	5.5	187.7
Finance, insurance, and real estate	2,537	12.1	4.4	4.8	194.4
Service and miscellaneous	13,737	13.4	5.3	5.1	207.7
Public administration	1,654	17.9	8.2	8.7	239.2
Occupation					
White-collar workers	20,603	13.0	5.0	5.0	198.0
Professional and technical	5,362	13.2	5.3	4.9	219.5
Managers and administrators, except farm	2,037	13.9	4.7	4.8	190.2
Clerical and kindred workers	10,999	12.9	5.1	5.2	202.7
Salesworkers	2,206	11.8	3.8	4.8	129.3
Blue-collar workers	4,928	15.5	5.5	7.8	187.2
Craftsmen and kindred workers	663	18.2	8.4	8.7	214.0
Operatives, except transport	3,937	14.9	4.4	7.6	172.2
Laborers, except farm	328	17.7	*	*	312.5

See footnote at end of table.

Table 69. Disability days and acute conditions per currently employed person per year, according to sex, industry, and occupation: United States, 1975—Continued

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex, industry, and occupation	Number of currently employed persons in thousands	Type of disability day			Acute conditions per 100 currently employed persons per year
		Restricted activity	Bed disability	Work loss	
		Number of days per currently employed person per year			
FEMALE—Continued					
Occupation—Continued					
Service workers	6,967	14.9	5.2	5.9	193.4
Private household workers	1,051	20.1	5.8	4.9	144.5
Other service workers	5,917	14.0	5.1	6.1	202.1
Farmworkers	392	11.8	2.8	4.6	151.0
Farmers and farm managers	83	*	*	*	*
Farm laborers and farm foremen	309	*	*	*	*

[1] Includes industry or occupation not specified.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 70. Cases of diseases for which immunization is available, according to disease: United States, 1965-75

(Data are based on reporting by State health departments)

Year	Rubella	Measles	Diphtheria	Tetanus	Pertussis	Polio
	Number of cases					
1965	—	261,904	164	300	6,799	72
1966	46,975	204,136	209	235	7,717	113
1967	46,888	62,705	219	263	9,718	41
1968	49,371	22,231	260	178	4,810	53
1969	57,686	25,826	241	185	3,285	20
1970	56,552	47,351	435	148	4,249	33
1971	45,086	75,290	215	116	3,036	21
1972	25,507	32,275	152	128	3,287	31
1973	27,804	26,690	228	101	1,759	8
1974	11,917	22,094	272	101	2,402	7
1975	16,652	24,374	307	102	1,738	8

SOURCE: Center for Disease Control: Reported morbidity and mortality in the United States, 1975. Morbidity and Mortality Weekly Report. 24(54), Aug. 1976.

Table 71. New active tuberculosis cases and rate per 100,000 population, according to selected characteristics: United States, 1974

(Data are based on reporting by State health departments)

Characteristic	Cases of tuberculosis		
	Number	Percent distribution	Rate per 100,000 resident population
Total	30,122	100	14.2
Sex			
Male	19,762	66	19.2
Female	10,360	34	9.5
Color			
White	17,825	59	9.7
All other	12,297	41	45.1
Age			
Under 5 years	1,226	4	7.5
5-14 years	1,006	3	2.6
15-24 years	2,478	8	6.3
25-44 years	8,068	27	15.4
45-64 years	10,244	34	23.6
65 years and over	7,100	24	32.5
Population of city of residence			
500,000 or more	8,865	29	25.7
250,000-500,000	2,773	9	21.3
100,000-250,000	2,651	9	16.1
All other areas	15,833	53	10.7

SOURCE: Center for Disease Control: Reported morbidity and mortality in the United States, 1975. Morbidity and Mortality Weekly Report. 24(54), Aug. 1976.

Table 72. Gonorrhea cases and rate per 100,000 population, according to sex and age: United States, selected years 1956-74
(Data are based on reporting by State health departments)

Age and year	Both sexes	Male	Female	Both sexes	Male	Female
	Number of cases of gonorrhea			Rate of gonorrhea per 100,000 civilian population		
All ages						
1956	224,683	155,265	69,418	135.7	192.4	81.7
1960	258,933	182,561	76,372	145.3	210.2	83.6
1972	767,215	504,575	262,640	371.6	506.1	246.0
1973	842,621	509,821	332,800	404.9	507.2	309.4
1974	898,943	534,565	364,378	428.7	527.7	336.2
Under 15 years						
1956	3,600	749	2,851	7.1	2.9	11.5
1960	4,880	1,540	3,340	8.7	5.4	12.1
1972	9,968	2,979	6,989	17.6	10.3	25.1
1973	10,814	2,911	7,903	19.4	10.3	28.9
1974	11,510	3,061	8,449	21.1	11.0	31.6
15-19 years						
1956	45,161	24,223	20,938	415.7	462.9	372.0
1960	53,649	30,649	23,000	412.7	480.9	347.1
1972	204,635	106,478	98,157	1035.4	1075.6	995.0
1973	232,994	108,221	124,773	1155.0	1075.2	1234.5
1974	248,757	111,273	137,484	1216.5	1089.7	1342.9
20-24 years						
1956	74,693	52,969	21,724	781.8	1255.8	406.8
1960	87,823	63,155	24,668	859.2	1354.4	443.7
1972	311,051	210,891	100,160	1813.5	2593.0	1110.5
1973	333,423	205,495	127,928	1918.2	2479.4	1406.7
1974	354,150	213,897	140,253	1984.0	2496.2	1511.2
25-29 years						
1956	48,624	36,964	11,660	434.2	692.6	198.6
1960	51,213	39,190	12,023	485.5	779.1	217.8
1972	135,220	100,752	34,468	921.6	1416.2	456.0
1973	152,055	107,852	44,203	1000.9	1461.6	565.8
1974	165,048	116,556	48,492	1041.2	1511.6	595.7
30-39 years						
1956	40,687	31,567	9,120	171.5	277.4	73.7
1960	46,092	36,081	10,011	192.1	313.0	80.3
1972	79,789	62,176	17,613	347.2	560.8	148.1
1973	84,600	62,812	21,788	354.8	546.2	176.5
1974	89,729	66,833	22,896	365.6	564.3	180.3

Table 72. Gonorrhea cases and rate per 100,000 population, according to sex and age: United States, selected years 1956-74—Continued

(Data are based on reporting by State health departments)

Age and year	Both sexes	Male	Female	Both sexes	Male	Female
	Number of cases of gonorrhea			Rate of gonorrhea per 100,000 civilian population		
40-49 years						
1956	9,048	6,714	2,334	41.9	63.7	21.1
1960	11,666	9,120	2,546	52.1	83.6	22.2
1972	19,897	16,103	3,794	84.6	141.9	31.1
1973	20,908	16,411	4,497	89.5	145.2	37.3
1974	21,610	16,808	4,802	93.5	150.2	40.3
50 years and over						
1956	2,870	2,079	791	7.5	11.3	4.0
1960	3,610	2,826	784	8.6	14.2	3.6
1972	6,655	5,196	1,459	12.9	22.4	5.1
1973	7,827	6,119	1,708	14.9	25.9	5.9
1974	8,139	6,137	2,002	15.3	25.7	6.8

NOTE: Cases not reported by age have been included on the basis of the known age distribution. Number of cases includes Alaska and Hawaii for all years. Rates for 1956 exclude Alaska and Hawaii.

SOURCE: Center for Disease Control: VD Fact Sheet, 1975, 32d ed. DHEW Pub. No. (CDC) 76-8195. Public Health Service. Atlanta, Ga.

Table 73. Primary and secondary syphilis cases and rate per 100,000 population, according to sex and age: United States, selected years 1956-74

(Data are based on reporting by State health departments)

Age and year	Both sexes	Male	Female	Both sexes	Male	Female
	Number of cases of syphilis			Rate of syphilis per 100,000 civilian population		
All ages						
1956	6,395	4,053	2,342	3.9	5.0	2.8
1960	16,145	11,136	5,009	9.1	12.8	5.5
1972	24,429	16,292	8,137	11.8	16.3	7.6
1973	24,825	16,888	7,937	11.9	16.8	7.4
1974	25,385	17,903	7,482	12.1	17.7	6.9
Under 15 years						
1956	78	17	61	0.2	0.1	0.2
1960	159	38	121	0.3	0.1	0.4
1972	232	61	171	0.4	0.2	0.6
1973	262	90	172	0.5	0.3	0.6
1974	270	77	193	0.5	0.3	0.7
15-19 years						
1956	1,163	527	636	10.7	10.1	11.3
1960	2,577	1,303	1,274	19.8	20.4	19.2
1972	4,035	1,921	2,114	20.4	19.4	21.4
1973	3,869	1,880	1,989	19.2	18.7	19.7
1974	3,992	2,031	1,961	19.5	19.9	19.2
20-24 years						
1956	1,758	1,138	620	18.4	27.0	11.6
1960	4,692	3,126	1,566	45.9	67.0	28.2
1972	7,216	4,592	2,624	42.1	56.5	29.1
1973	7,175	4,662	2,513	41.3	56.3	27.6
1974	7,296	4,963	2,333	40.9	57.9	25.1
25-29 years						
1956	1,263	858	405	11.3	16.1	6.9
1960	3,385	2,478	907	32.1	49.3	16.4
1972	4,811	3,473	1,338	32.8	48.8	17.7
1973	5,351	3,977	1,374	35.2	53.9	17.6
1974	5,498	4,152	1,346	34.7	53.8	16.5
30-39 years						
1956	1,358	937	421	5.7	8.2	3.4
1960	3,751	2,951	800	15.6	25.6	6.4
1972	5,232	3,987	1,245	22.8	36.0	10.5
1973	5,297	4,022	1,275	22.2	35.0	10.3
1974	5,477	4,369	1,108	22.3	36.9	8.7

Table 73. Primary and secondary syphilis cases and rate per 100,000 population, according to sex and age: United States, selected years 1956-74—Continued

(Data are based on reporting by State health departments)

Age and year	Both sexes	Male	Female	Both sexes	Male	Female
	Number of cases of syphilis			Rate of syphilis per 100,000 civilian population		
40-49 years						
1956	500	368	132	2.3	3.5	1.2
1960	1,108	862	246	4.9	7.9	2.1
1972	1,986	1,520	466	8.4	13.4	3.8
1973	2,103	1,631	472	9.0	14.4	3.9
1974	2,057	1,665	392	8.9	14.9	3.3
50 years and over						
1956	275	208	67	0.7	1.1	0.3
1960	473	378	95	1.1	1.9	0.4
1972	917	738	179	1.8	3.2	0.6
1973	768	626	142	1.5	2.7	0.5
1974	795	646	149	1.5	2.7	0.5

NOTE: Cases not reported by age have been included on the basis of the known age distribution. Number of cases includes Alaska and Hawaii for all years. Rates for 1956 exclude Alaska and Hawaii.

SOURCE: Center for Disease Control: VD Fact Sheet, 1975, 32d ed. DHEW Pub. No. (CDC) 76-8195. Public Health Service. Atlanta, Ga.

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Table 74. Venereal disease cases, according to type of venereal disease: United States, 1941-75

(Data are based on reporting by State health departments)

Year	Type of venereal disease								
	Syphilis					Gonorrhea	Chancroid	Granuloma inguinale	Lympho-granuloma venereum
	All stages [1]	Primary and secondary	Early latent	Late and late latent	Congenital				
	Number of cases								
1941	485,560	68,231	109,018	202,984	17,600	193,468	3,384	639	1,381
1942	479,601	75,312	116,245	202,064	16,918	212,403	5,477	1,278	1,888
1943	575,593	82,204	149,390	251,958	16,164	275,070	8,354	1,748	2,593
1944	467,755	78,443	123,038	202,848	13,578	300,676	7,878	1,759	2,858
1945	359,114	77,007	101,719	142,187	12,339	287,181	5,515	1,857	2,631
1946	363,647	94,957	107,924	125,248	12,106	368,020	7,091	2,232	2,603
1947	372,963	106,539	107,767	121,980	12,271	400,639	9,039	2,403	2,688
1948	338,141	80,528	97,745	123,972	13,309	363,014	8,631	2,315	2,494
1949	288,736	54,248	84,331	121,931	14,295	331,661	7,218	2,611	2,170
1950	229,723	32,148	64,786	112,424	13,446	303,992	5,796	2,017	1,635
1951	198,640	18,211	52,309	107,133	12,836	270,459	5,707	1,637	1,332
1952	168,734	11,991	38,365	101,920	9,240	245,633	3,837	1,069	1,235
1953	156,099	9,551	32,287	100,195	8,021	243,857	3,490	785	1,103
1954	137,876	7,688	24,999	93,601	7,234	239,661	3,294	607	917
1955	122,075	6,516	21,553	84,741	5,515	239,787	2,863	584	875
1956	126,219	6,757	20,014	89,851	5,535	233,333	2,322	419	602
1957	130,552	6,251	19,046	96,856	5,452	216,476	1,860	348	449
1958	116,630	6,661	16,698	85,974	4,839	220,191	1,574	332	436
1959	119,981	8,178	17,592	86,776	5,215	237,318	1,604	282	485
1960	120,249	12,471	16,829	84,195	4,593	246,697	1,555	273	800
1961	125,262	18,781	19,146	80,942	4,388	265,665	1,595	296	842
1962	124,188	20,084	19,924	78,264	4,085	260,468	1,401	203	635
1963	128,450	22,045	18,683	81,736	4,140	270,076	1,242	196	589
1964	118,247	22,733	18,104	72,184	3,737	290,603	1,260	145	543
1965	113,018	23,250	17,315	67,636	3,505	310,155	1,083	144	873

See footnote at end of table.

Table 74. Venereal disease cases, according to type of venereal disease: United States, 1941-75—Continued

(Data are based on reporting by State health departments)

Year	Type of venereal disease								
	Syphilis					Gonorrhea	Chancroid	Granuloma inguinale	Lympho-granuloma venereum
	All stages [1]	Primary and secondary	Early latent	Late and late latent	Congenital				
	Number of cases								
1966	110,128	22,473	16,974	66,149	3,464	334,949	950	164	625
1967	103,546	21,090	15,618	62,653	3,050	375,606	777	127	372
1968	98,195	20,182	15,379	58,905	2,596	431,380	827	174	349
1969	96,679	18,679	15,399	59,262	2,223	494,227	959	126	525
1970	87,934	20,186	15,425	49,537	1,903	573,200	1,189	168	587
1971	94,383	23,336	17,843	50,429	2,047	624,371	1,507	103	615
1972	95,076	24,000	20,354	48,056	1,951	718,401	1,298	88	828
1973	90,609	25,080	22,293	40,931	1,650	809,681	1,338	73	556
1974	84,164	24,728	24,290	33,465	1,334	874,161	1,064	51	374
1975	82,397	25,746	26,166	29,264	1,024	945,945	811	54	386

[1] Includes stage of syphilis not stated.

SOURCE: Center for Disease Control: VD Fact Sheet, 1975, 32d ed. DHEW Pub. No. (CDC) 76-8195. Public Health Service. Atlanta, Ga.

Table 75. Venereal disease rate per 100,000 population, according to type of venereal disease: United States, 1941-75

(Data are based on reporting by State health departments)

Year	Type of venereal disease								
	Syphilis					Gonorrhea	Chancroid	Granuloma inguinale	Lympho-granuloma venereum
	All stages [1]	Primary and secondary	Early latent	Late and late latent	Congenital				
	Rate per 100,000 civilian population								
1941	368.2	51.7	82.6	153.9	13.4	146.7	2.5	0.4	1.0
1942	363.4	57.0	88.0	153.1	12.8	160.9	4.1	0.9	1.4
1943	447.0	63.8	116.0	195.7	12.6	213.6	6.4	1.3	2.0
1944	367.9	61.6	96.7	159.6	10.7	236.5	6.1	1.3	2.2
1945	282.3	60.5	79.9	111.8	9.7	225.8	4.3	1.4	2.0
1946	271.7	70.9	80.6	93.6	9.0	275.0	5.2	1.6	1.9
1947	264.6	75.6	76.4	86.5	8.7	284.2	6.4	1.7	1.9
1948	234.7	55.9	67.9	86.1	9.2	252.0	6.0	1.6	1.7
1949	197.3	37.1	57.6	83.3	9.8	226.7	4.9	1.8	1.5
1950	154.2	21.6	43.5	75.5	9.0	204.0	3.9	1.4	1.1
1951	131.8	12.1	34.7	71.1	8.5	179.5	3.1	1.1	0.9
1952	110.8	7.9	25.2	66.9	6.1	161.3	2.5	0.7	0.8
1953	100.8	6.2	20.8	64.7	5.2	157.4	2.3	0.5	0.7
1954	87.5	4.9	15.9	59.4	4.6	152.0	2.1	0.4	0.6
1955	76.0	4.1	13.4	52.7	3.4	149.2	1.8	0.4	0.5
1956	77.1	4.1	12.2	54.8	3.4	142.4	1.4	0.3	0.4
1957	78.3	3.8	11.4	58.1	3.3	129.8	1.1	0.2	0.3
1958	68.5	3.9	9.8	50.5	2.8	129.3	0.9	0.2	0.3
1959	69.3	4.7	10.2	50.1	3.0	137.1	0.9	0.2	0.3
1960	68.0	7.1	9.5	47.6	2.6	139.6	0.9	0.2	0.5
1961	69.7	10.4	10.7	45.0	2.4	147.8	0.9	0.2	0.5
1962	68.1	11.0	10.9	42.9	2.2	142.8	0.8	0.1	0.3
1963	69.9	12.0	10.2	44.5	2.3	147.0	0.7	0.1	0.3
1964	63.4	12.2	9.7	38.7	2.0	155.8	0.7	0.1	0.3
1965	59.7	12.3	9.1	35.7	1.9	163.8	0.6	0.1	0.5

See footnote at end of table.

Table 75. Venereal disease rate per 100,000 population, according to type of venereal disease: United States, 1941-75—Continued

(Data are based on reporting by State health departments)

Year	Type of venereal disease								
	Syphilis					Gonorrhea	Chancroid	Granuloma inguinale	Lympho-granuloma venereum
	All stages [1]	Primary and secondary	Early latent	Late and late latent	Congenital				
	Rate per 100,000 civilian population								
1966	57.4	11.7	8.8	34.5	1.8	174.6	0.5	0.1	0.3
1967	53.5	10.9	8.1	32.3	1.6	193.9	0.4	0.1	0.2
1968	50.2	10.3	7.9	30.1	1.3	220.5	0.4	0.1	0.2
1969	48.9	9.5	7.8	30.0	1.1	250.2	0.5	0.1	0.3
1970	44.0	10.1	7.7	24.8	1.0	287.1	0.6	0.1	0.3
1971	47.0	11.6	8.9	25.1	1.0	310.6	0.7	0.1	0.3
1972	46.5	11.7	10.0	23.5	1.0	351.7	0.6	0.0	0.4
1973	43.9	12.1	10.8	19.8	0.8	392.2	0.6	0.0	0.3
1974	40.4	11.9	11.7	16.1	0.6	420.1	0.5	0.0	0.2
1975	39.3	12.3	12.5	14.0	0.5	451.1	0.4	0.0	0.2

[1] Includes stage of syphilis not stated.

SOURCE: Center for Disease Control: VD Fact Sheet, 1975, 32d ed. DHEW Pub. No. (CDC) 76-8195. Public Health Service. Atlanta, Ga.

Table 76. Notifiable diseases per 100,000 population, according to disease: United States, 1966-75

(Data are based on reporting by State health departments)

Disease	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
	Number of cases per 100,000 population									
Amebiasis	1.49	1.60	1.50	1.44	1.42	1.33	1.06	1.07	1.30	1.30
Anthrax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aseptic meningitis	1.56	1.56	2.25	1.82	3.18	2.51	2.23	2.33	1.53	2 10
Botulism	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.01
Brucellosis (undulant fever)	0.13	0.13	0.11	0.12	0.10	0.09	0.09	0.10	0.11	0 15
Chickenpox	(1)	(1)	(1)	(1)	(1)	(1)	87.34	97.68	72.20	72.38
Diphtheria	0.11	0.11	0.13	0.12	0.21	0.10	0.07	0.11	0.13	0.14
Encephalitis, primary	1.08	0.75	0.89	0.80	0.78	0.74	0.51	0.77	0.50	1.80
Encephalitis, postinfectious	0.49	0.54	0.25	0.15	0.18	0.21	0.12	0.17	0.15	0.19
Hepatitis A	16.77	19.67	22.96	23.98	27.87	28.90	25.97	24.18	19.54	16.82
Hepatitis B	1.79	1.28	2.49	3.02	4.08	4.74	4.52	4.03	5.15	6.16
Hepatitis, unspecified	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	3.95	3.36
Leprosy	0.06	0.04	0.06	0.05	0.06	0.06	0.06	0.07	0.06	0.08
Leptospirosis	0.04	0.03	0.03	0.04	0.02	0.03	0.02	0.03	0.03	0.04
Malaria	0.29	1.02	1.16	1.54	1.50	1.15	0.36	0.11	0.14	0.18
Measles (rubeola)	105.42	31.69	11.12	12.79	23.23	36.50	15.50	12.72	10.45	11.44
Meningococcal infections	1.73	1.09	1.31	1.46	1.23	1.10	0.64	0.66	0.64	0.69
Mumps	(1)	(1)	87.87	48.65	55.55	65.33	38.42	36.23	29.00	27.99
Pertussis (whooping cough)	3.98	4.91	2.41	1.63	2.08	1.47	1.58	0.84	1.15	0.82
Poliomyelitis, total	0.06	0.02	0.03	0.01	0.02	0.01	0.01	0.00	0.00	0.00
Paralytic	0.05	0.02	0.03	0.01	0.02	0.01	0.01	0.00	0.00	0.00
Psittacosis	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.08	0.02
Rabies in man	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00
Rheumatic fever, acute	3.63	3.12	2.67	2.48	2.45	2.16	2.01	1.92	1.79	2.01
Rubella (German measles)	24.57	25.74	25.67	28.91	27.75	21.86	12.25	13.25	5.64	7.81
Rubella congenital syndrome	0.01	0.01	0.01	0.02	0.04	0.03	0.02	0.02	0.02	0.01
Salmonellosis, excluding typhoid fever	8.60	9.16	8.26	9.12	10.84	10.63	10.64	11.35	10.40	10.61
Shigellosis	6.07	6.81	6.09	5.92	6.79	7.83	9.70	10.79	10.69	7.78
Tetanus	0.12	0.13	0.09	0.09	0.07	0.06	0.06	0.05	0.05	0.05
Trichinosis	0.06	0.03	0.04	0.11	0.05	0.05	0.04	0.05	0.06	0.09

See footnote at end of table.

Table 76. Notifiable diseases per 100,000 population, according to disease: United States, 1966-75—Continued

(Data are based on reporting by State health departments)

Disease	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
	Number of cases per 100,000 population									
Tuberculosis (newly reported active cases)	24.38	23.07	21.33	19.37	18.22	17.07	15.79	14.77	14.13	15.74
Tularemia	0.11	0.11	0.09	0.07	0.08	0.09	0.07	0.08	0.07	0.06
Typhoid fever	0.19	0.20	0.20	0.18	0.17	0.20	0.19	0.32	0.21	0.18
Typhus fever, flea-borne (murine)	0.02	0.03	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.02
Typhus fever, tick-borne (Rocky Mountain spotted)	0.14	0.15	0.15	0.25	0.19	0.21	0.25	0.32	0.36	0.40
Venereal diseases (newly reported civilian cases):										
Syphilis	54.37	52.53	48.84	46.28	45.30	47.00	44.15	42.03	39.95	37.70
Gonorrhea	181.85	207.33	235.67	268.58	297.47	328.16	371.61	404.92	428.70	469.19
Other specified venereal diseases: chancroid, granuloma inguinale, and lymphogranuloma venereum	0.67	0.67	0.75	0.89	1.07	1.03	1.09	0.79	0.66	0.52

[1] Not reported nationally.

NOTE: Rates greater than 0 but less than 0.005 are shown as 0.00, and rates equal to 0 are shown as -. Total resident population used to calculate all rates except venereal diseases, for which civilian resident population was used.

SOURCE: Center for Disease Control: Reported morbidity and mortality in the United States, 1975. Morbidity and Mortality Weekly Report. 24(54), Aug. 1976.

Table 77. Percent of live births weighing 2,500 grams or less, according to race and age of mother: United States, 1975
(Data are based on the National Vital Registration System)

Age of mother	All races	White	All other	
			Total	Black
	Percent of live births weighing 2,500 grams or less			
All ages	7.4	6.3	12.2	13.1
Under 15 years	14.1	11.3	16.1	16.3
15-19 years	10.0	8.1	14.4	14.8
20-24 years	7.1	6.0	12.1	12.8
25-29 years	6.1	5.4	10.2	11.2
30-34 years	6.8	6.1	10.7	11.8
35-39 years	8.2	7.3	12.1	13.2
40-44 years	9.5	8.6	12.6	13.2
45-49 years	10.3	10.0	11.3	11.0

NOTE: Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States. Figures for age of mother not stated are distributed. Birth weight category 2,500 grams or less corresponds to 5 pounds, 8 ounces or less.

SOURCE: National Center for Health Statistics: Vital Statistics of the United States, 1975, Vol. I. Health Resources Administration, DHEW, Rockville, Md. In preparation.

Table 78. Height of children and youths at selected percentiles, according to sex and age: United States
(Data are based on physical examinations of samples of the civilian noninstitutionalized population)

Age [1]	Male			Female		
	10th	50th	90th	10th	50th	90th
	Standing height in inches at percentile shown					
2 years	32.9	34.2	36.2	32.3	34.2	36.2
3 years	35.6	37.4	39.4	35.2	37.0	39.0
4 years	38.3	40.5	42.6	38.0	40.0	42.0
5 years	40.8	43.3	45.4	40.4	42.7	44.8
6 years	43.1	45.7	48.0	42.7	45.1	47.6
7 years	45.3	47.9	50.4	44.7	47.5	50.2
8 years	47.3	50.0	52.6	46.7	49.8	52.8
9 years	49.3	52.0	54.9	48.8	52.0	55.4
10 years	51.2	54.1	57.3	51.0	54.4	58.0
11 years	53.2	56.4	59.9	53.4	57.0	60.5
12 years	55.2	58.9	62.8	56.0	59.6	63.0
13 years	57.4	61.6	65.7	58.3	61.8	65.1
14 years	59.8	64.2	68.4	59.6	63.1	66.4
15 years	62.3	66.5	70.4	60.3	63.7	67.1
16 years	64.5	68.3	71.8	60.7	63.9	67.4
17 years	66.0	69.4	72.6	61.1	64.2	67.4
18 years	66.4	69.6	73.0	61.4	64.4	67.3

[1] Includes ONLY children with birthday age plus or minus 3 months; all other children excluded from table.

NOTE: Figures are smoothed values of standing height. Data from the Health Examination Survey, Cycles II and III, 1963-65 and 1966-68, and the Health and Nutrition Examination Survey, Cycle I, 1971-74.

SOURCE: National Center for Health Statistics: Vital and Health Statistics. Series 11. Health Resources Administration, DHEW, Rockville, Md. To be published.

Table 79. Weight of children and youths at selected percentiles, according to sex and age: United States
(Data are based on physical examinations of samples of the civilian noninstitutionalized population)

Age [1]	Male			Female		
	10th	50th	90th	10th	50th	90th
	Weight in pounds at percentile shown					
2 years	24.16	27.20	31.70	22.75	26.01	29.94
3 years	27.73	32.23	37.36	27.03	31.08	36.46
4 years	31.39	36.80	42.59	30.51	35.18	41.73
5 years	35.18	41.16	47.84	33.64	38.93	46.80
6 years	39.06	45.61	53.59	36.86	43.03	52.67
7 years	43.05	50.38	60.32	40.54	48.15	60.38
8 years	47.16	55.78	68.48	45.08	54.76	70.64
9 years	51.43	62.02	78.42	50.53	62.74	82.89
10 years	56.26	69.31	89.95	56.79	71.76	96.34
11 years	62.10	77.82	102.67	63.87	81.46	110.14
12 years	69.36	87.70	116.25	71.72	91.56	123.44
13 years	78.48	99.10	130.34	80.14	101.63	135.47
14 years	89.60	111.93	144.56	88.43	110.85	145.59
15 years	101.54	125.02	158.53	95.64	118.34	153.31
16 years	112.79	136.91	171.89	100.93	123.22	158.03
17 years	121.87	146.19	184.26	103.70	124.98	159.57
18 years	127.62	151.85	194.91	104.65	124.82	159.28

[1] Includes ONLY children with birthday age plus or minus 3 months; all other children excluded from table.

NOTE: Figures are smoothed weight values. Data from the Health Examination Survey, Cycles II and III, 1963-65 and 1966-68, and the Health and Nutrition Examination Survey, Cycle I, 1971-74.

SOURCE: National Center for Health Statistics: Vital and Health Statistics. Series 11. Health Resources Administration, DHEW, Rockville, Md. To be published.

SECTION II

Utilization of Health Resources

A. Ambulatory Care

While the number of physicians per 100,000 population has been increasing, the overall number of ambulatory physician visits per person per year, based on data from the national Health Interview Survey, has remained fairly constant since 1970 at about five visits. Rates of physician visits generally increase with age, reflecting the increased frequency, complexity, and chronicity of conditions associated with aging.

In 1975 for all age groups except children, females made visits to physicians at a higher rate than males. A larger proportion of females than males have had at least one visit per year, and the number of visits per person per year was also higher for females. Similarly, in all age groups except 45-64 years, whites made visits at a higher rate than all others.

Many of the differences in utilization between the poor and the nonpoor that existed a decade ago have diminished, disappeared, or actually reversed. For most age groups, persons in low-income families (less than $5,000) reported as many or more physician visits per person per year in 1975 as did persons in high income families ($15,000 and over), although persons in high-income families were more likely to have seen a doctor at least once during the past year. This higher use of visits among the poor may reflect a greater need for services due to deficits in health status brought about by environmental factors, past inequities in obtaining such services, and the income-depressing effects of illness.

Differences in utilization by place of residence also existed. Residents in nonmetropolitan areas made fewer physician visits per year than residents of metropolitan areas. Within each of the major socioeconomic dimensions (i.e., color, family income, and place of residence), the greatest differentials in the proportion of population seeing a physician at all during the year existed among children. Proportionately fewer children other than white, children from low-income families, and children in nonmetropolitan areas saw a doctor at least once during the year than their white, higher income, and metropolitan counterparts.

Physician visits are made in a number of settings including private offices, hospital outpatient departments and emergency rooms, and various types of freestanding clinics. Data from the National Ambulatory Medical Care Survey, conducted by NCHS, indicated that about three visits per person per year were provided by physicians in their private office practices during 1974. This corresponded with data from the Health Interview Survey, which showed that about 70 percent of all physician visits took place in doctors' offices. Office visits per person per year increased with age; and they were generally higher for females than males and for whites than all others.

Overall, less than half of these office visits were to general and family practitioners. The pattern differed, however, by location of practice, with specialists accounting for only 35 percent of the visits in nonmetropolitan areas as compared to over 65 percent in metropolitan areas. This is not surprising since specialists are highly concentrated in metropolitan areas.

Physician office practice typically involved care of patients whom the physician had seen before and those with relatively nonserious conditions. Only about 15 percent of the office visits were made by new patients (i.e., patients not previously seen by that particular physician). In

over 60 percent of the visits, the physician had seen the patient before for the same problem. The proportion of such visits increased with age, reflecting the increasing presence of chronic conditions.

The most common reason for office visits was for special examinations (such as prenatal care and followup care after surgery) which accounted for 18 percent of all visits. Respiratory conditions which account for 15 percent of the visits and circulatory conditions which account for another 10 percent were the major disease categories. The relative importance of conditions was different for different age groups. Among children, for example, respiratory conditions accounted for 28 percent of all office visits; while circulatory conditions account for 29 percent of the visits for elderly people.

When physicians were asked to assess the seriousness of their patients' principal problems, almost half were found to be "not serious," and another third were considered only "slightly serious." Very few differences existed in these assessments by sex, color, or place of residence. Although the seriousness of patients' principal problems increased with age, over two-thirds of visits by the elderly were still judged to be either "slightly serious" or "not serious."

One-half of all office visits resulted in some type of drug therapy, one-third involved the taking of a general history or physical exam, about one-fifth involved lab tests, and one-fifth involved medical counseling. Few differences were found in the distribution of these treatment modes by sex, color, and age. Notable differences were gradually increasing use of drug therapy with increasing patient age and more frequent use of psychotherapy and therapeutic listening for persons aged 25-44. Except for injections and immunizations and drug therapy, metropolitan physicians provided or ordered specific treatments or services more often than nonmetropolitan physicians.

Doctors ordered a return visit at a specific time for 6 out of 10 visits and a return visit if needed for another 2 out of 10. This pattern of followup differed by location of practice. Physicians in nonmetropolitan areas prescribed specific followup visits less often than metropolitan physicians. The only variations in return visit patterns by patient characteristics were a higher rate for females than males and increasing rates with increasing age. Seven out of 10 visits by patients 65 years and older resulted in scheduling of a return visit, a pattern which again reflects the more chronic nature of their illnesses. Only 2 percent of all office visits resulted in admission of the patient to a hospital.

The proportion of all physician contacts which are physician visits in hospital outpatient departments has remained relatively stable from 1971 to 1975. In contrast, emergency room utilization increased steadily over the same years. In most age groups the poor were greater utilizers of outpatient and emergency facilities than the nonpoor. Concern is often expressed about the continuity and comprehensiveness of care received in these locations, but the data available are not adequate to permit assessment of the relative quality of care in different settings.

The increasing proportion of ambulatory visits made to emergency rooms has prompted several studies to identify the types of visits involved. A study conducted by the U.S. Consumer Product Safety Commission estimated that in fiscal year 1976 almost 9 million product-related injuries were treated in hospital emergency rooms. Sports and recreational equipment and activities were one of the major sources of product-related injuries. Children 1 to 4 years of age had the highest rate of product-related injuries treated in emergency rooms. Males had higher treatment rates than females, but the differences decreased with age. This study of product-related injuries did not take into consideration socioeconomic differences in use of emergency rooms. Many product-related injuries among the nonpoor which may have been treated in doctors' offices were therefore not included in these estimates.

In another study conducted by the Drug Enforcement Administration and National Institute on Drug Abuse, the role of drug abuse in emergency room utilization was investigated. Overall, suicide attempts constituted the largest single category of drug-abuse visits. Among youths aged 10-19, psychic effects were mentioned as a motivation for taking the drug almost as often as suicide. About one-half of all drug cases among females involved a suicide attempt, while among males the motivational factors are about evenly distributed among

psychic effects, dependence, and suicide. Drug dependence accounted for a greater proportion of emergency room visits for blacks and other minorities than for whites. Diazepam (Valium), alcohol in combination with another drug(s), heroin, and aspirin were the most commonly named drugs of abuse reported in hospital emergency rooms, together accounting for about 35 percent of all drug-abuse cases.

Another major component of ambulatory service, dental care, is often viewed as one of the more elective forms of medical care; consequently, relatively large differences exist among socioeconomic groups in the utilization of dental services. The civilian noninstitutionalized population averaged 1.6 dental visits per person per year in 1975, but only half of the population saw a dentist at all during that year. Proportionately more persons in high-income families ($15,000 or more) than persons in low-income families (less than $5,000) had at least one dental visit during the year, and the high-income persons reported twice as many dental visits as did the low-income persons, 2.2 vs. 1.1 visits per year. The largest income differences in the number of visits per year were found among children and the elderly. Over the past decade the gap between the poor and nonpoor in the utilization of most forms of medical care has diminished markedly, disappeared, or actually reversed itself. However, this has not been the case with dental care, due in part to the limited dental coverage provided by public programs which finance health care among the poor.

Differences also existed in the patterns of dental care by place of residence, with residents of metropolitan areas reporting more dental visits than persons living outside metropolitan areas. These differences were not as striking as the income differentials.

Categories of service with recent shifts or increases in ambulatory utilization include psychiatric, family planning, and abortion. The increase in the use of outpatient psychiatric services is associated with reductions in the use of inpatient psychiatric hospital services, increases in use of new drug therapies, and expansion of insurance benefits for outpatient psychiatric services. Use of ambulatory psychiatric services in 1975 was highest among young adults aged 18-24 and lowest among the elderly. Almost one-half of the ambulatory psychiatric episodes were categorized in a miscellaneous diagnostic category. Of the specified diagnoses, schizophrenia and depressive disorders were most frequently reported. However, major specified conditions varied by age, with mental retardation primary for those under 18 years of age and organic brain syndromes primary among the elderly.

Another type of ambulatory care that has increased is services provided by family planning clinics financed primarily by either public or Planned Parenthood funds. The primary users of family planning services in 1975 were females aged 18-24. The relatively few males who used these facilities tended to be older. These data do not reflect family planning services provided in physicians' offices, still the major source of these services. Over 80 percent of the women aged 15-44 who received family planning services in the past 5 years obtained them from their own physician. Only 5 percent of these women received family planning services at a family planning clinic, although 17 percent of black women who received family planning services used such clinics.

Better data are becoming available on the number of legal abortions performed along with some of the characteristics of the patients. In general, these abortions are performed on an outpatient basis. The Abortion Surveillance Program of the Center for Disease Control reports a 30-percent increase in the number of legal abortions between 1972 and 1974, and an additional 12-percent increase between 1974 and 1975. About 763,000 legal abortions were reported in 1974 and 855,000 in 1975. The actual number of abortions performed each year was certainly higher than the number reported. One-third of the reported abortions were for women under 20 years of age, another third for women 20-24 years old, and one-third for women 25 years and over. A little over one-quarter of the reported abortions were for married women.

One of the most striking changes accompanying the liberalization of abortion laws over the last several years has been the decrease in the number of abortions performed out of State. In 1972, 44 percent of reported abortions were performed out of State in contrast to 13 percent

in 1974. However, in seven States more than 25 percent of the reported abortions were still performed on out-of-state residents in 1974.

Between 1972 and 1974, 68 percent of legal abortions were performed before the 11th week of pregnancy when the risk to the woman is relatively low. The risk of death is almost 50 times greater after the 15th week of gestation than before the 9th week, but still about 9 percent of the legal abortions during this 2-year period were performed after the 15th week of pregnancy.

Table 80. Office visits to physicians, according to age, color, and sex of patient: United States, 1974

(Data are based on reporting by a sample of office-based physicians)

Color and sex	Age of patient					
	All ages	Under 15 years	15-24 years	25-44 years	45-64 years	65 years and over
	Percent distribution					
Total	100.0	19.1	15.3	25.2	25.0	15.4
Male	100.0	25.3	12.8	21.6	25.6	14.7
Female	100.0	15.0	17.0	27.6	24.6	15.9
White	100.0	18.9	15.1	24.7	25.4	15.9
Male	100.0	25.2	12.7	21.1	25.9	15.0
Female	100.0	14.7	16.7	27.1	25.0	16.5
All other	100.0	20.9	16.8	30.0	21.9	10.4
Male	100.0	26.0	13.7	26.7	22.7	10.9
Female	100.0	17.8	18.8	31.9	21.4	10.1
	Office visits per person per year					
Total	3.0	2.2	2.6	3.1	3.7	4.7
Male	2.5	2.6	1.7	2.2	3.3	4.3
Female	3.6	2.1	3.3	4.0	4.2	5.0
White	3.2	2.4	2.6	3.1	3.7	4.6
Male	2.6	2.5	1.7	2.1	3.2	4.3
Female	3.6	2.3	3.4	4.0	4.2	4.8
All other	2.2	1.4	1.8	2.8	3.0	3.2
Male	1.8	1.4	1.2	2.1	2.6	3.0
Female	2.6	1.5	2.4	3.3	3.3	3.4

NOTE: Rates are based on the civilian noninstitutionalized population.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Provisional data from the National Ambulatory Medical Care Survey.

Table 81. Office visits to physicians, according to physician specialty and type of practice, sex, color, and age of patient, and location of practice: United States, 1974

(Data are based on reporting by a sample of office-based physicians)

Sex, color, and age of patient and location of practice	Specialty													Type of practice	
	All specialties	General and family practice	Medical specialty				Surgical specialty				Other specialty			Solo	Other [1]
			All medical specialties	Internal medicine	Pediatrics	Other	All surgical specialties	General surgery	Obstetrics and gynecology	Other	All other specialties	Psychiatry	Other		
	Office visits per person per year														
Total	3.0	1.3	0.8	0.3	0.2	0.2	0.9	0.2	0.2	0.4	0.1	0.1	0.1	1.8	1.2
Sex															
Male	2.5	1.1	0.7	0.3	0.3	0.2	0.6	0.2	0.0	0.4	0.1	0.1	0.1	1.5	1.0
Female	3.6	1.5	0.8	0.4	0.2	0.2	1.1	0.2	0.5	0.4	0.2	0.1	0.1	2.1	1.4
Color															
White	3.2	1.3	0.8	0.3	0.3	0.2	0.9	0.2	0.3	0.4	0.2	0.1	0.1	1.9	1.3
All other	2.2	1.1	0.5	0.2	0.2	0.1	0.6	0.1	0.2	0.3	0.1	*	0.1	1.5	0.8
Age															
Under 15 years	2.2	0.8	1.0	0.0	0.9	0.1	0.3	0.1	0.0	0.2	0.0	*	0.0	1.1	1.1
15-24 years	2.6	1.1	0.4	0.2	0.1	0.2	0.9	0.2	0.4	0.3	0.1	0.1	0.0	1.5	1.1
25-44 years	3.1	1.3	0.5	0.3	*	0.2	1.1	0.2	0.5	0.4	0.3	0.2	0.1	1.9	1.2
45-64 years	3.7	1.6	0.8	0.6	*	0.3	1.1	0.3	0.1	0.6	0.2	0.1	0.1	2.4	1.3
65 years and over	4.7	2.1	1.3	1.0	*	0.3	1.1	0.3	0.1	0.7	0.2	*	0.2	3.1	1.6
Location of practice															
Metropolitan area	3.4	1.1	1.0	0.4	0.3	0.3	1.0	0.2	0.3	0.5	0.2	0.1	0.1	2.0	1.4
Nonmetropolitan area	2.3	1.5	0.3	0.1	0.1	0.0	0.5	0.2	0.1	0.2	0.0	*	0.0	1.4	0.9

[1] Includes partnership and group practices.

NOTE: Rates are based on the civilian noninstitutionalized population.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Provisional data from the National Ambulatory Medical Care Survey.

Table 82. Office visits to physicians, according to prior visit status, sex, color, and age of patient, and location of practice: United States, 1974

(Data are based on reporting by a sample of office-based physicians)

Sex, color, and age of patient and location of practice	Prior visit status			
	Total	Patient never seen before	Patient seen before	
			For current problem	For another problem
	Percent distribution of office visits			
Total	100.0	14.9	62.1	23.0
Sex				
Male	100.0	16.4	59.3	24.2
Female	100.0	13.9	63.9	22.2
Color				
White	100.0	14.3	62.8	22.9
All other	100.0	20.3	55.0	24.8
Age				
Under 15 years	100.0	15.9	47.8	36.2
15-24 years	100.0	21.4	52.6	26.0
25-44 years	100.0	17.3	61.1	21.6
45-64 years	100.0	12.3	69.4	18.3
65 years and over	100.0	7.5	78.8	13.7
Location of practice				
Metropolitan area	100.0	15.3	62.9	21.8
Nonmetropolitan area	100.0	13.6	59.5	26.9

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Provisional data from the National Ambulatory Medical Care Survey.

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Table 83. Office visits to physicians, according to sex, color, and age of patient, location of practice, and principal diagnosis: United States, 1974

(Data are based on reporting by a sample of office-based physicians)

Principal diagnosis and ICDA code [1]	Total	Sex		Color		Age					Location of practice	
		Male	Female	White	All other	Under 15 years	15-24 years	25-44 years	45-64 years	65 years and over	Metropolitan area	Non-metropolitan area
	Percent distribution of office visits											
All diagnoses	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Infective and parasitic diseases 000-136	3.9	4.4	3.6	3.9	4.1	6.8	5.6	3.6	2.6	1.5	3.8	4.2
Neoplasms 140-239	2.0	1.9	2.1	2.1	*	*	*	1.7	2.8	3.9	2.2	1.4
Endocrine, nutritional, and metabolic diseases 240-279	4.2	3.1	5.0	4.1	5.1	*	2.7	4.8	6.2	5.7	4.4	3.7
Diabetes mellitus 250	1.7	1.7	1.7	1.6	2.2	*	*	1.0	2.7	4.4	1.6	1.9
Obesity 277	1.5	0.6	2.1	1.4	2.1	*	1.8	2.6	1.8	*	1.6	1.1
Mental disorders 290-315	4.3	4.3	4.4	4.5	2.9	1.3	3.7	8.2	4.8	1.7	4.9	2.5
Neuroses 300	2.3	1.9	2.6	2.4	1.8	*	1.8	4.6	2.7	*	2.6	1.5
Diseases of nervous system and sense organs 320-389	7.7	8.7	7.0	7.9	6.3	11.5	5.2	4.8	8.3	9.4	7.8	7.4
Diseases of the eye 360-379	3.6	3.8	3.5	3.6	3.7	3.2	3.2	1.9	4.5	5.8	3.8	2.9
Refractive errors 370	1.4	1.4	1.4	1.4	*	1.2	2.3	1.0	1.8	*	1.5	1.0
Otitis media 381	1.6	2.2	1.2	1.7	*	6.4	*	*	*	*	1.6	1.9
Diseases of circulatory system 390-458	9.8	10.1	9.5	9.7	10.0	*	*	4.5	15.6	28.8	9.8	9.7
Essential benign hypertension 401	3.9	3.5	4.1	3.8	4.9	*	*	2.2	7.3	9.4	3.9	3.9
Chronic ischemic heart disease 412	2.3	2.7	2.1	2.4	2.1	*	*	*	3.3	9.1	2.4	2.2
Diseases of respiratory system 460-519	15.1	17.1	13.7	14.9	16.3	27.7	14.8	12.3	11.9	9.2	14.3	17.5
Acute respiratory infections (except influenza) 460-466	7.6	8.4	7.2	7.5	9.1	17.2	7.5	6.0	4.8	3.2	7.2	9.0
Influenza 470-474	0.8	1.0	0.7	0.7	1.8	1.4	*	*	*	*	0.5	1.6
Hay fever 507	1.8	2.0	1.7	1.9	*	2.3	2.5	2.0	1.6	*	2.1	1.1
Diseases of digestive system 520-577	3.2	3.6	2.9	3.2	3.2	1.6	2.4	3.5	4.1	3.9	3.0	3.6
Diseases of genitourinary system 580-629	5.8	2.7	7.8	5.7	6.3	1.3	7.1	8.5	6.4	4.5	5.9	5.6
Diseases of male genital organs 600-607	0.6	1.5	...	0.6	*	*	*	*	*	1.2	0.7	*
Diseases of female genital organs 610-629	3.4	...	5.7	3.4	3.9	*	5.1	5.8	3.9	*	3.4	3.4
Diseases of skin and subcutaneous tissue 680-709	5.3	5.8	5.0	5.3	5.5	6.3	9.1	4.8	4.1	3.4	5.4	5.0
Diseases of musculoskeletal system 710-738	5.5	5.3	5.7	5.6	4.8	1.9	2.2	4.8	9.0	9.1	5.5	5.6
Arthritis and rheumatism 710-718	2.8	2.4	3.1	2.8	2.8	*	*	1.9	4.6	6.5	2.7	3.2

See footnotes at end of table.

Table 83. Office visits to physicians, according to sex, color, and age of patient, location of practice, and principal diagnosis: United States, 1974—Continued
(Data are based on reporting by a sample of office-based physicians)

Principal diagnosis and ICDA code [1]	Total	Sex		Color		Age					Location of practice	
		Male	Female	White	All other	Under 15 years	15-24 years	25-44 years	45-64 years	65 years and over	Metropolitan area	Non-metropolitan area
	Percent distribution of office visits											
Symptoms and ill-defined conditions 780-796	5.0	4.4	5.4	5.0	5.3	4.0	4.8	6.5	5.0	4.2	5.2	4.4
Accidents, poisoning, violence 800-999	7.5	11.0	5.3	7.5	8.4	7.5	9.8	8.9	6.9	4.1	7.3	8.5
Fracture 800-829	1.2	1.8	0.9	1.3	*	1.7	1.3	1.1	1.2	*	1.3	1.1
Dislocation, sprain 830-848	2.7	3.7	2.1	2.6	3.7	*	3.8	4.2	2.9	*	2.7	2.7
Lacerations 870-907	1.3	2.3	0.7	1.3	*	2.5	1.5	1.1	0.8	*	1.1	1.9
Special conditions and examinations without illness Y00-Y13	18.0	15.4	19.8	18.2	16.9	25.4	28.1	20.0	10.5	8.0	17.9	18.5
Medical and special exams Y00	7.1	7.6	6.8	7.2	6.5	18.2	8.3	5.5	3.0	1.7	7.0	7.4
Prenatal care Y06	3.6	...	6.0	3.6	3.8	*	11.4	6.9	*	...	3.6	3.7
Medical and surgical aftercare Y10	5.0	5.9	4.3	5.0	4.5	3.9	4.9	5.0	6.0	4.6	5.1	4.4
Other diagnoses [2]	1.4	1.1	1.5	1.4	*	1.6	1.3	1.3	1.0	1.9	1.4	1.3
Diagnosis given as "None"	0.5	*	0.5	0.5	*	*	*	*	*	*	0.4	*
Diagnosis unknown [3]	0.8	0.8	0.7	0.7	*	1.0	*	1.1	*	*	0.9	*

[1] Diagnostic groupings and code number inclusions are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

[2] Codes 280-289, Diseases of the blood and blood-forming organs; 630-678, Complications of pregnancy, childbirth, and the puerperium; 740-759, Congenital anomalies; 760-779, Certain causes of perinatal morbidity and mortality.

[3] Blank diagnosis, noncodable diagnosis, illegible diagnosis.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Provisional data from the National Ambulatory Medical Care Survey.

Table 84. Office visits to physicians, according to seriousness of principal problem, sex, color, and age of patient, and location of practice: United States, 1974

(Data are based on reporting by a sample of office-based physicians)

Sex, color, and age of patient and location of practice	Office visits per person per year	Seriousness of patient's principal problem				
		Total	Very serious	Serious	Slightly serious	Not serious
		Percent distribution of office visits				
Total	3.0	100.0	3.1	16.3	31.6	49.1
Sex						
Male	2.5	100.0	3.7	18.0	33.0	45.3
Female	3.6	100.0	2.7	15.1	30.7	51.6
Color						
White	3.2	100.0	3.1	16.3	31.8	48.8
All other	2.2	100.0	2.7	15.4	30.2	51.7
Age						
Under 15 years	2.2	100.0	1.4	10.2	29.0	59.4
15-24 years	2.6	100.0	1.8	10.9	27.0	60.4
25-44 years	3.1	100.0	3.1	14.3	30.5	52.2
45-64 years	3.7	100.0	3.8	20.3	34.5	41.4
65 years and over	4.7	100.0	5.2	25.8	36.7	32.3
Location of practice						
Metropolitan area	3.4	100.0	3.3	16.7	30.8	49.2
Nonmetropolitan area	2.3	100.0	2.2	14.9	34.3	48.6

NOTE: Rates are based on the civilian noninstitutionalized population.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Provisional data from the National Ambulatory Medical Care Survey.

Table 85. Office visits to physicians, according to treatments and services, sex, color, and age of patient, and location of practice: United States, 1974
(Data are based on reporting by a sample of office-based physicians)

Sex, color, and age of patient and location of practice	Treatment or service ordered or provided									
	None	General history or exam	Lab procedure or test	X-ray	Injection or immunization	Office surgical treatment	Drug therapy [1]	Psychotherapy or therapeutic listening	Medical counseling or advice	Other
	Percent of office visits with specified treatment or service [2]									
Total	5.2	33.1	19.4	7.0	17.9	8.4	50.3	4.4	20.3	9.7
Sex										
Male	5.4	32.1	16.6	8.3	18.4	10.3	47.9	3.9	19.6	10.0
Female	5.0	33.8	21.2	6.1	17.6	7.2	51.9	4.7	20.7	9.4
Color										
White	5.2	32.5	19.2	7.1	18.0	8.6	49.6	4.5	20.6	9.8
All other	4.6	38.5	21.3	6.3	17.5	6.2	57.0	3.3	17.6	8.1
Age										
Under 15 years	6.0	38.0	14.6	4.3	25.0	8.0	46.8	1.5	20.3	5.8
15-24 years	7.4	33.1	19.6	6.2	12.4	10.3	47.0	3.6	19.0	10.0
25-44 years	5.1	32.6	21.0	7.8	13.9	8.4	48.1	8.0	19.5	10.7
45-64 years	4.2	30.8	19.7	8.8	19.0	8.0	52.5	4.5	20.9	11.3
65 years and over	3.7	31.5	21.7	6.8	19.4	7.8	58.3	2.5	21.9	9.7
Location of practice										
Metropolitan area	5.2	34.6	20.4	7.7	17.8	8.5	49.6	5.2	20.7	10.4
Nonmetropolitan area	5.3	28.4	16.2	4.8	18.2	8.3	52.6	1.8	18.9	7.5

[1] Includes prescription and nonprescription drugs.
[2] Percents will not add to 100 because many patient visits involved the provision of more than one treatment or service.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Provisional data from the National Ambulatory Medical Care Survey.

Table 86. Office visits to physicians, according to disposition of visit, sex, color, and age of patient, and location of practice: United States, 1974

(Data are based on reporting by a sample of office-based physicians)

Sex, color, and age of patient and location of practice	Disposition of visit							
	No followup planned	Return at specified time	Return if needed	Telephone followup planned	Referred to other physician	Returned to referring physician	Admitted to hospital	Other
	Percent of office visits with specified disposition [1]							
Total	12.7	59.6	21.7	3.7	2.7	1.0	2.2	0.7
Sex								
Male	15.2	56.8	21.6	3.6	2.8	1.0	2.2	0.7
Female	11.0	61.5	21.9	3.8	2.6	1.0	2.2	0.6
Color								
White	12.6	59.7	21.8	3.8	2.7	1.0	2.2	0.7
All other	13.8	58.7	21.7	3.3	2.5	*	3.0	*
Age								
Under 15 years	20.1	47.4	25.7	5.5	2.5	*	1.5	*
15-24 years	17.9	54.5	22.2	3.9	2.5	*	1.6	*
25-44 years	11.8	60.2	21.7	3.3	2.9	1.1	2.8	0.8
45-64 years	8.9	64.6	20.3	3.2	2.9	1.4	2.6	0.8
65 years and over	6.1	70.5	18.9	2.7	2.3	1.0	2.4	*
Location of practice								
Metropolitan area	11.6	62.3	20.1	4.0	2.8	1.1	2.3	0.7
Nonmetropolitan area	16.0	51.5	27.0	2.8	2.1	0.7	2.1	0.6

[1] Percents will not add to 100 because some patient visits had more than one disposition.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Provisional data from the National Ambulatory Medical Care Survey.

Table 87. Physician visits per person per year and persons with one or more visits, according to age, sex, color, family income, and location of residence: United States, 1975

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex, color, family income, and location of residence	All ages	Under 15 years	15-44 years	45-64 years	65 years and over	All ages	Under 15 years	15-44 years	45-64 years	65 years and over
	Physician visits per person per year					Percent of population with one or more visits in past year				
Total	5.1	4.4	4.8	5.6	6.6	75.2	74.7	75.1	74.1	78.8
Sex										
Male	4.3	4.7	3.5	4.7	6.4	70.5	75.2	66.9	69.7	75.9
Female	5.7	4.1	6.0	6.5	6.8	79.5	74.2	82.8	78.1	80.8
Color										
White	5.1	4.5	4.8	5.6	6.7	75.7	76.2	75.6	73.9	78.9
All other	4.7	3.8	4.5	6.2	5.9	71.5	67.2	72.0	75.6	77.6
Family income[1]										
Less than $5,000	6.0	4.7	5.7	7.4	6.5	75.5	70.5	76.9	74.2	78.7
$5,000-$9,999	5.2	4.0	5.0	5.8	7.2	73.6	70.7	74.6	72.4	78.0
$10,000-$14,999	4.8	4.4	4.5	5.5	6.9	75.0	75.6	74.7	73.9	80.3
$15,000 or more	4.9	4.7	4.7	5.3	6.4	77.6	79.3	76.7	76.6	82.2
Location of residence										
Within SMSA	5.3	4.7	5.0	5.8	6.9	75.9	76.3	75.9	74.4	78.7
Large SMSA	5.4	4.9	5.2	5.9	6.5	76.2	77.9	75.5	74.6	79.0
Core counties	5.4	4.7	5.4	5.9	6.4	75.8	77.3	75.2	74.2	78.4
Fringe counties	5.4	5.4	4.9	5.8	6.8	77.2	79.2	76.0	75.6	80.7
Medium SMSA	5.2	4.4	4.9	5.8	7.8	76.0	75.6	76.5	74.7	77.8
Other SMSA	4.8	4.5	4.4	5.6	6.2	74.6	71.6	76.0	73.0	79.5
Outside SMSA	4.4	3.6	4.2	5.1	6.1	73.0	70.4	72.9	73.1	78.9
Adjacent to SMSA	4.6	3.5	4.4	5.5	6.3	73.4	70.9	73.0	73.7	79.8
Not adjacent to SMSA	4.2	3.8	3.8	4.6	5.8	72.5	69.7	72.8	72.2	77.8

[1] Excludes unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 88. Hospital outpatient clinic visits per person per year and hospital outpatient clinic visits as a percent of all physician visits, according to age, sex, and family income: United States, 1971-75

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Age, sex, and family income	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
	Hospital outpatient clinic visits per person per year					Hospital outpatient clinic visits as a percent of all physician visits				
ALL AGES										
Total	0.4	0.4	0.3	0.4	0.4	7.7	7.6	6.8	7.6	8.4
Sex										
Male	0.4	0.4	0.3	0.4	0.4	8.3	8.4	6.8	8.4	9.3
Female	0.4	0.4	0.4	0.4	0.4	7.3	7.1	6.8	7.0	7.8
Family income [1]										
Less than $5,000	0.7	0.6	0.6	0.6	0.7	11.7	11.3	10.5	11.3	11.0
$5,000-$9,999	0.4	0.4	0.3	0.4	0.6	8.0	8.9	6.7	8.9	10.8
$10,000-$14,999	0.2	0.2	0.3	0.3	0.4	4.9	4.8	5.7	6.5	8.1
$15,000 or more	0.3	0.3	0.2	0.3	0.3	5.5	5.4	4.9	5.3	5.5
UNDER 15 YEARS										
Total	0.3	0.3	0.3	0.3	0.3	7.3	6.5	6.2	6.1	7.7
Sex										
Male	0.3	0.3	0.3	0.3	0.4	7.2	6.5	5.5	6.5	7.6
Female	0.3	0.3	0.3	0.2	0.3	7.5	6.5	6.9	5.7	7.8
Family income [1, 2]										
Less than $5,000	0.6	0.5	0.5	0.5	0.6	16.2	12.8	12.2	13.7	12.2
$5,000-$9,999	0.3	0.3	0.2	0.3	0.4	8.3	8.8	6.5	8.0	11.5
$10,000-$14,999	0.2	0.2	0.2	0.2	0.3	3.9	3.9	4.1	5.4	6.5
$15,000 or more	0.2	0.2	0.2	0.2	0.2	4.0	4.7	3.9	3.6	4.5
15-44 YEARS										
Total	0.4	0.4	0.3	0.4	0.4	7.9	7.8	6.4	8.2	8.8
Sex										
Male	0.3	0.3	0.2	0.3	0.3	8.8	8.2	6.8	9.0	9.3
Female	0.4	0.5	0.4	0.5	0.5	7.4	7.6	6.3	7.7	8.6
Family income [1, 3]										
Less than $5,000	0.7	0.7	0.7	0.8	0.9	12.8	13.2	11.8	13.2	15.9
$5,000-$9,999	0.4	0.4	0.3	0.5	0.6	7.6	9.2	6.8	9.5	11.9
$10,000-$14,999	0.2	0.2	0.3	0.3	0.3	5.3	4.9	5.3	7.1	7.1
$15,000 or more	0.3	0.2	0.2	0.3	0.2	6.7	4.9	4.3	5.7	5.1
45-64 YEARS										
Total	0.5	0.5	0.4	0.5	0.5	9.0	9.1	8.0	8.3	9.3
Sex										
Male	0.5	0.5	0.4	0.5	0.5	10.0	10.6	8.4	9.6	10.7
Female	0.5	0.5	0.5	0.4	0.5	8.3	7.9	7.7	7.3	8.4
Family income [1]										
Less than $5,000	1.0	0.9	0.8	0.8	0.8	14.7	13.2	12.6	12.1	10.6
$5,000-$9,999	0.5	0.5	0.4	0.5	0.6	9.3	9.8	7.4	9.1	10.3
$10,000-$14,999	0.3	0.4	0.4	0.4	0.6	5.7	6.5	7.3	7.1	11.9
$15,000 or more	0.3	0.4	0.3	0.4	0.4	6.2	7.0	6.4	6.6	7.1

See footnotes at end of table.

Table 88. Hospital outpatient clinic visits per person per year and hospital outpatient clinic visits as a percent of all physician visits, according to age, sex, and family income: United States, 1971-75—Continued

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Age, sex, and family income	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
	Hospital outpatient clinic visits per person per year					Hospital outpatient clinic visits as a percent of all physician visits				
65 YEARS AND OVER										
Total	0.4	0.5	0.5	0.5	0.5	5.3	6.7	6.9	7.0	6.9
Sex										
Male	0.4	0.6	0.5	0.6	0.7	6.6	9.3	7.5	8.7	10.7
Female	0.3	0.4	0.5	0.4	0.3	4.6	5.0	6.6	5.8	4.4
Family income [1]										
Less than $5,000	0.4	0.5	0.5	0.5	0.3	5.8	7.7	6.9	7.4	5.2
$5,000-$9,999	0.4	0.4	0.4	0.6	0.6	6.1	5.9	5.4	8.5	8.1
$10,000-$14,999	*	*	0.8	*	0.7	*	*	10.9	*	9.5
$15,000 or more	*	*	0.6	*	0.4	*	*	8.5	*	6.5

[1] Excludes unknown family income.
[2] Ages used for family income were under 17 years.
[3] Ages used for family income were 17-44 years.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 89. Emergency room visits per person per year and emergency room visits as a percent of all physician visits, according to age, sex, and family income: United States, 1971-75

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Age, sex, and family income	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
	Emergency room visits per person per year					Emergency room visits as a percent of all physician visits				
ALL AGES										
Total	0.1	0.2	0.2	0.2	0.2	2.5	3.3	3.9	4.3	4.5
Sex										
Male	0.1	0.2	0.2	0.2	0.2	3.0	4.6	4.7	5.6	5.6
Female	0.1	0.1	0.2	0.2	0.2	2.2	2.4	3.3	3.4	3.7
Family income [1]										
Less than $5,000	0.1	0.2	0.2	0.3	0.4	2.6	3.2	3.8	5.2	5.9
$5,000-$9,999	0.1	0.2	0.2	0.2	0.3	3.0	3.5	4.0	4.7	5.0
$10,000-$14,999	0.1	0.2	0.2	0.2	0.2	2.1	3.3	4.0	4.7	4.4
$15,000 or more	0.1	0.2	0.2	0.2	0.2	2.2	3.0	3.8	3.5	3.5
UNDER 15 YEARS										
Total	0.2	0.2	0.3	0.2	0.3	3.9	4.9	5.9	5.8	6.6
Sex										
Male	0.2	0.3	0.3	0.3	0.3	3.4	5.8	6.0	6.7	6.7
Female	0.2	0.2	0.2	0.2	0.3	4.4	3.9	5.6	4.9	6.4
Family income [1, 2]										
Less than $5,000	0.2	0.2	0.4	0.4	0.5	5.7	5.8	9.0	11.6	11.0
$5,000-$9,999	0.2	0.2	0.2	0.3	0.4	5.0	4.9	6.5	7.3	9.3
$10,000-$14,999	0.1	0.2	0.2	0.2	0.2	3.3	5.2	5.1	5.8	5.7
$15,000 or more	0.1	0.2	0.2	0.2	0.2	2.5	4.0	4.7	3.9	4.7
15-44 YEARS										
Total	0.1	0.2	0.2	0.3	0.2	2.9	3.8	4.5	5.4	5.1
Sex										
Male	0.1	0.2	0.2	0.3	0.3	4.3	6.2	6.3	8.3	7.4
Female	0.1	0.2	0.2	0.2	0.2	2.2	2.5	3.5	3.9	3.8
Family income [1, 3]										
Less than $5,000	0.2	0.3	0.3	0.4	0.4	3.2	4.6	5.0	7.2	6.6
$5,000-$9,999	0.1	0.2	0.2	0.3	0.3	3.0	3.7	4.1	5.7	5.3
$10,000-$14,999	0.1	0.2	0.2	0.2	0.2	2.2	3.3	4.2	5.3	5.1
$15,000 or more	0.1	0.2	0.2	0.2	0.2	2.4	3.3	4.7	4.4	3.7
45-64 YEARS										
Total	0.1	0.1	0.1	0.1	0.2	1.1	2.0	2.2	2.5	2.8
Sex										
Male	0.1	0.1	0.1	0.1	0.2	1.1	2.4	2.4	2.3	3.3
Female	0.1	0.1	0.1	0.2	0.2	1.1	1.7	2.0	2.6	2.4
Family income [1]										
Less than $5,000	*	0.2	*	*	0.3	*	2.7	*	*	4.2
$5,000-$9,999	0.1	0.1	0.2	0.2	0.2	1.5	2.4	3.0	2.7	3.0
$10,000-$14,999	*	*	0.1	0.1	0.1	*	*	2.1	2.4	2.2
$15,000 or more	*	0.1	*	0.1	0.1	*	2.0	*	2.3	2.2

See footnotes at end of table.

Table 89. Emergency room visits per person per year and emergency room visits as a percent of all physician visits, according to age, sex, and family income: United States, 1971-75—Continued

(Data are based on household interviews of samples of the civilian noninstitutionalized population)

Age, sex, and family income	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
	Emergency room visits per person per year					Emergency room visits as a percent of all physician visits				
65 YEARS AND OVER										
Total	0.1	0.1	0.1	0.1	0.1	1.2	1.0	1.4	1.7	2.1
Sex										
Male	*	*	*	0.1	0.1	*	*	*	1.8	2.0
Female	*	*	0.1	0.1	0.1	*	*	1.6	1.7	2.2
Family income [1]										
Less than $5,000	*	*	*	0.1	0.2	*	*	*	1.9	3.2
$5,000-$9,999	*	*	*	*	*	*	*	*	*	*
$10,000-$14,999	*	*	*	*	*	*	*	*	*	*
$15,000 or more	*	*	*	*	*	*	*	*	*	*

[1] Excludes unknown family income.
[2] Ages used for family income were under 17 years.
[3] Ages used for family income were 17-44 years.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 90. Product-related injuries treated in hospital emergency rooms, according to category of consumer product: Contiguous United States, July 1, 1975-June 30, 1976

(Data are based on reporting by a sample of hospital emergency rooms)

Product category	Estimated number of injuries
Total	8,744,361
Home structures and fixtures, construction materials	2,059,713
Stairs, ramps, and landings (indoors or outdoors)	538,354
Nails, carpet tacks, screws, and thumbtacks	309,288
Architectural glass (including glass doors)	191,098
Doors (unspecified)	189,789
Metal pieces	108,742
Floors and flooring materials	100,258
Fences (nonelectric or unspecified)	76,275
Bathtubs and shower structures (excluding glass)	58,186
Other construction materials	54,212
Lumber, boards, and paneling pieces (not part of structure)	47,330
Porches, balconies, open side floors, and floor openings	46,620
Nonglass doors	43,356
Bricks and concrete blocks (not part of structure)	32,162
Window sills, door sills, door frames, and window frames	28,882
Electric fixtures (light bulbs, lamps, light fixtures, electric outlets, electric chandeliers, appliance cords, extension cords, and replacement wire)	26,186
Wire (nonelectric)	25,850
All other	183,125
Home alarm, escape, and protection devices	4,085
Space heating, cooling, and ventilating appliances	92,217
Home furnishings	620,712
Nonglass tables	165,555
Chairs, sofas, and sofa beds	138,024
Beds (excluding water beds and sofa beds)	133,033
Desks, storage cabinets, bookshelves, and magazine racks	81,353
Other furniture (beach chairs, glass tables, bar stools, benches, footstools, and bedding)	49,093
All other	53,654
Home communications and hobby equipment	52,429
General household appliances	55,776
Kitchen appliances and unpowered housewares	567,154
Knives and cutlery (unspecified)	184,017
Cutlery and knives (unpowered, including switchblades and pocket knives)	103,768
Drinking glasses and cups	76,286
Tableware (including flatware and accessories)	53,292
Cooking ranges, ovens, and related equipment	29,370
All other	120,421
Packaging and containers for household products	216,790
Glass bottles and jars	112,165
Cans and resealable closures	77,621
All other	27,004
Home and family maintenance products	135,088
Bleaches and dyes, cleaning agents, and caustic compounds	40,403
Fuels	27,750
All other	66,935
Home workshop apparatus	313,524
Ladders and stools	80,591
Powersaws (electric)	58,920
Hammers	36,238
Other workshop tools or accessories (unpowered, excluding knives)	25,677
All other	112,098
Yard and garden equipment	194,463
Lawnmowers (unspecified)	37,009
Chain saws	28,092
Hand garden tools (rakes, hoes, trowels, shovels, etc.)	27,995
All other	101,367
Child nursery equipment	38,510
Toys (excluding riding or ride-on toys)	84,364

Table 90. Product-related injuries treated in hospital emergency rooms, according to category of consumer product: Contiguous United States, July 1, 1975-June 30, 1976—Continued

(Data are based on reporting by a sample of hospital emergency rooms)

Product category	Estimated number of injuries	Product category	Estimated number of injuries
Riding or ride-on recreational equipment	650,617	Other sports and recreational equipment—Continued	
Bicycles	465,860	Swimming, swimming pools, and related equipment	69,062
Skates, skateboards, and scooters	129,127	Fishing equipment	60,438
Minibikes and unlicensed motor scooters and gocarts	26,911	Gymnastics and associated equipment (rings, bars, etc.)	53,927
All other	28,719	Wrestling and related equipment	51,284
Sports ball and related equipment	1,224,757	Tennis, badminton, and related equipment	51,236
Football	385,904	All other	212,200
Baseball	349,209		
Basketball	327,568	Miscellaneous	726,538
Volleyball	51,543	Glass (unknown origin)	351,503
Soccer	45,071	Farm equipment	48,682
All other	65,462	Pins and needles	44,410
Winter sports and related equipment	234,108	Razors, shavers, and razor blades	38,977
Snow skiing and related equipment	85,822	Pencils, pens, and other desk supplies	36,969
Hockey equipment	46,970	Contact lenses, eyeglasses, and eye protection devices	35,343
Sleds and toboggans	42,673	All other	170,654
Ice skates	40,617		
Snowmobiles	18,026	Products under regulation by Federal agencies other than the Consumer Product Safety Commission (includes food, drugs, cosmetics, pesticides, medical devices, cigarettes, and non-traffic automobile accidents)	817,406
Other sports and recreational equipment	656,110		
Swings, slides, and playground equipment	157,963		

NOTE: Data obtained through the National Electronic Injury Surveillance System.

SOURCE: U.S. Consumer Product Safety Commission: Annual Report, Fiscal Year 1976. Washington. U.S. Government Printing Office, Oct. 1976.

Table 91. Product-related injuries treated in hospital emergency rooms per 1,000 population, according to sex and age: Contiguous United States, July 1, 1975-June 30, 1976

(Data are based on reporting by a sample of hospital emergency rooms)

Age	Male	Female
	Estimated number of product-related injuries treated in hospital emergency rooms per 1,000 population	
Under 1 year	32	23
1-4 years	99	71
5-14 years	87	46
15-24 years	78	37
25-44 years	38	25
45-64 years	18	16
65 years and over	13	14

NOTE: Excludes moving motor vehicle accidents in which no other product is involved; injuries associated with suicide attempt, fight, assault, drug abuse, glue sniffing, or alcoholism when patient is 15 years of age or older; and industrial or occupational accidents which occur at the place of employment if other than a private home. Data obtained through the National Electronic Injury Surveillance System.

SOURCE: U.S. Consumer Product Safety Commission: Annual Report, Fiscal Year 1976. Washington, U.S. Government Printing Office, Oct. 1976.

Table 92. Emergency room mentions of the 35 most commonly named drugs of abuse, according to motivation for taking substance, age, sex, and race: United States, 24 SMSA's, April 1974-April 1975

(Data are based on reporting by a sample of hospital emergency rooms)

Age, sex, and race	Number of emergency room mentions	Motivation for taking substance					
		All motivations	Psychic effects	Dependence	Suicide attempt or gesture	Other	Unknown or non-response
		Percent distribution					
Total	105,688	100.0	18.0	16.9	37.5	3.1	24.5
Age							
Under 10 years	222	100.0	2.7	1.4	7.2	67.6	21.2
10-19 years	20,955	100.0	28.8	8.8	31.0	3.2	28.2
20-29 years	44,445	100.0	18.4	22.5	33.9	2.6	22.6
30-39 years	20,813	100.0	14.1	18.3	42.6	2.8	22.2
40-49 years	11,107	100.0	10.1	13.4	48.5	3.3	24.7
50 years and over	6,466	100.0	8.1	7.8	50.4	4.7	29.0
Unknown	1,680	100.0	14.0	13.0	32.5	2.2	38.3
Sex							
Male	44,475	100.0	24.4	26.6	22.6	2.5	23.8
Female	60,824	100.0	13.3	9.8	48.4	3.4	25.1
Unknown	389	100.0	14.7	24.2	30.6	28.3	2.3
Race							
White	71,762	100.0	18.0	13.5	41.6	3.1	23.8
Black	20,081	100.0	18.6	30.7	25.9	3.3	21.5
Other races	3,114	100.0	28.6	28.6	28.0	2.1	12.7
Unknown	10,731	100.0	13.8	10.5	34.3	3.2	38.1

NOTE: Includes only medical emergencies related directly or indirectly to drug ingestion. One emergency room episode can involve more than one drug mention. Each drug reported for an episode constitutes a drug mention.

SOURCE: Drug Enforcement Administration, U.S. Department of Justice, and National Institute on Drug Abuse, U.S. Department of Health, Education, and Welfare: Data from Project DAWN III.

Table 93. Emergency room mentions of the 35 most commonly named drugs of abuse, according to type of drug: United States, 24 SMSA's, April 1974-April 1975

(Data are based on reporting by a sample of hospital emergency rooms)

Type of drug	Drug mentions		
	Rank	Number	Percent distribution
All drugs	...	167,075	100.0
35 most commonly named drugs	...	105,688	63.3
Diazepam	1	23,046	13.8
Alcohol (in combination) [1]	2	15,133	9.1
Heroin	3	10,637	6.4
Aspirin	4	8,490	5.1
Chlordiazepoxide	5	4,617	2.8
D-Propoxyphene	6	4,304	2.6
Secobarbital	7	3,911	2.3
Flurazepam	8	3,473	2.1
Methadone	9	2,954	1.8
LSD	10	2,723	1.6
Secobarbital/Amobarbital	11	2,651	1.6
Phenobarbital	12	2,646	1.6
Amitriptyline	13	2,194	1.3
Marijuana	14	1,887	1.1
Methaqualone	15	1,759	1.1
Hashish	16	1,676	1.0
Pentobarbital	17	1,644	1.0
Amphetamine	18	1,517	0.9
Meprobamate	19	1,477	0.9
Glutethimide	20	1,083	0.6
Codeine	21	1,022	0.6
PCP	22	902	0.5
Clorazepate	23	879	0.5
Speed	24	835	0.5
Cocaine	25	784	0.5
Pentazocine	26	709	0.4
Oxazepam	27	564	0.3
Meperidine HCL	28	522	0.3
Methylphenidate	29	432	0.3
Butabarbital	30	297	0.2
Hydromorphone	31	245	0.1
Methamphetamine	32	241	0.1
Amobarbital	33	235	0.1
Morphine	34	173	0.1
PCP combinations	35	26	0.0

[1] Alcohol is included only when involved in a medical emergency along with at least one other drug. Alcohol alone is excluded.

NOTE: Includes only medical emergencies related directly or indirectly to drug ingestion. One emergency room episode can involve more than one drug mention. Each drug reported for an episode constitutes a drug mention.

SOURCE: Drug Enforcement Administration, U.S. Department of Justice, and National Institute on Drug Abuse, U.S. Department of Health, Education, and Welfare: Data from Project DAWN III.

Table 94. Dental visits per person per year and persons with one or more visits, according to age, sex, color, family income, and location of residence: United States, 1975

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex, color, family income, and location of residence	All ages	Under 15 years	15-44 years	45-64 years	65 years and over	All ages	Under 15 years	15-44 years	45-64 years	65 years and over
	Dental visits per person per year					Percent of population with one or more visits in past year				
Total	1.6	1.5	1.8	1.8	1.2	50.3	49.6	56.5	48.1	30.3
Sex										
Male	1.5	1.4	1.6	1.6	1.4	48.4	48.7	52.7	46.4	30.0
Female	1.7	1.5	2.0	1.9	1.0	52.1	50.5	60.0	49.7	30.6
Color										
White	1.7	1.6	1.9	1.8	1.2	52.4	52.3	58.8	50.0	31.3
All other	1.0	0.6	1.2	1.3	0.6	36.4	36.0	40.9	31.9	*
Family income [1]										
Less than $5,000	1.1	0.8	1.4	1.3	0.7	34.6	35.1	48.7	28.1	19.8
$5,000-$9,999	1.3	1.0	1.5	1.4	1.4	40.5	37.6	46.7	37.1	32.1
$10,000-$14,999	1.6	1.4	1.7	1.6	1.5	50.2	47.7	54.0	46.8	*
$15,000 or more	2.2	2.0	2.2	2.3	2.0	65.1	65.0	67.1	63.1	50.2
Location of residence										
Within SMSA	1.8	1.5	1.9	2.0	1.3	52.5	51.4	58.2	50.8	33.0
Large SMSA	1.9	1.6	2.0	2.1	1.5	54.3	54.2	59.4	52.1	35.5
Core counties	1.9	1.5	2.0	2.1	1.6	52.2	51.5	57.6	50.1	35.1
Fringe counties	1.9	1.9	2.0	2.2	1.2	58.8	59.4	63.4	56.5	*
Medium SMSA	1.7	1.5	1.8	1.8	1.1	51.0	49.1	57.1	49.3	30.2
Other SMSA	1.6	1.3	1.8	1.7	1.3	48.8	45.8	55.3	48.4	*
Outside SMSA	1.2	1.2	1.4	1.1	0.7	44.2	44.7	51.4	40.9	24.6
Adjacent to SMSA	1.3	1.3	1.4	1.2	0.6	44.8	45.1	51.9	41.2	*
Not adjacent to SMSA	1.2	1.1	1.4	1.0	0.8	43.4	44.1	50.7	40.5	*

[1] Excludes unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

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Table 95. Patient care episodes in outpatient psychiatric services and rate per 100,000 population, according to age and diagnosis: United States, 1971

(Data are based on reporting by facilities)

Diagnosis [1]	All ages	Under 18 years	18-24 years	25-44 years	45-64 years	65 years and over	All ages	Under 18 years	18-24 years	25-44 years	45-64 years	65 years and over
	Number of episodes						Rate per 100,000 resident population					
All diagnoses	2,316,754	632,216	436,535	818,232	375,852	53,919	1,129.0	893.3	1,833.4	1,692.7	890.7	268.3
Mental retardation	75,843	49,429	12,221	9,597	4,404	192	37.0	69.8	51.3	19.9	10.4	0.9
Organic brain syndromes	58,462	15,479	4,567	12,098	11,977	14,341	28.5	21.9	19.2	25.0	28.4	71.4
Schizophrenia	363,945	20,694	70,924	183,292	84,179	4,856	177.4	29.3	297.9	379.2	199.5	24.2
Depressive disorders	293,553	15,593	58,477	119,358	87,147	12,978	143.0	22.0	245.5	246.9	206.5	64.6
Other psychotic disorders	34,041	1,209	4,182	9,984	17,134	1,532	16.6	1.7	17.6	20.7	40.6	7.6
Alcohol disorders	125,394	1,503	5,377	60,062	53,751	4,701	61.1	2.1	22.6	124.2	127.4	23.4
Drug disorders	48,907	5,715	19,968	18,584	4,512	128	23.8	8.1	83.9	38.4	10.7	0.6
All other disorders	1,037,325	418,894	212,470	314,630	81,038	10,293	505.5	591.9	892.3	650.9	192.1	51.2
Undiagnosed	279,284	103,700	48,349	90,627	31,710	4,898	136.1	146.5	203.1	187.5	75.1	24.4

[1] The diagnostic groupings used in this table are defined in terms of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, DSM-II. They are: Mental retardation, 310-315; Organic brain syndromes, 290, 292, 293, 294 (except 294.3), 309 (except 309.13, 309.14); Schizophrenia, 295; Depressive disorders, 296, 298.0, 300.4; Other psychotic disorders, 297, 298.1-298.9; Alcohol disorders, 291, 309-13, 303; Drug disorders, 294.3, 309.14, 304.

NOTE: Includes such services provided in freestanding outpatient psychiatric clinics, State and county mental hospitals, private mental hospitals, psychiatric units of general hospitals (including VA), and Federally funded community mental health centers.

SOURCE: National Institute of Mental Health: Patient care episodes in psychiatric services, United States, 1971. Statistical Note, No. 92. DHEW Pub. No. (HSM) 74-655. Rockville, Md., Aug. 1973.

Table 96. Persons receiving services in family planning clinics and rate per 1,000 population, according to sex and age: United States, 1975

(Data are based on reporting by family planning clinics)

Age	Female		Male	
	Number [1]	Rate per 1,000 population	Number [1]	Rate per 1,000 population
Under 18 years	353,379	10.9		
18-19 years	570,594	137.7	14,488	0.3
20-24 years	1,202,588	125.9		
25-29 years	594,113	69.9	7,449	0.9
30-34 years	260,523	36.8	5,552	0.8
35 years and over	233,768	4.9	5,809	0.1

[1] Persons visiting the clinic only for supplies are excluded.

NOTE: Data include only family planning patients reported to the National Reporting System for Family Planning Services. Not all family planning service sites in the United States participate in the Reporting System; however, most of the sites that receive Federal funds for family planning services from DHEW, as well as many clinics affiliated with Planned Parenthood-World Population, do participate. Patients provided services by private physicians in their offices are specifically excluded. Rates are based on the civilian noninstitutionalized population.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Provisional data from the National Reporting System for Family Planning Services.

Table 97. Place of most recent family planning visit for currently married women 15-44 years of age with a family planning visit in past 5 years, according to race and age: United States, 1973

(Data are based on household interviews of a sample of women in the childbearing ages)

Race and age	Number of currently married women with family planning visit in past 5 years in thousands	Total	Own physician			Other sources				
			Total own physician	Own physician in office	Own physician in hospital	Total other sources	General clinic	Family planning clinic	Hospital	Other
		Percent distribution for most recent family planning visit								
Total [1]										
All ages (15-44)	14,380	100.0	83.6	80.3	3.3	16.4	8.3	4.6	1.3	2.2
15-29 years	9,019	100.0	82.0	78.6	3.4	18.0	9.3	5.3	1.5	1.9
30-44 years	5,361	100.0	86.3	83.2	3.1	13.7	6.8	3.3	*	2.7
White										
All ages (15-44)	13,273	100.0	85.5	82.4	3.1	14.5	7.6	3.6	1.1	2.1
15-29 years	8,334	100.0	83.5	80.2	3.3	16.5	8.7	4.5	1.3	1.9
30-44 years	4,940	100.0	88.9	86.0	2.8	11.1	5.7	2.1	*	2.4
Black										
All ages (15-44)	953	100.0	58.8	55.0	3.8	41.2	17.9	16.9	4.4	*
15-29 years	606	100.0	60.1	57.9	*	39.9	16.3	16.3	5.2	*
30-44 years	348	100.0	56.6	50.1	*	43.4	20.8	18.0	*	*

[1] Includes all other races not shown separately.

SOURCE: National Center for Health Statistics: Utilization of family planning services by currently married women 15-44 years of age, United States, 1973. Advance Data. To be published.

Table 98. Legal abortions, according to selected characteristics of the patient or of the procedure: United States, 1972-74

(Data are based on reporting by State health departments and by facilities)

Characteristic	1972	1973	1974
Number of legal abortions reported	586,760	615,831	763,476
	Percent distribution		
Total	100.0	100.0	100.0
Age			
19 years and under	32.6	32.7	32.7
20-24 years	32.5	32.0	31.8
25 years and over	34.9	35.3	35.6
Color			
White	77.0	72.5	69.7
All other	23.0	27.5	30.3
Marital status			
Married	29.7	27.4	27.4
Unmarried	70.3	72.6	72.6
Number of living children			
0	49.4	48.6	47.8
1	18.2	18.8	19.6
2	13.3	14.2	14.8
3	8.7	8.7	8.7
4	5.0	4.8	4.5
5 or more	5.4	4.9	4.5
Location of abortion facility			
In State of residence	56.2	74.8	86.6
Out of State of residence	43.8	25.2	13.4
Procedure			
Curettage	88.6	88.4	89.7
Suction	65.2	74.9	77.5
Sharp	23.4	13.5	12.3
Intrauterine instillation	10.4	10.4	7.8
Hysterotomy or hysterectomy	0.6	0.7	0.6
Other	0.5	0.6	1.9
Period of gestation			
8 weeks and under	34.0	36.1	42.6
9-10 weeks	30.7	29.4	28.7
11-12 weeks	17.5	17.9	15.4
13-15 weeks	8.4	6.9	5.5
16-20 weeks	8.2	8.0	6.5
21 weeks and over	1.3	1.7	1.2

NOTE: Percent distributions exclude cases for which selected characteristic was unknown.

SOURCE: Center for Disease Control: Abortion Surveillance, 1974. DHEW Pub. No. (CDC) 76-8276. Public Health Service. Washington. U.S. Government Printing Office, Apr. 1976.

Table 99. Legal abortions received by out-of-State residents, according to geographic division and State where abortion was performed: United States, 1972-74

(Data are based on reporting by State health departments and by facilities)

Geographic division and State	1972	1973	1974
Number of reported legal abortions with residence known	479,725	513,813	625,581
	Percent performed on out-of-State residents		
United States	43.8	25.2	13.4
New England			
Maine	—	0.8	1.0
New Hampshire	—	9.7	11.5
Vermont	16.5	22.2	27.7
Massachusetts	—	—	—
Rhode Island	—	8.8	8.4
Connecticut	0.1	1.3	1.9
Middle Atlantic			
New York	60.8	39.5	20.9
New Jersey	—	—	4.2
Pennsylvania	—	7.8	11.3
East North Central			
Ohio	—	9.6	9.0
Indiana	—	2.0	1.9
Illinois	—	11.2	10.0
Michigan	—	12.6	11.6
Wisconsin	13.0	9.9	6.6
West North Central			
Minnesota	—	9.3	18.1
Iowa	—	9.3	—
Missouri	—	25.6	25.8
North Dakota	—	—	18.2
South Dakota	—	43.7	41.9
Nebraska	—	20.7	19.2
Kansas	63.2	61.0	44.3

Geographic division and State	1972	1973	1974
	Percent performed on out-of-State residents—Continued		
South Atlantic			
Delaware	4.7	—	1.0
Maryland	2.0	2.8	4.7
District of Columbia	74.5	64.7	59.7
Virginia	0.1	2.6	5.4
West Virginia	—	—	—
North Carolina	0.6	0.5	5.6
South Carolina	0.6	8.6	6.7
Georgia	-	14.5	18.7
Florida	—	—	—
East South Central			
Kentucky	—	12.4	40.1
Tennessee	—	2.8	8.4
Alabama	0.3	9.1	10.2
Mississippi	-	-	5.0
West South Central			
Arkansas	—	—	—
Louisiana	—	—	11.9
Oklahoma	—	-	29.1
Texas	—	3.6	—
Mountain			
Montana	—	-	2.0
Idaho	—	2.6	2.6
Wyoming	—	-	3.9
Colorado	7.7	5.2	5.8
New Mexico	68.9	37.3	15.5
Arizona	—	0.8	0.4
Utah	—	10.0	5.1
Nevada	—	-	4.6
Pacific			
Washington	—	—	—
Oregon	0.2	5.2	6.0
California	16.0	9.4	2.4
Alaska	1.2	1.1	1.1
Hawaii	0.5	1.0	2.5

SOURCES: Center for Disease Control: Abortion Surveillance, 1972, Abortion Surveillance, 1973, and Abortion Surveillance, 1974. DHEW Pub. No. (CDC) 74-8205, 75-8276, and 76-8276. Public Health Service. Washington. U.S. Government Printing Office, Apr. 1974, May 1975, and Apr. 1976.

Table 100. Legal abortions, abortion-related deaths and rate per 100,000 abortions, and relative risk of death, according to period of gestation: United States, 1972-74

(Data are based primarily on reporting by State health departments and by facilities)

Period of gestation	Number of legal abortions reported	Abortion-related deaths		Relative risk of death [1]
		Number	Rate per 100,000 abortions	
Total	1,966,067	74	3.8	...
8 weeks and under	747,550	3	0.4	1.0
9-10 weeks	581,002	13	2.2	5.5
11-12 weeks	330,537	12	3.6	9.0
13-15 weeks	129,536	12	9.3	23.2
16-20 weeks	147,160	28	19.0	47.5
21 weeks and over	30,282	6	19.8	49.5

[1] Relative risk based on the index rate of 0.4 for the gestation period 8 weeks and under.

SOURCE: Center for Disease Control: Abortion Surveillance, 1974. DHEW Pub. No. (CDC) 76-8276. Public Health Service. Washington. U.S. Government Printing Office, Apr. 1976.

B. Inpatient Care in Short-Term Facilities

Hospital care accounted for the largest proportion (40 percent) of the total national health expenditures in fiscal year 1976. For each 1,000 persons in the U.S. civilian population, there were 159 hospitalizations for a total of 1,233 days of care in the over 6,000 non-Federal short-stay hospitals. Hospitalization in the 335 Federal short-stay hospitals (about 40 percent of which are operated by the Veterans Administration), and in the almost 700 long-stay hospitals accounted for additional days of care beyond those in community short-stay hospitals.

The amount of inpatient care increases dramatically with age. In 1974 the discharge rate for persons 65 years and over was 4.8 times the rate for children under 15, the number of days of care for the elderly was 12.5 times that for children, and the length of stay was 7.3 days longer. With each succeeding age group the probability of being hospitalized becomes higher and the length of stay longer. Thus the number of days spent in the hospital is greater for the older age groups.

Usually children are hospitalized because of accidents or respiratory diseases, particularly hypertrophy of the tonsils and adenoids. Most of these cases are acute episodes, and full recovery or adequate repair is highly likely. The lengths of these hospital stays are relatively short.

Among adults aged 15-44 childbirth and complications of pregnancy accounted for close to 30 percent of the hospitalizations in 1974. Diseases of the genitourinary system, accidents, and diseases of the digestive system each accounted for over 10 percent of the hospitalizations.

The lengths of stay for most of the hospitalizations of children under 15 years and persons aged 15-44 were short. For example, the average length of stay for accidents was 5.4 days and 6.8 days, respectively. Hospitalization for tonsils averaged 2.3 days and the length of stay for childbirth and complications of pregnancy averaged only 3.7 days. Among children and the population aged 15-44, there are few conditions for which hospitalizations are long. Mental disorders, diseases of the central nervous system, and cerebrovascular disease are each responsible for relatively few hospitalizations, yet they involve average stays of 10 days to 2 weeks. In addition, many of these patients may be transferred to a long-term institution for additional care. Malignant neoplasms, very rare in childhood, account for 2.2 hospitalizations per 1,000 persons aged 15-44, for which the average hospitalization is more than a week.

The discharge rate per 1,000 population increased only 21 percent from ages 15-44 to 45-64, but the number of days of care grew by over 90 percent. For most diagnoses, the middle-aged person (45-64 years) is hospitalized longer than the younger one. For example, a person in the age group 45-64 years spends an average of 11.1 days in the hospital for a fracture compared to 9.1 days for a person aged 15-44. The comparable figures for appendicitis are 9.8 and 5.6 days, a difference of over 4 days. Part of the increase in length of hospitalization is due to complexity (i.e., the older patient may have a more serious case, more complications, or other conditions which complicate treatment) and part to slower healing processes associated with aging. Also some middle-aged adults may remain in the hospital longer than children or younger adults when no other adult is available to provide care at home.

The reasons for hospitalization of individuals aged 45-64 also differ a great deal from those for younger individuals. Circulatory conditions rarely send people under 45 years to the hospital, but they caused 35.7 hospitalizations per 1,000 persons aged 45-64, including 9.9 hospitalizations for chronic ischemic heart disease. Malignant neoplasms accounted for 13.5 hospitalizations a year per 1,000 persons aged 45-64 in contrast with 2.2 per 1,000 persons aged 15-44. These conditions also have relatively long average lengths of stay. Other disease categories which show considerably higher discharge rates for individuals 45 years and over include digestive, genitourinary, and musculoskeletal conditions.

People 65 years and over had 346.2 hospitalizations and 4,120.1 days of care per 1,000 persons per year. The rate of hospitalization was 84 percent higher than for persons aged 45-64 while the number of days of care was 143 percent higher. The discharge rate for the elderly was higher for all disease categories. Diseases of the circulatory system was the most frequent cause of hospitalization, accounting for 105.0 discharges per 1,000 persons 65 years and over.

Cataracts, malignant neoplasms, pneumonia, and fractures accounted for other especially large increases in the rates of hospitalization. Average lengths of stay for these leading causes of hospitalization were also high.

Diseases of the circulatory system accounted for almost a third (32 percent) of the days elderly people spent in short-stay hospitals. Chronic ischemic heart disease alone accounted for 10 percent of the days of care, malignant neoplasms for 11 percent, and fractures for 7 percent. Other conditions which totaled more than 100 days of hospital care per 1,000 elderly persons were diabetes, mental disorders, pneumonia, and diseases of the urinary system.

Age is not the only patient characteristic associated with differential utilization of hospital care. Women are hospitalized more often than men, even after deleting admissions for childbirth and pregnancy-related disorders, but men have a longer average length of stay. Women were hospitalized more frequently in 1974 than men for neoplasms; endocrine, nutritional, and metabolic diseases; blood disorders; and diseases of the nervous, genitourinary, and musculoskeletal systems. Men were hospitalized more frequently than women for diseases of the circulatory and respiratory systems, and for accidents.

Most of the data on differences by age and sex are derived from hospital abstracts of discharged patients. Another way of obtaining data on utilization is by asking people in interview surveys. This approach has the advantage of obtaining information not available from hospital records, such as income and education. However, the disadvantages of the approach include the respondents' lack of definitive diagnostic information and the failure to include utilization by people who died in, or shortly after leaving, the hospital. Estimates from interview surveys thus indicate lower levels of utilization than estimates from hospital records.

The amount of hospitalization is inversely related to income. People in families with low incomes are hospitalized more often, and once hospitalized they remain in the hospital longer than people in families with higher incomes. Many factors may enter into this relationship. Poorer people are less likely to have a continuing source of primary care; they are more dependent on episodic care in outpatient departments and emergency rooms. Thus it is possible that, among the poor, conditions that might have been caught early and treated on an ambulatory basis frequently become serious and require inpatient treatment. Hospital personnel also may keep a patient a few days longer when they know that home conditions are not conducive to recovery.

In 1975 people living outside metropolitan areas were more likely to have been hospitalized one or more times in the past year, and they had a higher hospital discharge rate than metropolitan residents. These differences by place of residence are not large, but they are consistent for every age group. In part these differentials are a function of the distance people travel to obtain care. If the physician or other source of ambulatory care is far from the patient's residence, the decision may be made to hospitalize the patient for treatment to avoid repeated long trips to the doctor's office or to assure quick attention to the patient in case the illness takes a turn for the worse. Similarly diagnostic workups may be done on an inpatient basis instead of on an ambulatory basis to avoid repeated long trips from home.

Over the past 10 years discharge rates remained steady for children under age 15; they also declined for the age group 15-44, partly due to decreases in the number of births. For adults aged 45-64 discharge rates increased from 174.3 per 1,000 in 1965 to 194.7 in 1975. The rates for people 65 years and over increased substantially from 1965 to 1975 (from 263.9 to 359.3 per 1,000).

During the same 10 years the average length of stay declined for every age group. As a result, the number of days of care per 1,000 persons decreased slightly for people under age 45. Days of care remained fairly stable for those aged 45-64 (1,713.5 in 1965 and 1,748.9 per 1,000 in 1975) and increased for those 65 years and over (from 3,446.7 to 4,165.9 per 1,000).

Surgery was being performed at a higher rate in 1975 than in 1965. A rate of 9,584.3 operations per 100,000 persons of all ages occurred in 1975 in contrast with 7,734.5 in 1965, an increase of 24 percent in the rate. In many cases there is no evidence of change in the prevalence of the condition causing surgery. Changes in the surgery rate may be due to changed criteria for performing surgery, introduction of new surgi-

cal techniques and improvement of old ones, or new protocols for medical management.

The tonsillectomy rate (per 100,000 children under 15) declined from 1,641.7 in 1965 to 879.2 in 1975, down 46 percent. However, rates for other surgical procedures increased. Among people 65 years and over, the rate for cataract surgery in 1975 (1,115.2 per 100,000) was 2.12 times the 1965 rate; the rate for arthroplasty of the hip in 1975 (144.6 per 100,000) was 2.95 times the rate in 1965. The 1975 rate for rhinoplasty and repair of nose for females aged 15-44 (150.6 per 100,000) was 2.41 times the 1965 rate, and the 1975 rate for hysterectomies for women aged 45-64 (1,103.2 per 100,000) was 1.26 times the 1965 rate.

There appears to be reason for concern that in some cases excessive surgery may result from an oversupply of surgeons and the ability to pay for surgery through third-party payers. In other cases the surgery, even though not required to save lives, may improve the quality of life to such an extent that it appears to be warranted.

Table 101. Discharges from non-Federal short-stay hospitals per 1,000 population, according to sex, age, and diagnosis: United States, 1974

(Data are based on a sample of hospital records)

First-listed diagnosis and ICDA Code		Total	Sex		Age			
			Male	Female	Under 15 years	15-44 years	45-64 years	65 years and over
		Discharges per 1,000 population						
All diagnoses		159.2	131.1	185.2	71.8	155.2	188.1	346.2
I. Infective and parasitic diseases	000-136	3.9	3.7	4.1	5.4	3.4	2.8	4.6
II. Neoplasms	140-239	10.9	8.1	13.5	1.4	6.6	19.4	36.7
Malignant neoplasms	140-209	7.1	6.6	7.5	0.5	2.2	13.5	32.4
Benign neoplasms and neoplasms of unspecified nature	210-239	3.8	1.5	6.0	0.9	4.4	5.9	4.3
III. Endocrine, nutritional, and metabolic diseases	240-279	4.2	3.0	5.3	1.0	2.9	7.1	12.3
Diabetes mellitus	250	2.5	2.0	3.0	0.4	1.3	4.5	9.4
IV. Diseases of the blood and blood-forming organs	280-289	1.3	1.2	1.5	1.3	0.9	1.1	4.0
V. Mental disorders	290-315	6.5	6.6	6.4	0.8	8.5	9.3	7.4
VI. Diseases of the nervous system and sense organs	320-389	6.6	6.2	7.0	5.3	3.6	8.6	19.1
Diseases of central nervous system	320-349	1.4	1.4	1.5	1.1	1.2	1.7	2.9
Cataract	374	1.5	1.3	1.6	0.1	0.1	2.0	10.1
Diseases of ear and mastoid process	380-389	1.5	1.5	1.5	2.7	0.7	1.5	1.5
VII. Diseases of the circulatory system	390-458	20.8	21.8	19.7	0.6	6.3	35.7	105.0
Hypertensive disease	400-404	1.5	1.2	1.7	*	0.9	3.0	4.4
Acute myocardial infarction	410	1.8	2.5	1.2	*	0.3	3.9	9.2
Chronic ischemic heart disease	412	5.7	6.5	4.9	*	0.7	9.9	33.3
Cerebrovascular disease	430-438	3.0	2.8	3.2	0.1	0.2	3.5	21.5
VIII. Diseases of the respiratory system	460-519	15.8	16.4	15.2	24.3	8.7	13.1	29.6
Acute bronchitis and bronchiolitis	466	1.1	1.1	1.1	1.6	0.3	1.2	2.5
Acute upper respiratory infections, except influenza	460-465	1.5	1.6	1.4	3.5	0.7	0.7	1.3
Pneumonia, all forms	480-486	3.3	3.6	3.0	4.4	1.2	2.9	10.1
Hypertrophy of tonsils and adenoids	500	4.0	3.8	4.2	11.1	2.5	0.1	*
IX. Diseases of the digestive system	520-577	19.9	19.8	19.8	7.3	16.4	30.6	45.4
Ulcer of stomach, ulcer of duodenum, peptic ulcer of unspecified site, and gastrojejunal ulcer	531-534	2.1	2.6	1.6	0.1	1.6	3.8	5.3
Appendicitis	540-543	1.4	1.6	1.2	1.8	1.8	0.6	0.5
Inguinal hernia	550,552	2.4	4.4	0.6	1.9	1.4	4.0	4.9
Cholelithiasis	574	2.0	1.0	3.0	*	1.7	3.8	5.0
X. Diseases of the genitourinary system	580-629	16.4	10.1	22.2	4.3	18.6	22.3	26.2
Diseases of the urinary system	580-599	5.6	5.1	6.0	2.8	4.8	7.4	12.2
Hyperplasia of prostate	600	1.2	2.4	...	*	*	1.7	7.9
Disorders of menstruation	626	2.7	...	5.2	0.1	4.1	4.0	0.7
XI. Complications of pregnancy, childbirth, and the puerperium	630-678	19.3	...	37.3	0.4	44.5	0.2	...

Table 101. Discharges from non-Federal short-stay hospitals per 1,000 population, according to sex, age, and diagnosis: United States, 1974—Continued
(Data are based on a sample of hospital records)

First-listed diagnosis and ICDA Code		Total	Sex			Age		
			Male	Female	Under 15 years	15-44 years	45-64 years	65 years and over
		Discharges per 1,000 population						
XII. Diseases of the skin and subcutaneous tissue	680-709	2.6	2.6	2.6	1.5	2.7	2.9	4.2
XIII. Diseases of the musculoskeletal system and connective tissues	710-738	8.2	7.3	9.1	1.8	7.3	14.5	16.3
Osteoarthritis and allied conditions	713	1.1	0.9	1.3	*	0.3	2.2	5.2
Other arthritis and rheumatism	710-712, 714-718	1.3	1.0	1.6	0.2	0.8	2.6	3.6
Displacement of intervertebral disc	725	1.8	2.0	1.6	*	2.1	3.5	1.4
XIV. Congenital anomalies	740-759	1.6	1.6	1.6	2.9	1.2	1.0	0.9
XV. Certain causes of perinatal morbidity and mortality	760-779	0.1	0.1	0.1	0.3	...	...	...
XVI. Symptoms and ill-defined conditions	780-792, 794-796	2.9	2.6	3.1	2.0	3.1	3.4	3.2
XVII. Accidents, poisonings, and violence (nature of injury)	800-999	16.5	19.0	14.2	10.6	17.5	15.3	30.3
Fractures, all sites	800-829	5.6	5.9	5.3	3.6	4.3	5.2	17.0
Intracranial injuries (excluding those with skull fracture)	850-854	1.6	2.1	1.1	2.1	1.7	0.9	1.2
Lacerations and open wounds	870-907	1.7	2.6	0.9	1.1	2.4	1.3	1.4
Special conditions and examinations without sickness or tests with negative findings	793, Y00-Y13	1.8	0.9	2.5	0.5	3.0	1.0	1.1

NOTE: Excludes newborn infants. Diagnostic groupings and code number inclusions are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States. Codes 760-771, 773, and 779 are not used in the Hospital Discharge Survey. Rates are based on the civilian noninstitutionalized population.

SOURCE: National Center for Health Statistics: Utilization of short-stay hospitals: annual summary for the United States, 1974. Vital and Health Statistics. Series 13-No. 26. DHEW Pub. No. (HRA) 76-1777. Health Resources Administration. Washington. U.S. Government Printing Office, Sept. 1976.

Table 102. Days of care in non-Federal short-stay hospitals per 1,000 population, according to sex, age, and diagnosis: United States, 1974

(Data are based on a sample of hospital records)

First-listed diagnosis and ICDA Code		Total	Sex		Age			
			Male	Female	Under 15 years	15-44 years	45-64 years	65 years and over
		Days of care per 1,000 population						
All diagnoses		1,225.9	1,088.2	1,370.5	330.3	884.6	1,693.0	4,120.1
I. Infective and parasitic diseases	000-136	25.5	25.4	25.4	23.8	21.5	23.9	52.0
II. Neoplasms	140-239	117.5	99.6	133.4	7.0	46.3	217.2	509.4
Malignant neoplasms	140-209	94.9	91.4	98.4	3.9	22.8	177.8	472.3
Benign neoplasms and neoplasms of unspecified nature	210-239	22.4	8.4	35.7	3.2	23.5	39.1	35.3
III. Endocrine, nutritional, and metabolic diseases	240-279	41.9	29.7	52.6	7.7	22.9	68.1	158.0
Diabetes mellitus	250	27.4	20.9	33.1	2.9	11.1	46.5	121.8
IV. Diseases of the blood and blood-forming organs	280-289	10.7	8.7	12.5	6.3	5.3	9.1	47.8
V. Mental disorders	290-315	73.7	69.1	77.4	10.7	90.6	103.8	103.3
VI. Diseases of the nervous system and sense organs	320-389	43.6	41.2	44.9	24.5	24.5	56.7	144.9
Diseases of central nervous system	320-349	17.4	17.9	16.7	11.4	14.2	19.5	42.6
Cataract	374	8.6	7.4	9.7	0.3	0.6	10.2	61.8
Diseases of ear and mastoid process	380-389	5.6	5.4	5.6	8.5	2.6	6.9	7.8
VII. Diseases of the circulatory system	390-458	230.3	237.8	221.0	5.9	50.1	368.1	1,301.6
Hypertensive disease	400-404	11.3	8.9	13.5	*	5.2	23.3	40.7
Acute myocardial infarction	410	26.5	36.5	17.2	*	3.6	58.6	127.7
Chronic ischemic heart disease	412	62.2	65.9	58.8	*	6.0	94.1	396.6
Cerebrovascular disease	430-438	40.7	38.1	43.1	0.9	3.1	45.1	296.6
VIII. Diseases of the respiratory system	460-519	94.8	98.4	89.9	87.6	40.1	108.6	316.5
Acute bronchitis and bronchiolitis	466	7.4	6.6	8.3	8.1	1.9	11.3	21.8
Acute upper respiratory infections, except influenza	460-465	7.4	7.7	7.0	14.5	3.3	4.7	11.4
Pneumonia, all forms	480-486	28.9	32.1	26.1	25.9	8.3	30.3	123.7
Hypertrophy of tonsils and adenoids	500	9.2	8.0	10.1	23.3	6.9	0.4	*
IX. Diseases of the digestive system	520-577	154.9	144.8	164.7	29.8	105.3	265.8	468.0
Ulcer of stomach, ulcer of duodenum, peptic ulcer of unspecified site, and gastrojejunal ulcer	531-534	19.3	22.7	16.1	0.6	12.3	37.2	62.5
Appendicitis	540-543	8.7	9.8	7.6	9.8	10.2	5.7	5.9
Inguinal hernia	550,552	14.2	26.1	3.3	4.9	7.3	27.0	41.9
Cholelithiasis	574	21.4	11.3	30.8	*	16.1	38.9	64.8
X. Diseases of the genitourinary system	580-629	103.1	74.4	129.0	15.1	98.6	142.6	266.8
Diseases of the urinary system	580-599	38.9	36.9	41.5	11.0	28.3	53.2	129.7
Hyperplasia of prostate	600	12.5	25.9	...	*	*	15.4	90.7
Disorders of menstruation	626	11.0	...	21.2	0.3	17.1	15.2	3.3
XI. Complications of pregnancy, childbirth, and the puerperium	630-678	71.4	...	138.0	2.2	164.7	0.8	...

Table 102. Days of care in non-Federal short-stay hospitals per 1,000 population, according to sex, age, and diagnosis: United States, 1974—Continued

(Data are based on a sample of hospital records)

First-listed diagnosis and ICDA Code		Total	Sex		Age			
			Male	Female	Under 15 years	15-44 years	45-64 years	65 years and over
		Days of care per 1,000 population						
XII. Diseases of the skin and subcutaneous tissue	680-709	18.6	18.9	18.3	7.9	14.6	23.9	52.3
XIII. Diseases of the musculoskeletal system and connective tissues	710-738	77.6	65.2	88.1	11.6	58.5	136.1	210.8
Osteoarthritis and allied conditions	713	13.7	10.3	17.0	*	2.2	24.6	76.4
Other arthritis and rheumatism	710-712, 714-718	13.3	9.9	16.5	1.8	7.3	26.1	43.2
Displacement of intervertebral disc	725	20.2	21.5	19.0	*	22.6	40.0	17.2
XIV. Congenital anomalies	740-759	10.7	11.0	10.3	18.1	8.1	8.2	7.6
XV. Certain causes of perinatal morbidity and mortality	760-779	1.1	1.7	0.7	4.4	...	...	...
XVI. Symptoms and ill defined conditions	780-792, 794-796	14.1	12.2	16.0	7.4	13.8	19.0	23.0
XVII. Accidents, poisonings, and violence (nature of injury)	800-999	138.8	146.1	132.1	57.2	119.3	143.4	436.3
Fractures, all sites	800-829	65.3	58.4	71.7	23.3	39.1	57.4	303.3
Intracranial injuries (excluding those with skull fracture)	850-854	9.0	11.9	6.4	7.2	9.5	7.7	15.3
Lacerations and open wounds	870-907	10.0	14.4	5.7	5.6	11.9	10.5	11.6
Special conditions and examinations without sickness or tests with negative findings	793, Y00-Y13	6.3	3.5	9.0	1.8	8.8	5.0	10.3

NOTE: Excludes newborn infants. Diagnostic groupings and code number inclusions are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States. Codes 760-771, 773, and 779 are not used in the Hospital Discharge Survey. Rates are based on the civilian noninstitutionalized population.

SOURCE: National Center for Health Statistics: Utilization of short-stay hospitals: annual summary for the United States, 1974. Vital and Health Statistics. Series 13-No. 26. DHEW Pub. No. (HRA) 76-1777. Health Resources Administration. Washington. U.S. Government Printing Office, Sept. 1976.

Table 103. Average length of stay for patients discharged from non-Federal short-stay hospitals, according to sex, age, and diagnosis: United States, 1974
(Data are based on a sample of hospital records)

First-listed diagnosis and ICDA Code		Total	Sex		Age			
			Male	Female	Under 15 years	15-44 years	45-64 years	65 years and over
		Average length of stay in days						
All diagnoses		7.7	8.3	7.4	4.6	5.7	9.0	11.9
I. Infective and parasitic diseases	000-136	6.5	6.8	6.2	4.4	6.3	8.6	11.2
II. Neoplasms	140-239	10.8	12.3	9.9	5.1	7.0	11.2	13.9
Malignant neoplasms	140-209	13.4	13.8	13.1	8.1	10.5	13.2	14.6
Benign neoplasms and neoplasms of unspecified nature	210-239	5.9	5.7	6.0	3.6	5.3	6.6	8.2
III. Endocrine, nutritional, and metabolic diseases	240-279	10.0	9.8	10.0	7.9	8.0	9.6	12.8
Diabetes mellitus	250	10.9	10.6	11.0	7.8	8.9	10.3	12.9
IV. Diseases of the blood and blood-forming organs	280-289	8.0	7.3	8.5	4.8	6.1	8.6	12.0
V. Mental disorders	290-315	11.3	10.4	12.1	12.9	10.7	11.2	14.0
VI. Diseases of the nervous system and sense organs	320-389	6.6	6.7	6.4	4.6	6.9	6.6	7.6
Diseases of central nervous system	320-349	12.0	12.8	11.3	10.7	11.7	11.3	14.8
Cataract	374	5.8	5.6	5.9	4.2	4.6	5.2	6.1
Diseases of ear and mastoid process	380-389	3.7	3.7	3.7	3.1	3.5	4.5	5.3
VII. Diseases of the circulatory system	390-458	11.1	10.9	11.2	9.5	8.0	10.3	12.4
Hypertensive disease	400-404	7.8	7.4	8.0	*	6.1	7.7	9.2
Acute myocardial infarction	410	14.4	14.3	14.6	*	13.4	15.1	13.9
Chronic ischemic heart disease	412	10.9	10.1	11.9	*	8.3	9.5	11.9
Cerebrovascular disease	430-438	13.6	13.6	13.6	13.3	14.0	12.8	13.8
VIII. Diseases of the respiratory system	460-519	6.0	6.0	5.9	3.6	4.6	8.3	10.7
Acute bronchitis and bronchiolitis	466	6.8	5.8	7.8	4.9	5.5	9.0	8.6
Acute upper respiratory infections, except influenza	460-465	4.9	4.8	4.9	4.1	4.7	6.4	8.6
Pneumonia, all forms	480-486	8.8	8.9	8.8	5.9	7.0	10.5	12.2
Hypertrophy of tonsils and adenoids	500	2.3	2.1	2.4	2.1	2.8	3.7	*
IX. Diseases of the digestive system	520-577	7.8	7.3	8.3	4.1	6.4	8.7	10.3
Ulcer of stomach, ulcer of duodenum, peptic ulcer of unspecified site, and gastrojejunal ulcer	531-534	9.4	8.9	10.2	5.6	7.6	9.7	11.8
Appendicitis	540-543	6.1	6.0	6.3	5.6	5.6	9.8	11.5
Inguinal hernia	550,552	5.8	5.9	5.7	2.6	5.1	6.7	8.5
Cholelithiasis	574	10.6	11.3	10.4	*	9.6	10.1	13.1
X. Diseases of the genitourinary system	580-629	6.3	7.4	5.8	3.5	5.3	6.4	10.2
Diseases of the urinary system	580-599	7.0	7.3	6.9	3.9	5.9	7.2	10.6
Hyperplasia of prostate	600	10.7	10.7	...	*	*	8.8	11.5
Disorders of menstruation	626	4.1	...	4.1	3.1	4.2	3.8	4.6
XI. Complications of pregnancy, childbirth, and the puerperium	630-678	3.7	...	3.7	5.6	3.7	4.2	...

Table 103. Average length of stay for patients discharged from non-Federal short-stay hospitals, according to sex, age, and diagnosis: United States, 1974—Continued

(Data are based on a sample of hospital records)

First-listed diagnosis and ICDA Code	Total	Sex		Age			
		Male	Female	Under 15 years	15-44 years	45-64 years	65 years and over
	Average length of stay in days						
XII. Diseases of the skin and subcutaneous tissue 680-709	7.2	7.4	7.0	5.2	8.4	8.2	12.4
XIII. Diseases of the musculoskeletal system and connective tissues 710-738	9.4	8.9	9.7	6.5	8.0	9.4	12.9
Osteoarthritis and allied conditions 713	12.6	11.4	13.4	*	8.6	11.2	14.7
Other arthritis and rheumatism 710-712, 714-718	10.0	9.6	10.3	7.7	8.8	9.9	11.9
Displacement of intervertebral disc 725	11.3	10.7	12.1	*	10.5	11.6	15.2
XIV. Congenital anomalies 740-759	6.7	6.9	6.5	6.2	6.6	8.0	8.5
XV. Certain causes of perinatal morbidity and mortality 760-779	13.9	16.8	10.3	13.9	...	...	...
XVI. Symptoms and ill-defined conditions 780-792, 794-796	4.9	4.6	5.2	3.7	4.5	5.6	7.1
XVII. Accidents, poisonings, and violence (nature of injury) 800-999	8.4	7.7	9.3	5.4	6.8	9.4	14.4
Fractures, all sites 800-829	11.7	9.9	13.6	6.4	9.1	11.1	17.8
Intracranial injuries (excluding those with skull fracture) 850-854	5.8	5.8	5.9	3.5	5.7	8.9	13.2
Lacerations and open wounds 870-907	5.8	5.6	6.2	5.1	5.0	8.2	8.2
Special conditions and examinations without sickness or tests with negative findings 793, Y00-Y13	3.6	3.7	3.6	3.5	2.9	5.0	9.8

NOTE: Excludes newborn infants. Diagnostic groupings and code number inclusions are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States. Codes 760-771, 773, and 779 are not used in the Hospital Discharge Survey.

SOURCE: National Center for Health Statistics: Utilization of short-stay hospitals: annual summary for the United States, 1974. Vital and Health Statistics. Series 13-No. 26. DHEW Pub. No. (HRA) 76-1777. Health Resources Administration. Washington. U.S. Government Printing Office, Sept. 1976.

Table 104. Discharges, days of care, and average length of stay in non-Federal short-stay hospitals, according to age and family income: United States, 1974

(Data are based on a sample of hospital records and household interviews of a sample of the civilian noninstitutionalized population)

Family income	All ages	Under 15 years	15-44 years	45-64 years	65 years and over
	Discharges per 1,000 population				
All incomes [1]	159	72	155	188	346
Less than $5,000	239	82	218	248	379
$5,000-$9,999	180	81	179	225	338
$10,000-$14,999	139	75	152	174	284
$15,000 or more	117	60	121	148	286
	Days of care per 1,000 population				
All incomes [1]	1,233	328	892	1,702	4,107
Less than $5,000	2,373	494	1,457	3,097	4,439
$5,000-$9,999	1,315	302	951	2,120	3,634
$10,000-$14,999	983	375	978	1,463	3,346
$15,000 or more	716	242	593	1,057	3,679
	Average length of stay in days				
All incomes [1]	7.7	4.6	5.7	9.0	11.9
Less than $5,000	9.9	6.1	6.7	12.5	11.7
$5,000-$9,999	7.3	3.7	5.3	9.4	10.7
$10,000-$14,999	7.1	5.0	6.4	8.4	11.8
$15,000 or more	6.1	4.1	4.9	7.1	12.9

[1] Includes unknown income.

NOTE: Excludes newborn infants.

SOURCES: Division of Health Interview Statistics, National Center for Health Statistics: Data from the 1974 Health Interview Survey; Division of Health Resources Utilization Statistics, National Center for Health Statistics: Data from the 1974 Hospital Discharge Survey.

Table 105. Hospital discharges per 100 persons and percent of persons with 1 or more hospital episodes in past year, according to age, sex, color, family income, and location of residence: United States, 1975

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Sex, color, family income, and location of residence	All ages	Under 15 years	15-44 years	45-64 years	65 years and over	All ages	Under 15 years	15-44 years	45-64 years	65 years and over
	Number of discharges per 100 population					Percent with 1 or more hospital episodes in past year				
Total	14.1	7.0	14.1	17.5	25.0	10.6	5.6	11.2	12.3	17.4
Sex										
Male	11.5	8.0	8.1	17.0	26.7	8.4	6.2	6.2	11.8	18.6
Female	16.5	6.0	19.7	17.9	23.7	12.7	5.0	15.9	12.9	16.6
Color										
White	14.2	7.3	13.6	17.7	25.3	10.7	5.8	11.0	12.4	17.5
All other	13.7	5.8	17.4	15.8	22.2	10.1	4.7	12.6	11.3	16.1
Family income [1]										
Less than $5,000	19.7	9.2	18.7	25.4	26.1	13.9	6.7	14.2	15.9	18.1
$5,000-$9,999	16.1	7.7	17.1	19.9	24.4	11.9	6.1	13.3	13.3	16.8
$10,000-$14,999	13.1	7.0	13.9	16.8	27.7	10.3	5.6	11.4	12.4	19.0
$15,000 or more	11.1	5.8	11.5	14.6	21.7	8.9	4.9	9.3	11.1	16.8
Location of residence										
Within SMSA	13.5	6.9	13.7	16.7	23.5	10.3	5.3	11.0	11.9	17.0
Large SMSA	13.1	6.2	13.4	16.2	22.7	10.0	4.9	10.7	11.4	16.7
Core counties	13.3	6.2	13.5	16.7	21.9	10.1	4.7	10.8	11.7	16.2
Fringe counties	12.7	6.2	13.2	15.1	24.7	9.8	5.3	10.4	10.9	18.1
Medium SMSA	14.2	7.2	14.2	18.1	25.0	10.7	5.6	11.5	13.0	16.5
Other SMSA	13.7	8.8	13.9	15.4	23.4	10.7	6.3	11.3	11.7	19.2
Outside SMSA	15.8	7.4	15.3	19.7	28.2	11.6	6.4	11.9	13.5	18.3
Adjacent to SMSA	15.7	7.5	15.4	19.4	28.9	11.4	6.3	11.8	13.4	18.1
Not adjacent to SMSA	15.8	7.2	15.3	20.1	27.4	11.7	6.4	12.0	13.5	18.6

[1] Excludes unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

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C. Inpatient Care in Long-Term Facilities

Nursing homes, psychiatric hospitals, chronic disease hospitals, residential treatment facilities, and other long-term facilities provide care to individuals in need of care over a longer period of time than general (short-stay) hospitals. Patients in these institutions need treatment or management of a chronic condition or are too incapacitated to care for themselves.

By early 1974 over a million persons were residents of nursing homes, which are defined as facilities which provide some level of nursing care. Three-quarters of all nursing homes were certified for Medicaid.

The vast majority (89 percent) of nursing home residents were 65 years and over, and over 400,000 (38 percent) were 85 years and over. The number of nursing home residents per 1,000 persons in an age group increased sharply with age. The number of residents per 1,000 persons 85 years and over (236.6) was almost 20 times the rate for persons aged 65-74 (12.0).

This age differential in utilization reflects the increasing chronicity and complexity of conditions as well as increasing dependence on supportive services associated with aging. In general these elderly patients are infirm people who either cannot be cared for at home or whose home care would put a severe strain on the family.

Even though women constitute only 59 percent of the population 65 years and over, they represent 70 percent of all nursing home residents. In each age category of the elderly, women were more likely than men to be residents of nursing homes. The reasons for unequal utilization by sex are complex and only partly understood. One is that, since men tend to die at an earlier age than women, an elderly woman is less likely to have a spouse to help provide care and companionship. In 1975 nearly 80 percent of the men but only 40 percent of the women 65 years and over were married. Fifty-two percent of the women in this age group were widowed. Elderly men also tend to have higher incomes than elderly women and thus may be able to pay for better housing, food, and possibly outside help while remaining at home.

For the very elderly, days of care in nursing homes far outnumbered those in short-stay hospitals. At ages 65-74, for example, there was about 1 short-stay hospital day for every 1.3 nursing home days. By 75 years and over this ratio shifted dramatically to 1 short-stay hospital day for every 6.3 nursing home days.

The leading primary diagnosis for residents of nursing homes (22.5 percent) was hardening of the arteries. (Among those residents 85 years and over, hardening of the arteries was the primary diagnosis for 31.6 percent of the residents.) Senility, mental disorders, and stroke were each the primary diagnosis for over 10 percent of nursing home residents.

The oldest residents, 85 years and over, were most likely to have senility as a primary diagnosis, the youngest residents (under age 65) were the most likely to have a mental disorder as a primary diagnosis, and residents aged 65-84 were more likely than either the youngest or oldest residents to have stroke as a primary diagnosis.

People in nursing homes, however, often suffer from multiple problems. The prevalence of chronic conditions and impairments is high. Senility, arthritis or rheumatism, and heart trouble each had prevalence rates of over 300 per 1,000 residents. Many residents also had functional impairments, such as problems with hearing (32.2 percent could not hear a telephone conversation) or sight (46.5 percent could not read ordinary newsprint). Many (28.1 percent) had lost bowel and bladder control. Over half (51.4 percent) had problems with mobility; 31.2 percent were either chair-bound or bedridden.

Among the 11 percent of nursing home residents under 65 years, mental illness and mental retardation, rather than the chronic physical impairments suffered by the elderly, predominated. Males and females constituted almost equal portions of this age group (46 percent and 54 percent, respectively).

In recent years there has been a shift in the type of institution in which people with mental disorders receive long-term care. One characteristic of this shift is decreased use of State and county mental hospitals and increased use of private institutions. In 1969, 72 percent of all patients with mental disorders who were in psychiatric hospitals or nursing homes were in

State and county mental hospitals, and 18 percent were in nursing homes. By 1973, 62 percent were in State and county mental hospitals, and 29 percent were in nursing homes.

Use of mental retardation facilities also has changed in recent years. Although the admission rate has remained relatively stable since 1946, the net release rate of the resident patient population began to rise sharply in the late 1960's and has continued to rise. The introduction of new methods of treatment and management during this period and policies of deinstitutionalization contribute to this trend.

Despite these reductions and shifts in institutional care, episodes of psychiatric illness continue to represent a substantial amount of inpatient care. Excluding nursing homes, about 1,693,000 such patient care episodes occurred in 1971, an overall rate of 825 episodes per 100,000 population. This care was provided in State, county, and private mental hospitals, VA hospitals, psychiatric units of general hospitals, and federally funded community mental health centers. The major specified diagnostic categories (i.e., schizophrenia, depressive disorders, and alcohol-related disorders) accounted for 64 percent of all inpatient episodes during 1971. Schizophrenia was the most frequent diagnosis for those aged 25-44 while depressive and alcohol-related disorders were the most frequent diagnoses for those aged 45-64. Among the elderly the leading diagnosis for inpatient psychiatric care was organic brain syndrome, which accounted for 429 episodes per 100,000 people.

As both the number and proportion of elderly people in the United States increase over the next few years, increased need for long-term care can be expected. Planning for the provision of appropriate care and the means to pay for it are of high priority. Alternative arrangements to provide such care on a noninstitutional basis seem desirable.

Table 106. Nursing home residents and residents and days per 1,000 population, according to sex and age: United States, August 1973-April 1974

(Data are based on reporting by a sample of nursing homes)

Age	Both sexes	Male	Female
	Number of residents in nursing homes		
All ages	1,075,800	318,100	757,700
Under 65 years	114,300	52,400	61,900
65-74 years	163,100	65,100	98,000
75-84 years	384,900	102,300	282,600
85 years and over	413,600	98,300	315,300
	Residents per 1,000 population		
All ages	5.1	3.1	7.0
Under 65 years	0.6	0.6	0.6
65-74 years	12.0	11.1	12.8
75-84 years	58.9	40.8	70.0
85 years and over	236.6	169.8	269.7
	Days per 1,000 population		
All ages	1,900	1,100	2,600
Under 65 years	200	200	200
65-74 years	4,400	4,000	4,700
75-84 years	21,500	14,900	25;600
85 years and over	86,400	62,000	98,400

NOTE: Rates are based on U.S. resident population, July 1, 1974.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Data from the National Nursing Home Survey.

Table 107. Primary diagnosis of nursing home residents at last examination, according to age and sex: United States, August 1973-April 1974

(Data are based on reporting by a sample of nursing homes)

Sex and primary diagnosis at last examination	Nursing home residents	Age				
		All ages	Under 65 years	65-74 years	75-84 years	85 years and over
		Rate per 1,000 residents				
Both sexes						
Primary diagnosis at last examination:						
Senility, old age, and other symptoms and ill-defined conditions	146,800	136.5	20.6	85.2	140.9	198.4
Heart attack	55,700	51.8	*	41.1	55.3	68.9
Stroke	113,400	105.4	94.0	138.0	120.6	87.5
Hardening of the arteries	241,800	224.7	36.6	151.7	237.2	315.8
Diseases of the circulatory system other than hardening of the arteries, stroke, and heart attack	39,400	36.6	*	31.4	39.9	43.4
Accidents, poisonings, and violence	49,300	45.8	39.6	35.8	45.8	55.3
Mental disorders	115,800	107.6	395.8	185.1	72.0	32.7
Diseases of the musculoskeletal system and connective tissue	73,100	67.9	48.3	58.5	70.7	80.0
Endocrine, nutritional, and metabolic diseases	48,100	44.7	44.0	59.5	46.9	39.8
Diseases of the respiratory system	22,200	20.6	*	33.2	22.9	14.7
Neoplasms	25,600	23.8	27.9	29.4	23.6	22.3
Diseases of the nervous system and sense organs	64,200	59.7	156.0	78.4	49.3	38.0
Diseases of the digestive system	20,500	19.0	*	18.6	17.9	21.6
Infective and parasitic diseases	*	*	*	*	*	*
Diseases of the genitourinary system	15,600	14.5	*	*	16.7	16.2
Diseases of the skin and subcutaneous tissue	6,000	5.6	*	*	6.1	*
Diseases of the blood and blood-forming organs	7,600	7.1	*	*	7.6	9.5
Congenital anomalies	3,100	2.9	19.1	*	*	*
Other diagnoses [1]	16,100	15.0	22.1	15.9	15.0	13.5
Unknown diagnoses	9,600	8.9	*	*	9.3	10.5
Male						
Primary diagnosis at last examination:						
Senility, old age, and other symptoms and ill-defined conditions	35,900	112.8	*	67.0	125.4	179.9
Heart attack	14,500	45.5	*	41.4	49.5	60.9
Stroke	38,000	119.5	96.7	156.0	132.2	94.4
Hardening of the arteries	60,600	190.4	*	130.1	226.9	275.7
Diseases of the circulatory system other than hardening of the arteries, stroke, and heart attack	11,000	34.6	*	*	41.2	42.1
Accidents, poisonings, and violence	9,700	30.6	48.0	*	27.1	27.9
Mental disorders	45,400	142.7	419.4	201.9	73.6	28.0
Diseases of the musculoskeletal system and connective tissue	16,300	51.2	*	45.3	56.1	57.5
Endocrine, nutritional, and metabolic diseases	12,900	40.4	*	53.2	39.0	38.4
Diseases of the respiratory system	12,100	38.0	*	57.0	43.9	23.4
Neoplasms	9,700	30.6	*	*	30.9	32.8
Diseases of the nervous system and sense organs	22,400	70.4	152.8	73.7	56.3	39.0

See footnote at end of table.

Table 107. Primary diagnosis of nursing home residents at last examination, according to age and sex: United States, August 1973-April 1974—Continued
(Data are based on reporting by a sample of nursing homes)

Sex and primary diagnosis at last examination	Nursing home residents	Age				
		All ages	Under 65 years	65-74 years	75-84 years	85 years and over
Male—Continued		Rate per 1,000 residents				
Diseases of the digestive system	6,700	21.1	*	23.5	*	*
Infective and parasitic diseases	*	*	*	*	*	*
Diseases of the genitourinary system	8,900	28.0	*	*	35.6	35.6
Diseases of the skin and subcutaneous tissue	*	*	*	*	*	*
Diseases of the blood and blood-forming organs	*	*	*	*	*	*
Congenital anomalies	*	*	*	*	*	*
Other diagnoses [1]	5,200	16.5	*	*	*	*
Unknown diagnoses	2,900	9.0	*	*	*	*
Female						
Primary diagnosis at last examination:						
Senility, old age, and other symptoms and ill-defined conditions	111,000	146.4	*	97.3	146.6	186.1
Heart attack	41,200	54.4	*	40.9	57.4	65.1
Stroke	75,400	99.5	91.7	126.1	116.5	77.5
Hardening of the arteries	181,200	239.1	38.8	166.1	240.9	299.6
Diseases of the circulatory system other than hardening of the arteries, stroke, and heart attack	28,400	37.5	*	32.1	39.4	39.8
Accidents, poisonings, and violence	39,500	52.1	32.4	42.1	52.6	58.8
Mental disorders	70,400	92.9	375.8	173.9	71.5	31.2
Diseases of the musculoskeletal system and connective tissue	56,800	74.9	57.7	67.3	76.0	79.7
Endocrine, nutritional, and metabolic diseases	35,300	46.5	55.0	63.7	49.8	36.6
Diseases of the respiratory system	10,100	13.3	*	*	15.3	10.7
Neoplasms	15,900	21.0	*	28.6	21.0	16.9
Diseases of the nervous system and sense organs	41,800	55.2	158.8	81.4	46.8	34.2
Diseases of the digestive system	13,800	18.2	*	*	17.8	19.6
Infective and parasitic diseases	*	*	*	*	*	*
Diseases of the genitourinary system	6,700	8.9	*	*	9.8	8.7
Diseases of the skin and subcutaneous tissue	4,000	5.3	*	*	*	*
Diseases of the blood and blood-forming organs	5,400	7.1	*	*	7.8	8.1
Congenital anomalies	*	*	*	*	*	*
Other diagnoses [1]	10,900	14.3	*	*	14.4	11.2
Unknown diagnoses	6,800	8.9	*	*	8.9	10.2

[1] Includes certain causes of perinatal morbidity, complications of pregnancy and childbirth, and other diagnoses not listed above.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Data from the National Nursing Home Survey.

Table 108. Chronic conditions and impairments of nursing home residents, according to age and sex: United States, August 1973-April 1974

(Data are based on reporting by a sample of nursing homes)

Sex and chronic condition or impairment	Number of residents with condition or impairment [1]	Age				
		All ages	Under 65 years	65-74 years	75-84 years	85 years and over
		Prevalence per 1,000 residents				
Both sexes						
Chronic condition or impairment:						
Senility	627,200	583.0	189.1	482.2	623.2	694.3
Mental illness	200,400	186.3	348.5	293.0	171.9	112.8
Mental retardation	72,800	67.8	345.7	94.5	27.6	17.5
Arthritis or rheumatism	368,500	342.5	109.7	232.4	363.2	431.1
Paralysis or palsy due to stroke	122,100	113.5	106.6	166.1	129.1	80.1
Paralysis or palsy not related to stroke, arthritis, or rheumatism	66,200	61.6	161.5	75.5	52.5	36.8
Glaucoma or cataracts	110,900	103.1	38.5	62.8	95.6	143.9
Diabetes	142,700	132.6	112.0	168.1	148.8	109.4
Any chronic trouble with back or spine	106,100	98.6	74.7	86.6	100.8	107.9
Amputation of extremities or limbs, or permanent stiffness or any deformity of foot, leg, fingers, arm, or back	150,000	139.4	189.2	160.8	133.0	123.2
Heart trouble	360,500	335.1	110.2	271.9	354.7	403.9
None of the above	57,700	53.6	64.5	62.2	53.8	47.0
Male						
Chronic condition or impairment:						
Senility	169,900	534.0	170.4	482.4	615.8	677.0
Mental illness	63,700	200.1	334.8	274.8	164.1	116.3
Mental retardation	31,600	99.5	362.4	104.1	37.9	*
Arthritis or rheumatism	81,300	255.6	79.2	180.2	298.1	355.6
Paralysis or palsy due to stroke	42,000	131.9	104.9	193.4	147.9	88.8
Paralysis or palsy not related to stroke, arthritis, or rheumatism	23,600	74.3	167.4	78.7	61.6	34.9
Glaucoma or cataracts	28,500	89.6	40.4	*	85.5	141.5
Diabetes	39,100	122.9	101.6	147.5	137.3	102.8
Any chronic trouble with back or spine	23,800	74.8	71.0	68.0	77.6	78.5
Amputation of extremities or limbs, or permanent stiffness or any deformity of foot, leg, fingers, arm, or back	48,600	152.8	203.2	176.5	151.6	111.6
Heart trouble	100,400	315.5	104.7	280.3	350.0	415.2
None of the above	19,400	60.9	70.2	69.0	57.0	54.5

See footnote at end of table.

Table 108. Chronic conditions and impairments of nursing home residents, according to age and sex: United States, August 1973-April 1974—Continued
(Data are based on reporting by a sample of nursing homes)

Sex and chronic condition or impairment	Number of residents with condition or impairment [1]	Age				
		All ages	Under 65 years	65-74 years	75-84 years	85 years and over
Female		Prevalence per 1,000 residents				
Chronic condition or impairment:						
Senility	457,300	603.6	205.0	482.1	625.8	699.7
Mental illness	136,800	180.5	360.0	305.0	174.8	111.7
Mental retardation	41,100	54.3	331.6	88.1	23.8	16.7
Arthritis or rheumatism	287,200	379.0	135.4	267.1	386.8	454.7
Paralysis or palsy due to stroke	80,100	105.8	108.1	147.9	122.3	77.4
Paralysis or palsy not related to stroke, arthritis, or rheumatism	42,600	56.2	156.5	73.4	49.3	37.4
Glaucoma or cataracts	82,400	108.8	*	66.6	99.3	144.6
Diabetes	103,600	136.8	120.9	181.8	152.9	111.4
Any chronic trouble with back or spine	82,300	108.6	77.9	99.0	109.3	117.1
Amputation of extremities or limbs, or permanent stiffness or any deformity of foot, leg, fingers, arm, or back	101,400	133.8	177.2	150.3	126.3	126.8
Heart trouble	260,100	343.3	114.9	266.3	356.4	400.4
None of the above	38,300	50.6	59.7	57.6	52.7	44.7

[1] A resident can have more than one chronic condition or impairment.

SOURCE: Division of Health Resources Utilization Statistics, National Center for Health Statistics: Data from the National Nursing Home Survey.

Table 109. Patient care episodes in inpatient psychiatric services and rate per 100,000 population, according to age and diagnosis: United States, 1971
(Data are based on reporting by facilities)

Diagnosis [1]	All ages	Under 18 years	18-24 years	25-44 years	45-64 years	65 years and over	All ages	Under 18 years	18-24 years	25-44 years	45-64 years	65 years and over
	Number of episodes						Rate per 100,000 resident population					
All diagnoses	1,692,752	111,021	245,106	614,901	512,379	209,345	824.9	156.9	1,029.4	1,272.0	1,214.3	1,041.9
Mental retardation	46,766	5,835	7,386	14,779	14,384	4,382	22.8	8.3	31.0	30.6	34.1	21.8
Organic brain syndromes	157,691	3,649	8,364	15,441	44,124	86,113	76.8	5.2	35.1	31.9	104.6	428.6
Schizophrenia	537,174	21,341	85,043	232,520	151,270	47,000	261.8	30.2	357.2	481.0	358.5	233.9
Depressive disorders	321,708	8,657	34,036	123,571	118,526	36,918	156.8	12.2	143.0	255.6	280.9	183.7
Other psychotic disorders	27,810	1,199	2,383	7,492	9,991	6,745	13.5	1.7	10.0	15.5	23.7	33.6
Alcohol disorders	227,626	870	10,142	95,518	106,245	14,851	110.9	1.2	42.6	197.6	251.8	73.9
Drug disorders	68,162	7,357	32,153	21,727	5,252	1,673	33.2	10.4	135.0	44.9	12.4	8.3
All other disorders	263,403	56,361	58,011	88,589	52,933	7,509	128.4	79.6	243.6	183.3	125.4	37.4
Undiagnosed	42,412	5,752	7,588	15,264	9,654	4,154	20.7	8.1	31.9	31.6	22.9	20.7

[1] The diagnostic groupings used in this table are defined in terms of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, DSM-II. They are: Mental retardation, 310-315; Organic brain syndromes, 290, 292, 293, 294 (except 294.3), 309 (except 309.13, 309.14); Schizophrenia, 295; Depressive disorders, 296, 298.0, 300.4; Other psychotic disorders, 297, 298.1-298.9; Alcohol disorders, 291, 309.13, 303; Drug disorders, 294.3, 309.14, 304.

NOTE: Includes such services provided in State and county mental hospitals, private mental hospitals, VA neuropsychiatric hospitals, psychiatric units of general hospitals (including VA), and Federally funded community mental health centers.

SOURCE: National Institute of Mental Health: Patient care episodes in psychiatric services, United States, 1971. Statistical Note, No. 92. DHEW Pub. No. (HSM) 74-655. Rockville, Md., Aug. 1973.

Table 110. Patients with mental disorders in psychiatric hospitals and nursing homes, according to type of facility: United States, 1969 and 1973

(Data are based on reporting by facilities)

Type of facility	1969	1973	1969	1973
	Number of patients		Percent distribution	
All types	514,567	398,712	100.0	100.0
State and county mental hospitals	369,969	248,522	71.9	62.3
Private mental hospitals	10,963	11,393	2.1	2.9
VA hospitals	43,385	22,997	8.4	5.8
Nursing homes	90,250	115,800	17.5	29.0

SOURCES: Division of Biometry and Epidemiology, National Institute of Mental Health: Unpublished data; and Division of Health Resources Utilization Statistics, National Center for Health Statistics: Data from the National Nursing Home Survey.

Table 111. Resident patients, admissions, and releases for mental retardation facilities: United States, 1946-71

(Data are based on reporting by facilities)

Year	Resident patients at end of year	Admissions		Net releases	
		Number	Rate per 100,000 population	Number	Rate per 1,000 average resident patient population
1946	116,828	11,677	8.4	7,512	65.9
1947	118,703	12,012	8.4	6,714	56.9
1948	121,751	12,304	8.5	6,484	53.5
1949	125,849	12,384	8.4	6,194	50.0
1950	128,850	12,268	8.2	5,765	45.1
1951	130,193	11,977	7.9	7,202	55.5
1952	132,605	12,288	8.0	6,865	52.0
1953	135,568	12,851	8.2	6,569	49.0
1954	139,977	13,511	8.5	6,006	43.3
1955	144,708	13,153	8.1	5,700	40.1
1956	147,404	13,037	7.9	7,588	52.1
1957	152,497	14,172	8.4	6,223	41.6
1958	156,156	13,760	8.0	6,574	42.8
1959	160,568	14,228	8.1	6,640	42.0
1960	163,752	14,701	8.3	6,429	39.9
1961	167,291	14,525	8.0	8,012	48.4
1962	173,638	13,919	7.6	7,600	44.2
1963	176,516	14,909	8.0	8,156	46.6
1964	179,599	15,276	8.1	9,292	52.2
1965	187,273	17,300	9.8	7,993	43.6
1966	191,987	14,998	7.7	9,268	48.9
1967	193,188	15,714	8.1	11,665	60.4
1968	192,520	14,688	7.5	11,675	60.5
1969	189,394	14,868	7.4	14,701	77.0
1970	186,743	14,985	7.5	14,702	76.9
1971	181,009	15,370	7.5	17,079	93.1

NOTE: Alaska included beginning in 1960; Hawaii included beginning in 1961.

SOURCES: 1946-68 data adapted from data provided by Hospital Studies Section, Biometrics Branch, National Institute of Mental Health; 1969-70 data from Office of Human Development: Mental Retardation Source Book, DHEW Pub. No. (OS) 73-81, Washington, U.S. Government Printing Office, Sept. 1972; 1971 data from Developmental Disabilities Office, Office of Human Development, DHEW.

SECTION III

Health Care Resources

A. Health Manpower

Nearly 5 million persons were active in the health field in 1974. The number in each occupation varied from 400 health economists to nearly 1 million in the category of aides, orderlies, and attendants. The most numerous professional occupations were registered nurses (857,000), physicians (363,000), and dentists (107,000).

The number of physicians in the United States increased nearly 70 percent between 1950 and 1974; the ratio of physicians to population increased 22 percent over the same period. Osteopathic physicians accounted for less than 4 percent of the total in 1974, although they form a much larger proportion in certain States.

A large portion of the increase in physicians is due to the increasing number of foreign medical graduates (FMG's) practicing in the United States. For example, the American Medical Association (AMA) data show that between 1963 and 1973 the proportion of FMG's increased from 11 percent to nearly 20 percent of the total number of physicians. This trend is likely to change abruptly, since recent health manpower legislation (Public Law 94-484) places restrictions on FMG's entering the United States. At the same time the increase in U.S. medical school graduates which began in the early 1970's will begin to swell the numbers of practicing physicians.

In 1974, 323,993 active, non-Federal physicians were practicing in the United States and its territories. Of those whose classification was known, an estimated 92 percent were involved in direct patient care, and 67 percent in office-based practice. These proportions are similar to those observed in 1968, when 89 percent of the 266,544 active, non-Federal physicians were in direct patient care and 68 percent in office-based practice. The proportion in hospital-based practice increased from 22 percent to 25 percent over the 1968-74 period. On the other hand, the proportion of office-based general practitioners decreased from 21 percent in 1968 to 17 percent in 1974.

Over half (51 percent) of the active office-based physicians in patient care during 1974 were in primary-care specialties (i.e., general practice, internal medicine, pediatrics, and obstetrics-gynecology). In 1968, AMA data showed that 55 percent were in primary-care specialties.

On the other hand, the proportion of active office-based physicians engaged in surgical specialties excluding obstetrics-gynecology, increased slightly; in 1968, 27 percent were surgical specialists compared to 28 percent in 1974. Data from AMA indicate that this trend is likely to change, since the proportion of residents in surgical residency programs, excluding obstetrics-gynecology, decreased from 37 percent in 1968 to 31 percent in 1974.

Furthermore, the proportion of residents in primary-care specialties increased from 34 percent in 1968 to 44 percent in 1974. Much of this increase occurred in the internal medicine category (from 16 percent in 1968 to 24 percent in 1974), and some of these physicians may eventually become specialists (e.g., endocrinologists) rather than primary-care providers. Nevertheless, the Health Manpower Act (Public Law 94-484) provides a number of incentives to increase further the number of physicians choosing residency programs in family practice and primary care. Therefore, future trends will probably show increases in these areas.

The availability of either primary-care physicians or specialists differs for different parts of the United States. The number of active, non-Federal physicians per 10,000 population was 14.7 in 1973, but this varied from 18.9 in the Northeast to 12.2 in the South. Furthermore, metropolitan areas had larger physician-population ratios than nonmetropolitan areas (17.4 vs. 7.4). Within metropolitan counties, the largest standard metropolitan statistical areas (SMSA's) had the largest ratios. Outside SMSA's the most urbanized counties had the largest ratios, although nonmetropolitan counties adjacent to SMSA's had smaller ratios than those not adjacent. These patterns were followed within each region with few exceptions.

The number of active, non-Federal, office-based physicians in primary-care specialties per 10,000 population was highest in the West (5.6) and lowest in the South (4.1). The pattern by urbanization was identical to the one discussed above for all active, non-Federal physicians, except that the differences between the county types were not as great.

Federal concern about the maldistribution of physicians and other health manpower is reflected in legislation and in a number of programs designed to provide incentives for establishing practices in shortage areas. For example, 922 areas of the United States were officially designated as Critical Medical Manpower Shortage Areas as of February 1, 1977. The population of these areas was 13 million, or approximately 6 percent of the total U.S. population. Medical students who agree to practice in these areas are eligible for scholarships and loan forgiveness programs while in school.

One indication of the trend in geographic distribution of manpower is the age distribution of the physicians currently in practice. In 1973, 17 percent of active, non-Federal physicians in office-based practice were 65 years and over. Although the Northeast had the second highest active, non-Federal office-based physician-population ratio, it also had the highest proportion of physicians in this age group (23 percent). The youngest physicians were in the West, where only 13 percent were 65 years and over. Considering the West's high physician-population ratio, this suggests that it may further increase its advantage in physician supply. The South may soon overtake the North Central States since both regions had the same ratio of active, non-Federal, office-based physicians-to-population, and the South had a lower proportion of physicians 65 years and over.

In 1974, the number of active, non-Federal physicians per 10,000 population varied from 42.9 in the District of Columbia and 23.6 in New York to 8.6 in Mississippi and 8.5 in Alaska. There is little evidence that variation among the States decreased from 1968 to 1974. In 1968, 23 States had ratios more than 20 percent below the U.S. average (i.e., less than 10.6); in 1974, 22 States had ratios more than 20 percent below the U.S. average (i.e., less than 12.2).

Active dentists numbering 106,740 were engaged in patient care in 1975, or 5.0 per 10,000 population. This represented an 8.7 percent increase from the 1971 ratio of 4.6. As with physicians, the dentist-population ratio varied greatly among the States. The 1975 ratios ranged from 8.5 in the District of Columbia and 7.6 in New York to 2.9 in South Carolina and 2.6 in Mississippi. States which had high physician-population ratios tended to have high dentist-population ratios as well (the correlation coefficient was 0.77 in 1974). Variation among the States in dentist-population ratios remained as high in 1975 as it was in 1971. In 1971, 15 States had ratios, per 10,000 population, more than 20 percent below the U.S. average (below 3.7) compared to 18 States in 1975 (below 4.0).

The location of dentists by metropolitan area followed similar patterns to those of physician location. The 1974 ratio of licensed dentists to population increased with increasing SMSA size. Unlike the physician ratios, however, dentist ratios in suburban counties of large SMSA's were slightly larger than those in the core counties. Outside SMSA's the ratio increased as urbanization increased, but counties adjacent to SMSA's had slightly lower ratios than those not adjacent. In almost all cases, the South had the lowest ratios while the Northeast and West had the highest.

The uneven distribution of dental manpower led to the designation of dental manpower shortage areas. There were 775 Critical Dental Manpower Shortage Areas designated as of February 1, 1977, with a total population of 11.6 million (5 percent of the U.S. population).

The number of registered nurses per 10,000 population was highest in the New England States (45.7-61.8) and lowest in the South Central States (19.0-25.6), with a U.S. average of 37.4.

Optometrists per 10,000 population varied from 0.5 in Alaska and Alabama and 0.6 in several Southern States to 1.6 in Illinois and 1.5 in Massachusetts, Montana, and Oregon. The U.S. average was 1.0.

Pharmacist ratios per 10,000 population were highest in Pennsylvania (8.9), Massachusetts (8.6), Oklahoma (8.2), and New York (7.7). They were lowest in Virginia (4.3), North Carolina (4.2), West Virginia (4.1), Hawaii (3.2), and Alaska (2.9). The U.S. average was 6.3.

Chiropractors were most prevalent in the West North Central States and in New Hampshire, with a U.S. average of 0.8 per 10,000.

The number of dental hygienists per 10,000 was highest in Vermont (7.9), the District of Columbia (7.9), and Connecticut (6.8). Vermont had a dentist-population ratio below the U.S. average. On the other hand, Utah had the second lowest hygienist-population ratio (1.1) and a dentist-population ratio well above the national average. Several Southern States had very low ratios of both dentists and dental hygienists.

Podiatrist ratios per 10,000 population were highest in the Middle Atlantic States (0.5-0.7), southern New England (0.6), and the District of Columbia (0.7). The lowest ratios were in States of the South Region, Alaska, and Hawaii.

Veterinarians had an average ratio of 1.4 per 10,000 and were most prevalent in States with large animal populations—Iowa, South Dakota, Nebraska, Kansas, Montana, and Wyoming.

States with the highest numbers of registered radiologic technologists per 10,000 population were Colorado (7.3), Vermont (7.1), Maine (7.0), Connecticut (6.9), Minnesota (6.6), and Wisconsin (6.4).

A number of difficulties are involved in interpreting the manpower data presented in the tables at the end of this discussion. A major problem is the effect of differential productivity. The available data do not indicate whether an "active" physician is devoting 10 or 50 hours per week to patient care or how many patients a physician actually cares for in a given week. For example, 1973-74 data from the National Ambulatory Medical Care Survey show wide variation in the mean number of office visits per week by physician's type of practice and specialty. Furthermore, the actual time spent with the physician during a visit varied with patient characteristics (e.g., diagnosis, age, etc.) as well as with physician specialty. American Medical Association data indicate that in 1970 the average number of office visits per week for general practitioners in nonmetropolitan areas was 27 percent higher than the average in metropolitan areas.

The utilization of allied health personnel is another factor affecting the physician's productivity. According to AMA data, although the South had the lowest physician-population ratios, primary-care physicians in the South were the heaviest utilizers of allied health personnel (especially nurses).

Similar difficulties affect the other manpower data. Movement in and out of the labor force and part-time work are especially serious problems in measuring the distribution of nurses. The distributions of many of the allied health personnel are greatly affected by different licensure laws among the States. For example, the very low supply of dental hygienists in Utah may be due to the fact that these duties are assumed by unlicensed assistants.

Table 112. Persons active in health field, according to occupation: United States, 1974

(Data are based on multiple sources)

Health field and selected occupation	Estimated number of persons
Total	4,672,850 to 4,707,650
Administration of health services [1]	48,200
Anthropology and sociology	1,700
Automatic data processing in the health field	4,000 to 5,000
Basic sciences in the health field [2]	60,000
Biomedical engineering	12,000
Chiropractic	16,600
Clinical laboratory services	172,500
Dentistry and allied services	279,800
Dentist	107,300
Dental hygienist	22,500
Dental assistant	118,000
Dental laboratory technician	32,000
Dietetic and nutritional services	72,700
Economic research in the health field [1]	400
Environmental sanitation	20,000
Food and drug protective services	47,900
Funeral directors and embalmers	50,000
Health and vital statistics [1]	1,350
Health education	22,500 to 23,000
Health information and communication	7,400 to 10,500
Library services in the health field	10,300
Medical records	60,000
Medicine and osteopathy	362,700
Physician (M.D.)	350,600
Physician (D.O.)	12,100
Midwifery	4,300
Nursing and related services	2,319,000
Registered nurse	857,000
Practical nurse	492,000
Nursing aide, orderly, attendant	936,000
Home health aide	34,000
Occupational therapy	13,500 to 14,500
Opticianry	12,000
Optometry	25,100 to 25,300
Orthotic and prosthetic technology	2,800 to 3,800
Pharmacy	132,900
Physical therapy	26,100
Podiatric medicine	7,100
Psychology	35,000
Radiologic technology	100,000
Respiratory therapy	18,000 to 19,000
Secretarial and office services in the health field [1]	275,000 to 300,000
Social work	38,600
Specialized rehabilitation services	11,250 to 13,250
Speech pathology and audiology	27,000
Veterinary medicine	33,500
Vocational rehabilitation counseling	17,700
Miscellaneous health services	323,950
Electrocardiograph technician [1]	9,500
Electroencephalograph technician	4,000
Emergency medical technician	260,000
Medical assistant	16,000
Operating room technician	12,000
Ophthalmic medical assistant	20,000
Orthoptist [1]	450
Physician's assistant	2,000

[1] Previous estimate repeated in absence of sufficient information on which to base revision.

[2] Excludes physical scientists.

NOTE: Each occupation is counted only once. For example, all physicians are in medicine and osteopathy and not in any other category.

SOURCE: National Center for Health Statistics: Health Resources Statistics: Health Manpower and Health Facilities, 1975. DHEW Pub. No. (HRA) 76-1509. Health Resources Administration. Washington. U.S. Government Printing Office, 1976.

Table 113. Total physicians, according to type of physician, and number per 10,000 population: United States and outlying U.S. areas, selected years 1950-74

(Data are based on reporting by physicians)

Year	Type of physician			Physicians (M.D. and D.O.) per 10,000 population [3]
	M.D.[1] and D.O.[2]	M.D.[1]	D.O.[2]	
	Number of physicians			
1950	232,697	219,997	12,700	14.9
1955	255,211	241,711	13,500	15.0
1960	274,833	260,484	14,349	14.8
1965	305,115	292,088	13,027	15.3
1968	—	317,032	—	—
1969	—	324,942	—	—
1970	—	334,028	—	—
1971	358,523	344,823	13,700	16.9
1972	370,534	356,534	14,000	17.4
1973	380,679	366,379	14,300	17.7
1974	394,448	379,748	14,700	18.2

[1] Includes non-Federal M.D.'s in the 50 States, District of Columbia, Puerto Rico, and other U.S. outlying areas, and Federal M.D.'s in the United States and abroad. Excludes M.D.'s with temporary foreign addresses.

[2] Estimated.

[3] Population includes civilians in the 50 States, District of Columbia, Puerto Rico, and other U.S. outlying areas; U.S. citizens in foreign countries; and the Armed Forces in the United States and abroad.

NOTE: Includes both active and inactive physicians.

SOURCE: National Center for Health Statistics: Health Resources Statistics: Health Manpower and Health Facilities, 1975. DHEW Pub. No. (HRA) 76-1509. Health Resources Administration. Washington. U.S. Government Printing Office, 1976.

Table 114. Physicians (M.D.) and percent change in number, according to type of practice: United States and outlying U.S. areas, 1968, 1971, and 1974

(Data are based on reporting by physicians)

Type of practice	Year			Period	
	1968	1971	1974	1968-74	1971-74
	Number of physicians			Percent change	
Doctors of medicine [1]	317,032	344,823	379,748	19.8	10.1
Active M.D.'s	296,312	322,228	350,609	18.3	8.8
Non-Federal	266,544	293,029	323,993	21.6	10.6
Patient care	238,481	263,730	278,517	16.8	5.6
Office-based practice	180,991	194,932	203,943	12.7	4.6
General practice [2]	54,994	53,929	50,201	—8.7	—6.9
Other specialty	125,997	142,003	153,742	22.0	8.3
Hospital-based practice	57,490	68,798	74,574	24.8	8.4
Training programs [3]	41,545	48,437	54,510	31.2	12.5
Full-time hospital staff	15,945	20,361	20,064	25.8	—1.5
Other professional activity [4]	28,063	25,770	25,133	—10.4	—2.5
Not classified [5]	...	3,529	20,343	...	476.5
Federal	29,768	29,199	26,616	—10.6	—8.8
Patient care	23,241	23,518	22,721	—2.2	—3.4
Office-based practice	3,623	2,832	2,012	—44.5	—29.0
General practice [2]	1,858	1,208	828	—55.4	—31.5
Other specialty	1,765	1,624	1,184	—32.9	—27.1
Hospital-based practice	19,618	20,686	20,709	5.6	0.1
Training programs [3]	5,567	4,403	4,512	—19.0	2.5
Full-time hospital staff	14,051	16,283	16,197	15.3	—0.5
Other professional activity [4]	6,527	5,681	3,895	—40.3	31.4
Inactive M.D.'s	18,631	19,388	21,614	16.0	11.5
Address unknown	2,809	3,207	7,525	...	...

[1] Includes non-Federal M.D.'s in the 50 States, District of Columbia, Puerto Rico, and other U.S. outlying areas, and Federal M.D.'s in the United States and abroad. Excludes M.D.'s with temporary foreign addresses.

[2] Includes general practice and family practice, other specialties not listed, and no specialty reported.

[3] Includes interns and residents.

[4] Includes medical teaching, administration, research, and other.

[5] Not classified as to their specialty.

SOURCE: National Center for Health Statistics: Health Resources Statistics: Health Manpower and Health Facilities, 1975. DHEW Pub. No. (HRA) 76-1509. Health Resources Administration. Washington. U.S. Government Printing Office, 1976.

Table 115. Active physicians (M.D.), according to type of practice and primary specialty: United States and outlying U.S. areas, 1974

(Data are based on reporting by physicians)

Primary specialty	Type of practice				
	Total active	Patient care			Other professional activity [1]
		Office-based practice	Hospital-based practice		
			Training programs	Full-time physician staff	
	Number of active physicians				
Total [2]	330,266	205,955	59,022	36,261	29,028
General practice [3]	69,445	51,029	8,445	5,294	4,677
Specialty practice	260,821	154,926	50,577	30,967	24,351
Medical specialties	89,919	50,253	20,325	9,948	9,393
Allergy	1,657	1,432	–	83	142
Cardiovascular diseases	6,229	4,420	–	826	983
Dermatology	4,479	3,302	631	281	265
Gastroenterology	2,063	1,397	–	273	393
Internal medicine	51,752	26,213	14,823	5,599	5,117
Pediatrics [4]	21,645	12,520	4,871	2,242	2,012
Pulmonary diseases	2,094	969	–	644	481
Surgical specialties	105,870	73,677	19,558	8,299	4,336
Anesthesiology	12,484	8,465	1,799	1,449	771
Colon and rectal surgery	662	608	21	19	14
General surgery	31,085	19,390	7,820	2,672	1,203
Neurological surgery	2,859	1,896	573	235	155
Obstetrics and gynecology	20,987	15,187	3,455	1,373	972
Ophthalmology	10,741	8,474	1,419	497	351
Orthopedic surgery	10,985	7,787	2,035	863	300
Otolaryngology	5,588	4,162	838	391	197
Plastic surgery	2,088	1,569	325	121	73
Thoracic surgery	1,925	1,318	262	222	123
Urology	6,466	4,821	1,011	457	177
Psychiatry and neurology	29,552	14,934	4,944	5,743	3,931
Child psychiatry	2,411	1,349	293	344	425
Neurology	3,839	1,707	939	542	651
Psychiatry	23,302	11,878	3,712	4,857	2,855
Other specialties	35,480	16,062	5,750	6,977	6,691
Aerospace medicine	708	190	41	152	325
General preventive medicine	758	218	30	83	427
Occupational medicine	2,365	1,620	3	93	649
Pathology [5]	11,591	3,947	2,535	2,874	2,235
Physical medicine and rehabilitation	1,610	589	292	577	152
Public health	2,695	511	43	255	1,886
Radiology [6]	15,753	8,987	2,806	2,943	1,017

[1] Includes medical teaching, administration, research, and other.

[2] Includes active non-Federal M.D.'s in the 50 States, District of Columbia, Puerto Rico, and other U.S. outlying areas, and active Federal M.D.'s in the United States and abroad. Excludes 7,525 M.D.'s with addresses unknown, 20,345 unclassified M.D.'s, and 21,614 inactive M.D.'s.

[3] Includes general practice and family practice, other specialties not listed, and no specialty reported.

[4] Includes pediatric allergy and pediatric cardiology.

[5] Includes forensic pathology.

[6] Includes diagnostic radiology and therapeutic radiology.

SOURCE: National Center for Health Statistics: Health Resources Statistics: Health Manpower and Health Facilities, 1975. DHEW Pub. No. (HRA) 76-1509. Health Resources Administration. Washington. U.S. Government Printing Office, 1976.

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Table 116. Active non-Federal physicians (M.D.) per 10,000 population, according to specialty, geographic region, and location: United States, 1973

(Data are based on reporting by physicians)

Geographic region and location	Resident population in thousands	All active non-Federal physicians	Physicians not engaged in patient care[1]	Specialty of physicians in patient care									
				All specialties	General practice	Internal medicine	Pediatrics		Obstetrics and gynecology		General surgery	All other	Interns
							Based on resident population	Based on population 0-14 years	Based on resident population	Based on female population 15-44 years			
		Active non-Federal physicians per 10,000 population											
United States	209,517	14.7	1.8	12.9	2.4	1.7	0.7	2.8	0.9	4.0	1.2	5.4	0.5
Within SMSA	152,875	17.4	2.3	15.1	2.3	2.2	0.9	3.5	1.0	4.8	1.4	6.6	0.7
Large SMSA	86,248	20.0	2.8	17.2	2.3	2.6	1.1	4.1	1.2	5.4	1.6	7.5	0.9
Core counties	59,789	23.3	3.4	19.9	2.5	3.1	1.2	4.8	1.3	6.1	1.8	8.7	1.2
Fringe counties	26,449	12.6	1.5	11.1	1.9	1.5	0.8	2.8	0.8	3.7	0.9	4.9	0.2
Medium SMSA	48,389	14.4	1.6	12.7	2.3	1.6	0.7	2.7	0.9	4.1	1.3	5.4	0.6
Other SMSA	18,238	13.5	1.5	11.9	2.1	1.5	0.7	2.4	0.8	3.7	1.2	5.4	0.4
Outside SMSA	56,642	7.4	0.5	6.8	2.8	0.6	0.3	1.1	0.4	1.8	0.8	2.0	0.0
Adjacent to SMSA	29,380	7.2	0.5	6.7	2.7	0.6	0.3	1.1	0.4	1.8	0.7	1.9	2.0
Urbanized	13,306	9.1	0.7	8.4	2.5	0.9	0.5	1.7	0.6	2.7	0.9	3.0	0.1
Less urbanized	13,696	5.9	0.3	5.5	2.9	0.4	0.2	0.6	0.2	1.1	0.6	1.2	0.0
Thinly populated	2,378	3.6	0.2	3.4	2.7	0.1	0.0	0.1	0.0	0.1	0.3	0.3	0.0
Not adjacent to SMSA	27,262	7.6	0.5	7.0	2.8	0.6	0.3	1.1	0.3	1.7	0.8	2.1	0.0
Urbanized	8,669	11.1	1.0	10.1	2.3	1.1	0.5	2.0	0.7	3.0	1.2	4.2	0.1
Less urbanized	14,088	6.6	0.4	6.2	3.1	0.4	0.2	0.7	0.3	1.3	0.8	1.4	0.0
Thinly populated	4,505	3.9	0.2	3.7	2.7	0.2	0.1	0.2	0.1	0.3	0.3	0.4	0.0
Northeast	49,545	18.9	2.7	16.3	2.3	2.5	1.0	4.0	1.1	5.0	1.5	7.0	0.8
Within SMSA	42,622	20.3	3.0	17.4	2.2	2.8	1.1	4.4	1.2	5.4	1.6	7.6	0.9
Large SMSA	27,544	23.3	3.7	19.7	2.2	3.3	1.3	5.2	1.3	6.0	1.8	8.8	1.0
Core counties	17,716	26.9	4.5	22.3	2.2	3.9	1.4	6.0	1.5	6.8	2.1	9.9	1.4
Fringe counties	9,829	16.9	2.0	14.9	2.2	2.2	1.1	4.0	1.0	4.7	1.2	6.8	0.4
Medium SMSA	13,236	15.1	1.8	13.4	2.3	1.9	0.8	3.1	0.9	4.4	1.4	5.5	0.6
Other SMSA	1,842	13.2	1.1	12.1	2.1	1.6	0.6	2.4	0.8	3.7	1.3	5.4	0.3
Outside SMSA	6,923	10.2	0.9	9.3	2.5	1.1	0.4	1.7	0.5	2.6	1.1	3.5	0.2
Adjacent to SMSA	5,085	9.5	0.7	8.7	2.5	0.9	0.4	1.6	0.5	2.7	1.0	3.2	0.1
Urbanized	3,870	9.2	0.7	8.5	2.4	0.9	0.5	1.8	0.6	2.9	1.0	3.2	0.0
Less urbanized	1,130	10.5	0.9	9.6	2.8	1.2	0.3	1.2	0.4	2.1	1.2	3.4	0.3
Thinly populated	86	6.2	0.2	6.0	4.0	0.2	0.1	0.5	–	–	0.5	1.2	–

See footnote at end of table.

Table 116. Active non-Federal physicians (M.D.) per 10,000 population, according to specialty, geographic region, and location: United States, 1973—Continued

(Data are based on reporting by physicians)

Geographic region and location	Resident population in thousands	All active non-Federal physicians	Physicians not engaged in patient care[1]	Specialty of physicians in patient care									
				All specialties	General practice	Internal medicine	Pediatrics		Obstetrics and gynecology		General surgery	All other	Interns
							Based on resident population	Based on population 0-14 years	Based on resident population	Based on female population 15-44 years			
Northeast—Continued													
Outside SMSA—Continued													
Not adjacent to SMSA	1,838	12.2	1.4	10.8	2.6	1.4	0.5	1.8	0.5	2.5	1.3	4.2	0.3
Urbanized	840	16.4	2.3	14.1	2.2	1.9	0.6	2.2	0.7	3.3	1.6	6.4	0.6
Less urbanized	856	8.6	0.7	7.9	2.8	0.9	0.3	1.3	0.3	1.7	0.9	2.5	0.0
Thinly populated	142	9.3	0.8	8.5	2.7	1.3	0.6	2.4	0.5	2.5	1.1	2.0	0.1
North Central	57,461	12.7	1.4	11.3	2.4	1.5	0.6	2.1	0.7	3.4	1.1	4.5	0.5
Within SMSA	39,511	15.4	1.9	13.5	2.2	1.9	0.7	2.7	0.9	4.1	1.3	5.7	0.8
Large SMSA	23,887	16.8	2.1	14.7	2.1	2.2	0.9	3.2	1.0	4.7	1.5	6.1	0.9
Core counties	16,062	20.8	2.8	18.0	2.3	2.8	1.1	4.0	1.2	5.6	1.8	7.5	1.3
Fringe counties	7,825	8.7	0.8	7.9	1.6	1.0	0.5	1.6	0.6	2.9	0.8	3.2	0.1
Medium SMSA	10,138	12.3	1.2	11.1	2.5	1.2	0.5	1.9	0.7	3.3	1.1	4.5	0.5
Other SMSA	5,485	14.8	1.8	13.0	2.2	1.8	0.6	2.2	0.8	3.4	1.1	6.0	0.5
Outside SMSA	17,950	7.0	0.4	6.5	2.9	0.5	0.2	0.8	0.3	1.4	0.7	1.8	0.0
Adjacent to SMSA	9,054	7.1	0.5	6.6	2.9	0.6	0.2	0.9	0.3	1.5	0.7	1.8	0.1
Urbanized	3,886	9.9	0.9	9.0	2.7	0.9	0.4	1.7	0.5	2.6	1.0	3.3	0.1
Less urbanized	4,556	5.3	0.2	5.1	3.2	0.3	0.1	0.3	0.1	0.7	0.6	0.8	–
Thinly populated	612	3.5	0.1	3.4	2.7	0.1	0.0	0.1	–	–	0.3	0.2	0.0
Not adjacent to SMSA	8,896	6.8	0.4	6.4	2.9	0.5	0.2	0.8	0.3	1.3	0.7	1.8	0.0
Urbanized	2,208	9.9	0.6	9.3	2.1	1.0	0.5	1.8	0.6	2.6	1.1	4.0	0.0
Less urbanized	4,972	6.5	0.3	6.2	3.3	0.4	0.1	0.5	0.2	1.0	0.8	1.3	0.0
Thinly populated	1,716	3.5	0.2	3.3	2.7	0.1	0.0	0.1	0.0	0.1	0.2	0.3	–
South	66,167	12.2	1.4	10.7	2.2	1.3	0.6	2.4	0.8	3.6	1.1	4.3	0.4
Within SMSA	41,659	15.5	2.0	13.5	1.9	1.8	0.9	3.2	1.1	4.7	1.3	5.9	0.6
Large SMSA	15,495	18.2	2.7	15.6	1.9	2.3	1.0	3.8	1.3	5.5	1.5	6.8	0.7
Core counties	9,708	22.9	3.3	19.6	2.1	3.0	1.2	4.6	1.5	6.8	1.9	8.8	1.1
Fringe counties	5,788	10.3	1.5	8.7	1.6	1.2	0.8	2.7	0.8	3.4	0.7	3.6	0.1
Medium SMSA	17,786	14.4	1.7	12.7	2.0	1.5	0.8	2.8	1.0	4.2	1.3	5.6	0.6
Other SMSA	8,379	12.9	1.6	11.3	1.8	1.3	0.7	2.7	0.9	4.0	1.2	5.0	0.4

See footnote at end of table.

Table 116. Active non-Federal physicians (M.D.) per 10,000 population, according to specialty, geographic region, and location: United States, 1973—Continued

(Data are based on reporting by physicians)

Geographic region and location	Resident population in thousands	All active non-Federal physicians	Physicians not engaged in patient care[1]	Specialty of physicians in patient care									
				All specialties	General practice	Internal medicine	Pediatrics		Obstetrics and gynecology		General surgery	All other	Interns
							Based on resident population	Based on population 0-14 years	Based on resident population	Based on female population 15-44 years			
South—Continued	Active non-Federal physicians per 10,000 population												
Outside SMSA	24,508	6.5	0.4	6.0	2.6	0.5	0.3	1.0	0.3	1.7	0.7	1.6	0.0
Adjacent to SMSA	12,251	5.9	0.4	5.5	2.5	0.4	0.3	0.9	0.3	1.5	0.6	1.4	0.0
Urbanized	3,617	8.0	0.5	7.5	2.3	0.7	0.5	1.8	0.6	2.9	0.8	2.6	0.0
Less urbanized	7,116	5.3	0.3	5.0	2.7	0.3	0.2	0.7	0.2	1.1	0.6	1.0	0.0
Thinly populated	1,518	3.3	0.2	3.1	2.4	0.1	0.0	0.1	0.0	0.1	0.3	0.2	–
Not adjacent to SMSA	12,257	7.1	0.5	6.6	2.6	0.6	0.3	1.1	0.4	1.9	0.8	1.9	0.1
Urbanized	3,859	10.8	1.0	9.7	2.1	1.1	0.6	2.2	0.7	3.3	1.1	3.9	0.2
Less urbanized	6,310	6.0	0.3	5.7	2.9	0.4	0.2	0.8	0.3	1.4	0.7	1.2	0.0
Thinly populated	2,087	3.6	0.2	3.4	2.4	0.2	0.0	0.2	0.1	0.3	0.3	0.4	0.0
West	36,344	16.7	2.0	14.7	2.9	1.9	0.8	3.1	0.9	4.2	1.2	6.4	0.5
Within SMSA	29,083	18.7	2.3	16.4	2.9	2.2	0.9	3.6	1.1	4.8	1.3	7.4	0.7
Large SMSA	19,322	20.6	2.7	18.0	3.0	2.5	1.1	4.1	1.2	5.1	1.4	8.1	0.8
Core counties	16,314	22.1	2.9	19.2	3.1	2.7	1.1	4.3	1.2	5.5	1.5	8.6	0.9
Fringe counties	3,008	12.9	1.4	11.5	2.3	1.6	0.9	3.1	0.7	3.3	0.9	5.2	0.0
Medium SMSA	7,230	15.6	1.8	13.9	2.6	1.6	0.8	2.7	0.9	4.2	1.2	6.1	0.6
Other SMSA	2,532	12.5	1.0	11.6	2.7	1.2	0.6	2.1	0.8	3.5	1.0	5.3	–
Outside SMSA	7,261	8.7	0.6	8.0	3.2	0.7	0.3	1.2	0.4	1.9	0.8	2.6	0.0
Adjacent to SMSA	2,989	8.7	0.7	8.0	3.1	0.7	0.3	1.2	0.4	2.1	0.8	2.6	0.0
Urbanized	1,933	9.6	0.8	8.8	2.8	0.9	0.4	1.5	0.6	2.6	0.9	3.2	0.0
Less urbanized	895	7.2	0.5	6.7	3.5	0.5	0.1	0.5	0.2	1.2	0.7	1.6	–
Thinly populated	162	5.6	0.4	5.2	4.1	0.1	–	–	–	–	0.3	0.7	–
Not adjacent to SMSA	4,272	8.7	0.6	8.1	3.3	0.7	0.3	1.2	0.4	1.8	0.9	2.6	–
Urbanized	1,762	10.7	0.6	10.1	2.9	1.0	0.5	1.8	0.6	2.8	1.1	4.0	–
Less urbanized	1,950	7.8	0.6	7.3	3.6	0.5	0.2	0.8	0.2	1.2	0.8	1.8	–
Thinly populated	560	5.1	0.4	4.6	3.4	0.3	0.1	0.3	0.0	0.2	0.2	0.6	–

[1] Includes 24,748 physicians in other professional activities and 13,744 physicians not classified.

NOTE: Excludes Alaska.

SOURCE: Calculated from: Roback, G.: Distribution of Physicians in the U.S., 1973. Copyrighted 1975. By permission of the American Medical Association.

Table 117. Active non-Federal office-based physicians (M.D.) per 10,000 population, according to specialty, geographic region, and location: United States, 1973

(Data are based on reporting by physicians)

Geographic region and location	Resident population in thousands	Specialty								
		All specialties	General practice	Internal medicine	Pediatrics		Obstetrics and gynecology		General surgery	All other
					Based on resident population	Based on population 0-14 years	Based on resident population	Based on female population 15-44 years		
		Active non-Federal office-based physicians per 10,000 population								
United States	209,517	9.4	2.2	1.2	0.5	2.0	0.7	3.2	0.9	3.9
Within SMSA	152,875	10.6	2.1	1.4	0.6	2.4	0.8	3.8	1.0	4.7
Large SMSA	86,248	11.5	2.1	1.7	0.7	2.7	0.9	4.1	1.0	5.1
Core counties	59,799	12.7	2.3	1.9	0.7	2.9	1.0	4.5	1.1	5.8
Fringe counties	26,449	8.7	1.8	1.2	0.7	2.4	0.7	3.2	0.7	3.6
Medium SMSA	48,389	9.5	2.0	1.2	0.6	2.1	0.7	3.4	0.9	4.1
Other SMSA	18,238	9.4	1.9	1.1	0.5	2.0	0.7	3.3	0.9	4.2
Outside SMSA	56,642	6.1	2.7	0.5	0.3	1.0	0.3	1.7	0.7	1.6
Adjacent to SMSA	29,380	5.9	2.6	0.5	0.3	1.0	0.3	1.7	0.7	1.5
Urbanized	13,306	7.4	2.4	0.8	0.4	1.6	0.6	2.6	0.8	2.5
Less urbanized	13,696	5.0	2.9	0.3	0.1	0.5	0.2	1.0	0.6	0.9
Thinly populated	2,378	3.2	2.6	0.1	0.0	0.1	0.0	0.1	0.3	0.2
Not adjacent to SMSA	27,262	6.4	2.7	0.6	0.3	1.0	0.3	1.6	0.7	1.8
Urbanized	8,669	8.8	2.2	1.0	0.5	1.9	0.6	2.8	1.0	3.5
Less urbanized	14,088	5.8	3.1	0.4	0.2	0.7	0.2	1.2	0.7	1.2
Thinly populated	4,505	3.5	2.6	0.2	0.0	0.2	0.1	0.3	0.3	0.3
Northeast	49,545	10.7	2.1	1.6	0.7	2.7	0.8	3.9	1.0	4.5
Within SMSA	42,622	11.2	2.1	1.7	0.7	2.8	0.9	4.1	1.0	4.8
Large SMSA	27,544	12.1	2.1	1.9	0.8	3.2	0.9	4.3	1.0	5.4
Core counties	17,716	12.6	2.1	2.0	0.7	3.1	1.0	4.4	1.1	5.7
Fringe counties	9,829	11.2	2.1	1.7	0.9	3.3	0.9	4.1	0.9	4.7
Medium SMSA	13,236	9.6	2.1	1.4	0.6	2.3	0.8	3.6	1.0	3.9
Other SMSA	1,842	9.6	1.9	1.3	0.6	2.1	0.7	3.4	1.1	4.0
Outside SMSA	6,923	7.6	2.4	0.8	0.4	1.5	0.5	2.4	0.9	2.6
Adjacent to SMSA	5,085	7.4	2.4	0.8	0.4	1.5	0.5	2.5	0.9	2.4
Urbanized	3,870	7.6	2.3	0.8	0.4	1.7	0.6	2.8	0.9	2.5
Less urbanized	1,130	6.9	2.5	0.8	0.2	0.9	0.3	1.7	0.9	2.1
Thinly populated	86	5.5	3.9	0.2	0.1	0.5	–	–	0.5	0.8
Not adjacent to SMSA	1,838	8.3	2.4	1.0	0.4	1.5	0.5	2.3	1.0	2.9
Urbanized	840	9.7	2.1	1.2	0.5	1.7	0.6	2.8	1.2	4.2
Less urbanized	856	7.1	2.7	0.8	0.3	1.2	0.3	1.7	0.9	2.0
Thinly populated	142	7.5	2.7	1.1	0.6	2.1	0.5	2.5	1.1	1.5

Table 117. Active non-Federal office-based physicians (M.D.) per 10,000 population, according to specialty, geographic region, and location: United States, 1973—Continued

(Data are based on reporting by physicians)

Geographic region and location	Resident population in thousands	Specialty								
		All specialties	General practice	Internal medicine	Pediatrics		Obstetrics and gynecology		General surgery	All other
					Based on resident population	Based on population 0-14 years	Based on resident population	Based on female population 15-44 years		
		Active non-Federal office-based physicians per 10,000 population								
North Central	57,461	8.2	2.2	1.0	0.4	1.5	0.6	2.7	0.8	3.2
Within SMSA	39,511	9.3	2.0	1.2	0.5	1.8	0.7	3.2	0.9	4.0
Large SMSA	23,887	9.4	1.9	1.3	0.6	2.0	0.8	3.5	0.9	4.0
Core counties	16,062	10.9	2.0	1.6	0.6	2.4	0.9	4.0	1.0	4.7
Fringe counties	7,825	6.5	1.6	0.8	0.4	1.4	0.5	2.5	0.6	2.5
Medium SMSA	10,138	8.5	2.1	1.0	0.4	1.4	0.6	2.8	0.8	3.6
Other SMSA	5,485	9.8	2.0	1.2	0.5	1.9	0.7	2.9	0.9	4.5
Outside SMSA	17,950	5.9	2.8	0.5	0.2	0.7	0.3	1.3	0.7	1.4
Adjacent to SMSA	9,054	5.7	2.8	0.4	0.2	0.8	0.3	1.4	0.7	1.3
Urbanized	3,886	7.3	2.5	0.7	0.4	1.4	0.5	2.3	0.8	2.4
Less urbanized	4,556	4.7	3.1	0.3	0.1	0.3	0.1	0.7	0.5	0.6
Thinly populated	612	3.3	2.6	0.1	0.0	0.1	–	–	0.3	0.2
Not adjacent to SMSA	8,896	6.0	2.8	0.5	0.2	0.7	0.2	1.3	0.7	1.5
Urbanized	2,208	8.9	2.1	1.0	0.5	1.8	0.5	2.5	1.0	3.8
Less urbanized	4,972	5.7	3.3	0.4	0.1	0.5	0.2	1.0	0.7	1.0
Thinly populated	1,716	3.2	2.6	0.1	0.0	0.0	0.0	0.1	0.2	0.2
South	66,167	8.2	2.0	0.9	0.5	1.8	0.7	3.0	0.8	3.3
Within SMSA	41,659	9.8	1.7	1.2	0.6	2.3	0.8	3.8	0.9	4.4
Large SMSA	15,495	10.8	1.8	1.5	0.7	2.6	1.0	4.3	1.0	4.9
Core counties	9,708	13.0	1.9	1.8	0.8	2.9	1.2	5.1	1.2	6.2
Fringe counties	5,788	7.0	1.5	0.9	0.6	2.2	0.7	2.9	0.6	2.7
Medium SMSA	17,786	9.5	1.8	1.1	0.6	2.2	0.8	3.4	0.9	4.3
Other SMSA	8,379	8.9	1.7	1.0	0.6	2.1	0.8	3.5	0.9	3.9
Outside SMSA	24,508	5.5	2.5	0.5	0.3	1.0	0.3	1.6	0.6	1.3
Adjacent to SMSA	12,251	5.1	2.5	0.4	0.2	0.9	0.3	1.5	0.6	1.1
Urbanized	3,617	7.0	2.2	0.7	0.5	1.7	0.6	2.8	0.8	2.3
Less urbanized	7,116	4.6	2.7	0.3	0.2	0.6	0.2	1.0	0.5	0.8
Thinly populated	1,518	2.9	2.3	0.1	0.0	0.1	0.0	0.1	0.2	0.2
Not adjacent to SMSA	12,257	5.9	2.5	0.5	0.3	1.0	0.4	1.8	0.7	1.5
Urbanized	3,859	8.1	2.0	0.9	0.5	2.0	0.7	3.1	1.0	3.1
Less urbanized	6,310	5.3	2.8	0.4	0.2	0.8	0.3	1.4	0.7	1.0
Thinly populated	2,087	3.3	2.4	0.2	0.0	0.1	0.1	0.3	0.3	0.3

Table 117. Active non-Federal office-based physicians (M.D.) per 10,000 population, according to specialty, geographic region, and location: United States, 1973—Continued

(Data are based on reporting by physicians)

Geographic region and location	Resident population in thousands	Specialty								
		All specialties	General practice	Internal medicine	Pediatrics		Obstetrics and gynecology		General surgery	All other
					Based on resident population	Based on population 0-14 years	Based on resident population	Based on female population 15-44 years		
		Active non-Federal office-based physicians per 10,000 population								
West	36,344	11.8	2.8	1.4	0.6	2.4	0.8	3.7	1.0	5.2
Within SMSA	29,083	12.8	2.7	1.6	0.7	2.7	0.9	4.1	1.1	5.8
Large SMSA	19,322	13.9	2.8	1.8	0.8	3.1	1.0	4.4	1.1	6.3
Core counties	16,314	14.5	2.9	1.9	0.8	3.1	1.0	4.7	1.2	6.7
Fringe counties	3,008	10.2	2.2	1.3	0.8	2.8	0.7	3.0	0.7	4.5
Medium SMSA	7,230	10.9	2.3	1.2	0.6	2.2	0.8	3.6	0.9	5.0
Other SMSA	2,532	10.5	2.5	1.1	0.5	2.0	0.7	3.4	1.0	4.6
Outside SMSA	7,261	7.6	3.1	0.6	0.3	1.1	0.4	1.9	0.8	2.4
Adjacent to SMSA	2,989	7.5	3.0	0.7	0.3	1.1	0.4	2.1	0.7	2.3
Urbanized	1,933	8.3	2.7	0.8	0.4	1.4	0.6	2.6	0.8	2.9
Less urbanized	895	6.3	3.5	0.4	0.1	0.5	0.2	1.2	0.7	1.4
Thinly populated	162	4.5	3.8	0.1	–	–	–	–	0.2	0.4
Not adjacent to SMSA	4,272	7.7	3.2	0.6	0.3	1.1	0.4	1.7	0.8	2.4
Urbanized	1,762	9.7	2.9	0.9	0.5	1.8	0.6	2.7	1.0	3.8
Less urbanized	1,950	6.9	3.5	0.5	0.2	0.8	0.2	1.2	0.8	1.6
Thinly populated	560	4.4	3.3	0.2	0.1	0.2	0.0	0.2	0.2	0.5

NOTE: Excludes Alaska. Excludes 24,748 physicians in other professional activities, 13,744 not classified, and 73,716 in hospital-based practice.

SOURCE: Calculated from: Roback, G.: Distribution of Physicians in the U.S., 1973. Copyrighted 1975. By permission of the American Medical Association.

Table 118. Active non-Federal physicians (M.D.), number per 10,000 population, and percent increase in number, according to geographic division and State: United States, 1968 and 1974

(Data are based on reporting by physicians)

Geographic division and State	Year		Year		Percent increase in number of physicians, 1968-74
	1968	1974	1968	1974	
	Number of active non-Federal physicians		Rate per 10,000 resident population		
United States	264,287	321,089	13.2	15.2	22.6
New England:					
Maine	932	1,201	9.5	11.5	28.9
New Hampshire	846	1,135	12.1	14.0	34.2
Vermont	700	839	16.5	17.9	19.9
Massachusetts	10,536	12,546	19.3	21.6	19.1
Rhode Island	1,277	1,610	14.0	17.2	26.1
Connecticut	5,117	6,230	17.3	20.2	21.8
Middle Atlantic:					
New York	38,902	42,830	21.5	23.6	10.1
New Jersey	9,015	11,448	12.7	15.6	27.0
Pennsylvania	16,356	18,347	13.9	15.5	12.2
East North Central:					
Ohio	13,003	14,633	12.3	13.6	12.5
Indiana	4,753	5,586	9.4	10.5	17.5
Illinois	13,954	16,835	12.7	15.1	20.6
Michigan	10,049	11,987	11.5	13.2	19.3
Wisconsin	4,702	5,713	11.1	12.5	21.5
West North Central:					
Minnesota	5,174	6,166	14.2	15.7	19.2
Iowa	2,696	2,942	9.7	10.3	9.1
Missouri	5,495	6,408	11.9	13.4	16.6
North Dakota	542	600	8.6	9.4	10.7
South Dakota	501	529	7.6	7.8	5.6
Nebraska	1,503	1,840	10.4	11.9	22.4
Kansas	2,324	2,798	10.1	12.3	20.4
South Atlantic:					
Delaware	652	794	12.2	13.9	21.8
Maryland	6,170	8,130	16.4	19.9	31.8
District of Columbia	2,773	3,103	34.3	42.9	11.9
Virginia	4,853	6,426	10.6	13.1	32.4
West Virginia	1,655	1,991	9.2	11.1	20.3
North Carolina	4,947	6,240	9.7	11.6	26.1
South Carolina	2,004	2,803	7.5	10.1	39.9
Georgia	4,361	5,652	9.5	11.6	29.6
Florida	7,558	11,789	12.3	14.6	56.0
East South Central:					
Kentucky	3,033	3,698	9.4	11.0	21.9
Tennessee	4,231	5,244	10.6	12.7	23.9
Alabama	2,754	3,333	7.7	9.3	21.0
Mississippi	1,653	2,007	7.1	8.6	21.4
West South Central:					
Arkansas	1,560	1,892	7.9	9.2	21.3
Louisiana	4,015	4,596	10.8	12.2	14.5
Oklahoma	2,361	2,728	9.4	10.1	15.5
Texas	11,463	14,616	10.4	12.1	27.5

Table 118. Active non-Federal physicians (M.D.), number per 10,000 population, and percent increase in number, according to geographic division and State: United States, 1968 and 1974—Continued

(Data are based on reporting by physicians)

Geographic division and State	Year		Year		Percent increase in number of physicians, 1968-74
	1968	1974	1968	1974	
	Number of active non-Federal physicians		Rate per 10,000 resident population		
Mountain:					
Montana	641	767	9.2	10.4	19.7
Idaho	596	738	8.5	9.2	23.8
Wyoming	286	347	9.1	9.7	21.3
Colorado	3,340	4,215	16.3	16.9	26.2
New Mexico	918	1,280	9.1	11.4	39.4
Arizona	1,902	3,260	11.4	15.1	71.4
Utah	1,298	1,697	12.6	14.5	30.7
Nevada	446	643	9.9	11.2	44.2
Pacific:					
Washington	4,318	5,295	13.2	15.2	22.6
Oregon	2,643	3,458	13.2	15.3	30.8
California	32,334	40,526	16.8	19.4	25.3
Alaska	180	288	6.6	8.5	60.0
Hawaii	965	1,310	12.4	15.5	35.8

SOURCE: National Center for Health Statistics: Health Resources Statistics: Health Manpower and Health Facilities, 1975. DHEW Pub. No. (HRA) 76-1509. Health Resources Administration. Washington. U.S. Government Printing Office, 1976.

Table 119. Licensed dentists per 10,000 population, according to geographic region and location: United States, 1974

(Data are based on reporting by State licensing boards)

Location	Geographic region				
	All regions	Northeast	North Central	South	West
	Number of licensed dentists per 10,000 resident population				
United States	5.4	6.9	5.2	4.1	6.5
Within SMSA	6.0	7.2	5.6	4.8	6.9
Large SMSA	6.7	7.9	6.1	5.4	7.3
Core counties	6.7	7.8	5.5	5.9	7.4
Fringe counties	6.8	8.3	7.3	4.5	6.7
Medium SMSA	5.2	5.9	4.8	4.8	6.0
Other SMSA	4.8	5.6	5.2	4.0	6.6
Outside SMSA	3.7	4.8	4.2	2.8	4.8
Adjacent to SMSA	3.6	5.0	4.0	2.7	4.8
Urbanized	4.4	5.2	4.6	3.4	4.8
Less urbanized	3.2	4.1	3.7	2.5	5.0
Thinly populated	2.2	5.1	3.1	1.7	3.5
Not adjacent to SMSA	3.7	4.6	4.3	2.8	4.9
Urbanized	4.4	4.4	4.8	3.7	5.4
Less urbanized	3.6	4.5	4.4	2.6	4.8
Thinly populated	2.8	5.7	3.2	1.9	3.8

NOTE: Excludes Pennsylvania and Alaska. Dentist register data for Pennsylvania are not available for 1974.

SOURCE: Health Resources Administration: Data from the Bureau of Health Manpower, Division of Dentistry.

Table 120. Civilian dentists active in patient care, rate per 10,000 population, and percent increase in number, according to geographic division and State: United States, 1971, 1974, and 1975

(Data are based on reporting by dentists and dental schools)

Geographic division and State	Year			Year			Period	
	1971	1974	1975	1971	1974	1975	1971-74	1971-75
	Number of civilian dentists active in patient care			Rate per 10,000 resident population			Percent change in number of dentists	
United States	97,210	103,030	106,740	4.6	4.9	5.0	6.0	9.8
New England	6,215	6,899	7,147	5.1	5.7	5.9	11.0	15.0
Maine	356	373	386	3.5	3.6	3.6	4.8	8.4
New Hampshire	316	366	379	4.2	4.5	4.6	15.8	19.9
Vermont	175	189	196	3.9	4.0	4.2	8.0	12.0
Massachusetts	3,072	3,555	3,683	5.3	6.1	6.3	15.7	19.9
Rhode Island	432	427	442	4.5	4.6	4.8	−1.2	2.3
Connecticut	1,864	1,989	2,061	6.1	6.4	6.7	6.7	10.6
Middle Atlantic	22,843	23,972	24,836	6.1	6.4	6.7	4.9	8.7
New York	12,595	13,313	13,793	6.9	7.4	7.6	5.7	9.5
New Jersey	4,121	4,158	4,308	5.6	5.7	5.9	0.9	4.5
Pennsylvania	6,127	6,501	6,735	5.2	5.5	5.7	6.1	9.9
East North Central	18,718	19,218	19,910	4.6	4.7	4.9	2.7	6.4
Ohio	4,475	4,758	4,929	4.2	4.4	4.6	6.3	10.1
Indiana	2,078	2,104	2,180	4.0	3.9	4.1	1.3	4.9
Illinois	5,591	5,666	5,870	5.0	5.1	5.3	1.3	5.0
Michigan	4,354	4,363	4,520	4.9	4.8	4.9	0.2	3.8
Wisconsin	2,220	2,327	2,411	5.0	5.1	5.2	4.8	8.6
West North Central	7,831	7,950	8,236	4.7	4.8	4.9	1.5	5.2
Minnesota	2,258	2,296	2,379	5.9	5.9	6.1	1.7	5.4
Iowa	1,327	1,317	1,364	4.6	4.6	4.8	−0.8	2.8
Missouri	2,015	2,007	2,079	4.3	4.2	4.4	−0.4	3.2
North Dakota	236	240	249	3.8	3.8	3.9	1.7	5.5
South Dakota	234	242	251	3.5	3.5	3.7	3.4	7.3
Nebraska	822	846	876	5.5	5.5	5.7	2.9	6.6
Kansas	939	1,002	1,038	4.2	4.4	4.6	6.7	10.5
South Atlantic	11,038	12,395	12,840	3.4	3.7	3.8	12.3	16.3
Delaware	216	231	239	3.9	4.0	4.1	6.9	10.6
Maryland	1,611	1,884	1,952	4.0	4.6	4.8	16.9	21.2
District of Columbia	665	590	611	8.8	8.2	8.5	−11.3	−8.1
Virginia	1,798	1,957	2,027	3.8	4.0	4.1	8.8	12.7
West Virginia	604	608	630	3.4	3.4	3.5	0.7	4.3
North Carolina	1,508	1,617	1,675	2.9	3.0	3.1	7.2	11.1
South Carolina	658	778	806	2.5	2.8	2.9	18.2	22.5
Georgia	1,373	1,612	1,670	2.9	3.3	3.4	17.4	21.6
Florida	2,605	3,118	3,230	3.7	3.9	3.9	19.7	24.0
East South Central	4,242	4,493	4,654	3.2	3.4	3.4	5.9	9.7
Kentucky	1,147	1,219	1,263	3.5	3.6	3.7	6.3	10.1
Tennessee	1,452	1,624	1,682	3.6	3.9	4.0	11.8	15.8
Alabama	1,025	1,058	1,096	2.9	3.0	3.0	3.2	6.9
Mississippi	618	592	613	2.8	2.5	2.6	−4.2	−0.8
West South Central	7,097	7,491	7,761	3.5	3.6	3.7	5.6	9.4
Arkansas	607	633	656	3.1	3.1	3.1	4.3	8.1
Louisiana	1,276	1,419	1,470	3.5	3.8	3.9	11.2	15.2
Oklahoma	947	995	1,031	3.6	3.7	3.8	5.1	8.9
Texas	4,267	4,444	4,604	3.7	3.7	3.8	4.1	7.9

Table 120. Civilian dentists active in patient care, rate per 10,000 population, and percent increase in number, according to geographic division and State: United States, 1971, 1974, and 1975—Continued

(Data are based on reporting by dentists and dental schools)

Geographic division and State	Year			Year			Period	
	1971	1974	1975	1971	1974	1975	1971-74	1971-75
	Number of civilian dentists active in patient care			Rate per 10,000 resident population			Percent change in number of dentists	
Mountain	3,839	4,124	4,273	4.2	4.4	4.4	7.4	11.3
Montana	316	337	349	4.5	4.6	4.7	6.6	10.4
Idaho	330	340	352	4.5	4.3	4.3	3.0	6.7
Wyoming	156	167	173	4.6	4.7	4.6	7.1	10.9
Colorado	1,154	1,226	1,270	5.1	4.9	5.0	6.2	10.1
New Mexico	370	351	364	3.5	3.1	3.2	—5.1	—1.6
Arizona	710	797	826	3.8	3.7	3.7	12.3	16.3
Utah	591	659	683	5.4	5.6	5.7	11.5	15.6
Nevada	212	247	256	4.1	4.3	4.3	16.5	20.8
Pacific	15,387	16,488	17,083	5.6	5.9	6.1	7.2	11.0
Washington	1,945	2,150	2,227	5.7	6.2	6.3	10.5	14.5
Oregon	1,398	1,412	1,463	6.5	6.2	6.4	1.0	4.6
California	11,491	12,337	12,783	5.7	5.9	6.0	7.4	11.2
Alaska	88	121	125	2.8	3.6	3.6	37.5	42.0
Hawaii	465	468	485	5.8	5.5	5.6	0.6	4.3

NOTE: Active in patient care = providing patient care as the primary professional activity.

SOURCES: National Center for Health Statistics: Health Resources Statistics: Health Manpower and Health Facilities, 1972-73, DHEW Pub. No. (HSM) 73-1509, Health Services and Mental Health Administration, Washington, U.S. Government Printing Office, 1973; Health Resources Administration: Unpublished data from the Bureau of Health Manpower, Division of Dentistry.

Table 121. Selected practitioners per 10,000 population, according to geographic division and State: United States, selected years
(Data are based on reporting by practitioners or on registers)

Geographic division and State	Type of practitioner							
	Registered nurses employed in nursing (1972)	Optometrists (1973)	Active pharmacists (1973)	Active chiropractors (1974)	Dental hygienists (1974)	Active podiatrists (1974)	Veterinarians (1974)	Registered radiologic technologists (1976)
	Number per 10,000 resident population							
United States	37.4	1.0	6.3	0.8	2.6	0.3	1.4	4.6
New England:								
Maine	45.7	1.3	5.1	0.3	3.5	0.2	1.2	7.0
New Hampshire	56.9	1.0	4.5	2.2	4.5	0.3	1.5	6.5
Vermont	61.2	1.0	4.8	0.9	7.9	0.2	2.5	7.1
Massachusetts	61.8	1.5	8.6	0.4	4.6	0.6	0.8	5.7
Rhode Island	47.8	1.4	5.6	0.4	3.3	0.6	0.6	5.9
Connecticut	57.0	1.0	6.8	0.4	6.8	0.6	1.0	6.9
Middle Atlantic:								
New York	48.5	1.0	7.7	0.8	4.1	0.7	0.9	3.3
New Jersey	42.0	1.0	5.5	0.8	2.5	0.5	0.9	4.2
Pennsylvania	49.4	1.1	8.9	0 8	---	0.6	1.0	5.1
East North Central:								
Ohio	37.4	1.0	6.8	0.5	2.1	0.5	1.3	5.3
Indiana	29.4	1.1	6.2	0.6	1.8	0.2	1.7	4.7
Illinois	39.3	1.6	5.5	0.6	1.9	0.5	1.3	4.8
Michigan	32.9	0.9	6.2	0.9	3.1	0.3	1.3	4.5
Wisconsin	41.7	1.0	5.2	1.1	3.6	0.3	1.7	6.4
West North Central:								
Minnesota	46.8	1.0	6.1	1.2	3.5	0.2	2.3	6.6
Iowa	41.4	1.2	5.6	2.1	2.0	0.3	4.4	5.0
Missouri	31.0	1.0	5.6	2.1	1.8	0.2	1.9	4.5
North Dakota	45.1	1.3	7.0	1 1	2.4	0.1	1.9	5.0
South Dakota	44.6	1.4	6.8	1.6	2.2	0.2	3.5	4.9
Nebraska	43.6	1.1	6.6	0.5	1.5	0.2	3.2	4.9
Kansas	39.7	1.1	6.5	2.5	2.7	0.2	3.1	5.3
South Atlantic:								
Delaware	51.1	0.8	4.5	0.3	4.0	0.3	1.4	5.0
Maryland	36.0	0.6	5.8	0.4	2.4	0.3	1.9	5.0
District of Columbia	66.4	1.0	7.6	0.1	7.9	0.7	1.0	2.2
Virginia	35.0	0.7	4.3	0.2	1.5	0.1	1.3	4.2
West Virginia	33.6	0.8	4.1	0.2	2.4	0.2	0.6	4.3
North Carolina	31.8	0.7	4.2	0.5	2.4	0.1	0.9	3.8
South Carolina	29.2	0.7	5.5	0.7	1.5	0.1	0.8	3.9
Georgia	26.2	0.6	6.9	0.5	3.7	0.1	1.5	3.8
Florida	35.1	1.0	5.7	1.0	3.4	0.3	1.4	4.7

Table 121. Selected practitioners per 10,000 population, according to geographic division and State: United States, selected years—Continued
(Data are based on reporting by practitioners or on registers)

Geographic division and State	Type of practitioner							
	Registered nurses employed in nursing (1972)	Optometrists (1973)	Active pharmacists (1973)	Active chiropractors (1974)	Dental hygienists (1974)	Active podiatrists (1974)	Veterinarians (1974)	Registered radiologic technologists (1976)
	Number per 10,000 resident population							
East South Central:								
Kentucky	25.6	0.7	5.4	1.2	1.5	0.2	1.2	3.5
Tennessee	23.2	1.0	6.0	0.3	2.4	0.1	1.0	3.8
Alabama	22.1	0.5	6.5	0.7	3.6	0.1	1.5	3.5
Mississippi	22.5	0.6	5.2	0.9	0.5	0.0	1.1	2.6
West South Central:								
Arkansas	19.0	1.1	5.4	0.6	1.3	0.1	1.3	3.7
Louisiana	24.4	0.6	6.4	0.4	1.3	0.1	1.0	3.8
Oklahoma	25.0	1.1	8.2	1.2	1.5	0.2	2.0	4.0
Texas	24.0	0.8	5.4	0.9	1.5	0.2	1.7	3.8
Mountain:								
Montana	45.1	1.5	6.2	1.3	2.0	0.2	3.0	4.9
Idaho	33.1	1.2	6.6	0.7	2.3	0.2	2.7	4.8
Wyoming	42.6	1.1	5.8	1.2	3.0	0.2	3.0	4.8
Colorado	49.4	0.9	6.7	0.9	4.4	0.3	2.8	7.3
New Mexico	25.9	0.8	5.5	1.0	2.3	0.2	1.6	3.6
Arizona	38.1	0.9	5.7	1.1	2.7	0.3	1.5	4.7
Utah	28.5	0.8	6.6	0.6	1.1	0.3	1.3	4.1
Nevada	32.6	1.0	6.0	0.8	2.9	0.3	1.8	5.4
Pacific:								
Washington	41.4	1.3	7.3	1.1	3.4	0.2	2.0	4.3
Oregon	40.1	1.5	6.1	0.8	3.9	0.2	1.8	4.9
California	33.3	1.4	6.1	1.0	2.8	0.4	1.4	4.6
Alaska	42.2	0.5	2.9	0.5	1.7	0.1	1.2	3.6
Hawaii	38.0	1.1	3.2	0.3	3.3	0.1	0.9	3.2

SOURCES: Data for chiropractors, optometrists, pharmacists, podiatrists, registered nurses, veterinarians—National Center for Health Statistics: Health Resources Statistics: Health Manpower and Health Facilities, 1975, DHEW Pub. No. (HRA) 76-1509, Health Resources Administration, Washington, U.S. Government Printing Office, 1976. Data for dental hygienists and registered radiologic technologists—Division of Health Manpower and Facilities Statistics, National Center for Health Statistics.

Table 122. Percent of active non-Federal office-based physicians (M.D.) 65 years of age and over, according to geographic region and location: United States, 1973

(Data are based on reporting by physicians)

Location	Geographic region				
	All regions	Northeast	North Central	South	West
	Percent of physicians 65 years of age and over				
United States	17.0	23.2	17.4	13.9	12.7
Within SMSA	16.8	23.2	17.0	13.1	12.6
Large SMSA	17.8	24.1	18.0	12.8	12.8
Core counties	19.1	27.7	19.2	13.9	13.6
Fringe counties	13.5	16.9	13.7	9.2	7.1
Medium SMSA	15.9	21.2	15.8	13.6	12.3
Other SMSA	13.9	19.9	14.7	12.7	11.8
Outside SMSA	17.6	23.4	19.0	16.3	12.8
Adjacent to SMSA	18.7	23.7	19.8	16.6	13.4
Urbanized	17.9	24.4	17.7	14.3	12.3
Less urbanized	19.1	20.2	22.1	17.6	15.7
Thinly populated	24.5	42.6	25.9	22.7	20.5
Not adjacent to SMSA	16.6	22.7	18.2	16.0	12.3
Urbanized	14.2	17.9	16.2	13.7	11.0
Less urbanized	18.0	27.8	19.1	17.3	13.3
Thinly populated	20.6	31.1	21.2	20.3	15.5

NOTE: Excludes Alaska.

SOURCE: Calculated from: Roback, G.: Distribution of Physicians in the U.S., 1973. Copyrighted 1975. By permission of the American Medical Association.

B. Health Facilities

Efforts to influence the number and distribution of health care facilities have been a major thrust of numerous legislative acts and health programs over the past three decades, beginning with the Hill-Burton Program in 1947. These activities have been integrated under the National Health Planning and Resources Development Act of 1974, which requires that local health planning agencies indicate local needs and priorities, and the types of services and facilities to be created, expanded, or phased out.

Inpatient health care facilities comprise both short- and long-stay hospitals as well as nursing and personal care homes. The number of hospitals and the number of hospital beds decreased in recent years. This decline in hospital beds has been entirely within the specialty hospitals, with an actual increase occurring in the number of general medical and surgical hospital beds. Between 1969 and 1973 the total number of hospital beds decreased by 7.5 percent, but the number of general medical and surgical hospital beds increased by 4.1 percent. The number of nursing and personal care homes, on the other hand, increased by 15.5 percent between 1969 and 1973, along with an increase of 40.7 percent in the number of beds and comparable increase in the number of employees in these homes. Although the number of psychiatric hospital employees in these hospitals did not drop in recent years, the number of beds and of patients each declined by about 30 percent.

Hospitals can be classified in a number of ways; therefore, the specific classification scheme should be considered when comparing statistics on hospitals. In most of the tables in this discussion, hospitals are classified by length of stay (i.e., short-stay hospitals or long-stay hospitals) and by type of ownership (i.e., Federal or non-Federal). Since this distinction was not made in many of the tables in *Health United States, 1975,* the reader should use caution when comparing data from the two reports.

In 1974 the 6,693 short-stay hospitals in the country provided a total of just over 1 million beds. One-third of these hospitals were government owned, primarily by State and local governments, while over half were nonprofit hospitals. The nonprofit hospitals contained 63.3 percent of all short-stay hospital beds. Only about 1 percent of all short-stay hospital beds were in short-stay psychiatric hospitals. The 677 long-stay hospitals in 1974 contained about 370,000 beds. Two-thirds of these hospitals and over 90 percent of the long-stay hospital beds were government owned, again primarily by State and local governments. Over half of the long-stay hospitals were psychiatric hospitals, which contained over three-quarters of all long-stay beds.

During the past 30 years over $50 billion was spent on health facilities construction and modernization. While only between $3 and $4 billion of this total were derived directly from the Hill-Burton Program, those funds appear to have been a factor in achieving a more equitable distribution of the short-stay hospital bed supply across the country. A number of States that had very low bed-population ratios in 1948, such as Mississippi, Alabama, Arkansas, and Tennessee, now have near or above the national average of 4.54 short-stay (excluding psychiatric) non-Federal beds per 1,000 population. However, in 1974 considerable differences still existed in the bed-population ratios, ranging from a low of 2.2 in Alaska and 3.2 for Utah, Hawaii, and Maryland to 6.9 in North Dakota and 7.0 in the District of Columbia. This extremely high rate in the District of Columbia compensated for the very low rate in Maryland, since much of suburban Washington receives its hospital care in the District of Columbia. The highest ratios of short-stay hospital beds to population were generally found in the West North Central States. These States are characterized by relatively low physician-population ratios. This indicated different patterns of health care with greater reliance on inpatient care relative to ambulatory care in the West North Central States than in other sections of the country.

The distribution of psychiatric beds, both short- and long-stay, also varied considerably by State, with California reporting 0.65 beds per 1,000 population (although this was not the lowest State ratio), while New York had 2.66 psychiatric beds per 1,000 population.

Not only did the distribution of non-Federal short-stay hospital beds between the States become more equitable, but the distribution of these beds by degree of urbanization also improved. When hospital beds are classified by the type of county in which they are located,

counties that are not adjacent to standard metropolitan statistical areas (SMSA's) have slightly more non-Federal short-stay beds per 1,000 population than did the nonadjacent and metropolitan counties (4.74 vs. 3.99 and 4.63). This higher ratio of hospital beds in the less urban areas is in contrast to the very low physician-population ratios in these areas. Inpatient care becomes an alternative form of medical care in areas with a paucity of physicians, as illustrated above with the data from the West North Central States. The smallest metropolitan areas had a higher ratio of beds to population than the largest ones.

One of the many factors related to the spiraling cost of hospital care is the increase in the number of hospital employees per patient. In 1974 there were 336 full-time equivalent employees for every 100 patients in non-Federal short-stay hospitals. This is about twice the number of employees per patient as 30 years ago.

More hospitals are offering a wider range of medical services than in the past. Services such as open-heart surgery, intensive cardiac care units, radioisotopic facilities, radium therapy, and renal dialysis have all contributed to the increasing cost of hospital care. Long-stay and short-stay hospitals offer quite a different mix of services, with the long-stay hospitals more likely to provide dental care, occupational therapy, podiatric care, psychiatric services, rehabilitation, social work services, and volunteer services.

The growth of the nursing home and long-term care sector was one of the major health developments in the past decade. This growth coincided with modifications in our health care financing system. During the past decade, from 1963 to 1973, the total number of beds in nursing and personal care facilities more than doubled. The greatest rate of increase was in the area of nursing care homes, with 3½ times as many nursing care beds in 1973 as a decade earlier.

More than 85 percent of nursing home beds were in facilities certified for Medicare and/or Medicaid patients. Those not certified were generally smaller homes, which tend to have lower ratios of nursing staff to beds than certified homes. As with hospital beds, the distribution of nursing home beds was uneven between States, ranging from less than 30 beds per 1,000 persons 65 years of age and older in Florida and West Virginia to over 100 beds in Wisconsin and Minnesota. The very low ratio of nursing home beds in Florida, with its large elderly population, may be accounted for by the availability of suitable alternative living arrangements. In general, the Southeastern States had the lowest bed-population ratios, while the West North Central, New England, and Pacific States had the highest ratios.

More than 3,000 mental health facilities across the country provide a wide variety of mental health services, on both an inpatient and outpatient basis. Half of all psychiatric hospitals provide outpatient as well as inpatient care, and many facilities provide emergency mental health services. The marked increase in the use of outpatient facilities over the past 20 years has been accompanied by a decline in the number of psychiatric beds and inpatients. This changing pattern of care has been brought about in large part by the increased use of drugs which permit treatment on an outpatient basis, as well as by a growing availability of mental health care in the community. Emergency mental health care is offered by all classes of mental health facilities, although most residential treatment centers for children do not offer emergency services. Emergency mental health services include walk-in care, telephone consultations, suicide prevention, and home visits. With the exception of home care, most facilities that offer emergency services provide them 24 hours a day, 7 days a week.

Table 123. Inpatient health facilities, employees, beds, and patients, according to type of facility: United States, 1969, 1971, and 1973

(Data are based on reporting by facilities)

Type of facility	1969	1971	1973	1969	1971	1973
	Number of facilities			Number of employees [1]		
All facilities	31,055	34,451	34,108	3,447,085	3,787,226	4,014,523
Hospitals	7,845	7,678	7,438	2,779,269	2,975,009	3,136,742
General medical and surgical	6,715	6,607	6,458	2,365,032	2,563,499	2,737,944
Specialty hospitals	1,130	1,071	980	414,237	411,510	398,798
Psychiatric	506	533	508	281,289	291,284	279,313
Chronic	189	90	70	21,700	29,200	27,554
Tuberculosis	116	99	65	20,014	17,550	11,374
Other [2]	319	349	337	91,234	73,476	80,557
Nursing and related homes	18,910	22,004	21,834	443,572	567,717	635,710
Nursing care	11,484	12,871	14,873	365,065	479,391	559,684
Personal care with nursing	3,514	3,568		62,062	66,141	
Personal care without nursing	3,792	5,369	6,961	16,119	21,690	76,026
Domiciliary	120	196		326	495	
Other inpatient facilities [3]	4,300	4,769	4,836	224,244	244,500	242,071
	Number of beds			Number of patients [4]		
All facilities	---	3,194,213	3,177,665	2,557,331	2,678,819	2,658,373
Hospitals	1,565,908	1,507,988	1,449,062	1,273,217	1,187,906	1,120,159
General medical and surgical	989,733	1,004,799	1,030,432	777,268	767,014	775,359
Specialty hospitals	576,175	503,189	418,630	495,949	420,892	344,800
Psychiatric	477,309	418,487	338,574	414,155	355,633	282,634
Chronic	40,790	24,614	22,350	16,018	21,267	18,675
Tuberculosis	20,960	17,806	10,215	13,784	11,037	6,517
Other [2]	37,116	42,282	47,491	51,992	32,955	36,974
Nursing and related homes	943,876	1,201,598	1,327,704	849,775	1,075,724	1,197,517
Nursing care	704,217	917,707	1,107,358	634,747	824,038	1,011,092
Personal care with nursing	174,847	192,347		158,327	171,799	
Personal care without nursing	63,532	88,317	220,346	55,625	77,028	186,425
Domiciliary	1,253	3,227		1,076	2,859	
Other inpatient facilities [3]	---	484,627	400,899	434,339	415,189	340,697

[1] Includes full-time and part-time employees for hospitals. Includes only full-time employees for nursing and related homes and other inpatient facilities.

[2] Includes eye, ear, nose, and throat hospitals; epilepsy hospitals; alcoholism hospitals; narcotic addiction hospitals; maternity hospitals; orthopedic hospitals; physical rehabilitation hospitals; and other hospitals.

[3] Includes facilities for the mentally retarded; orphanages; homes or schools for dependent children, emotionally disturbed, unwed mothers, alcoholics and drug abusers, deaf and/or blind, and physically handicapped; and other health facilities.

[4] Number of average daily patients indicated for hospitals and number of residents for nursing care and related homes and other inpatient facilities.

SOURCE: National Center for Health Statistics: Health Resources Statistics, Health Manpower and Health Facilities, 1975. DHEW Pub. No. (HRA) 76-1509. Health Resources Administration. Washington. U.S. Government Printing Office, 1976.

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Table 124. Short-stay and long-stay hospitals, according to specialty and ownership of hospital: United States, 1974

(Data are based on reporting by facilities)

Type of ownership	Specialty of short-stay hospital				Specialty of long-stay hospital						
	Total	General	Psychiatric	Other	Total	General	Psychiatric	Chronic disease	Tuberculosis	Rehabilitation	Other
	Number of hospitals										
All ownerships	6,693	6,402	118	173	677	37	377	66	47	56	94
Government	2,245	2,195	26	24	450	31	278	44	44	13	40
Federal	335	334	–	1	52	23	27	–	–	–	2
State-local	1,910	1,861	26	23	398	8	251	44	44	13	38
Proprietary	928	817	53	58	65	2	51	6	–	1	5
Nonprofit	3,520	3,390	39	91	162	4	48	16	3	42	49
Church	802	780	4	18	23	–	7	4	–	8	4
Other	2,718	2,610	35	73	139	4	41	12	3	34	45

SOURCE: Division of Health Manpower and Facilities Statistics, National Center for Health Statistics: Data from the Master Facility Inventory.

Table 125. Beds in short-stay and long-stay hospitals, according to specialty and ownership of hospital: United States, 1974

(Data are based on reporting by facilities)

Type of ownership	Specialty of short-stay hospital				Specialty of long-stay hospital						
	Total	General	Psychiatric	Other	Total	General	Psychiatric	Chronic disease	Tuberculosis	Rehabilitation	Other
	Number of beds										
All ownerships	1,049,701	1,026,221	10,813	12,667	369,238	20,140	289,325	20,310	8,019	7,105	24,339
Government	306,272	298,845	4,356	3,071	341,902	19,405	278,998	17,105	7,821	3,436	15,137
Federal	87,306	86,795	–	511	46,011	16,501	28,381	–	–	–	1,129
State-local	218,966	212,050	4,356	2,560	295,891	2,904	250,617	17,105	7,821	3,436	14,008
Proprietary	79,027	73,173	3,766	2,088	6,172	335	4,775	429	–	262	371
Nonprofit	664,402	654,203	2,691	7,508	21,164	400	5,552	2,776	198	3,407	8,831
Church	191,031	190,016	440	575	2,625	–	806	249	–	745	825
Other	473,371	464,187	2,251	6,933	18,539	400	4,746	2,527	198	2,662	8,006
	Percent distribution of beds										
All ownerships	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Government	29.2	29.1	40.3	24.2	92.6	96.4	96.4	84.2	97.5	48.4	62.2
Federal	8.3	8.4	–	0.4	12.5	81.9	9.8	–	–	–	4.6
State-local	20.9	20.7	40.3	20.2	80.1	14.4	86.6	84.2	97.5	48.4	57.6
Proprietary	7.5	7.1	34.8	16.5	1.7	1.7	1.7	2.1	–	3.7	1.5
Nonprofit	63.3	63.7	24.9	59.3	5.7	2.0	1.9	13.7	2.5	48.0	36.3
Church	18.2	18.5	4.1	4.5	0.7	–	0.3	1.2	–	10.5	3.4
Other	45.1	45.2	20.8	54.7	5.0	2.0	1.6	12.4	2.5	37.5	32.9

SOURCE: Division of Health Manpower and Facilities Statistics, National Center for Health Statistics: Data from the Master Facility Inventory.

Table 126. Beds in non-Federal short-stay and long-stay hospitals, according to specialty of hospital, geographic division, and State: United States, 1974

(Data are based on reporting by facilities)

Geographic division and State	Total non-Federal	Specialty of non-Federal short-stay hospital				Specialty of non-Federal long-stay hospital						
		Total	General	Psychiatric	Other	Total	General	Psychiatric	Chronic disease	Tuberculosis	Rehabilitation	Other
	Number of beds											
United States	1,285,622	962,395	939,426	10,813	12,156	323,227	3,639	260,944	20,310	8,019	7,105	23,210
New England	82,090	52,492	50,949	539	1,004	29,598	1,550	18,680	6,666	124	670	1,908
Maine	6,226	4,785	4,785	–	–	1,441	–	1,279	162	–	–	–
New Hampshire	4,893	3,361	3,324	–	37	1,532	–	1,481	–	–	–	51
Vermont	3,068	2,244	2,244	–	–	824	–	824	–	–	–	–
Massachusetts	43,528	27,550	26,456	385	709	15,978	–	8,644	4,967	124	572	1,671
Rhode Island	7,085	3,592	3,326	84	182	3,493	1,150	1,846	497	–	–	–
Connecticut	17,290	10,960	10,814	70	76	6,330	400	4,606	1,040	–	98	186
Middle Atlantic	273,619	172,552	167,478	1,077	3,997	101,067	78	83,023	6,320	565	2,228	8,853
New York	141,189	86,542	83,507	333	2,702	54,647	–	47,831	3,373	64	572	2,807
New Jersey	45,137	29,366	28,914	255	197	15,771	78	13,456	365	235	387	1,250
Pennsylvania	87,293	56,644	55,057	489	1,098	30,649	–	21,736	2,582	266	1,269	4,796
East North Central	241,424	192,964	189,065	2,787	1,112	48,460	945	38,835	3,256	796	892	3,736
Ohio	62,954	48,830	48,294	476	60	14,124	524	11,923	652	–	210	815
Indiana	30,601	23,542	23,239	125	178	7,059	–	6,032	176	–	–	851
Illinois	67,159	55,299	53,876	971	452	11,860	–	8,356	1,800	607	316	781
Michigan	50,216	40,820	39,977	580	263	9,396	421	7,831	590	–	271	283
Wisconsin	30,494	24,473	23,679	635	159	6,021	–	4,693	38	189	95	1,006
West North Central	114,175	97,093	95,808	771	514	17,082	14	14,608	–	549	179	1,732
Minnesota	27,890	23,424	23,314	–	110	4,466	14	3,597	–	50	–	805
Iowa	18,540	17,001	16,961	–	40	1,539	–	1,474	–	–	65	–
Missouri	32,129	26,377	25,298	737	342	5,752	–	4,448	–	459	40	805
North Dakota	5,154	4,285	4,285	–	–	869	–	869	–	–	–	–
South Dakota	4,862	3,791	3,791	–	–	1,071	–	997	–	–	74	–
Nebraska	10,507	9,413	9,401	–	12	1,094	–	1,094	–	–	–	–
Kansas	15,093	12,802	12,758	34	10	2,291	–	2,129	–	40	–	122
South Atlantic	198,474	141,104	137,120	2,052	1,932	57,370	457	48,347	2,380	3,261	1,539	1,386
Delaware	3,771	2,005	1,945	–	60	1,766	–	922	550	–	–	294
Maryland	22,274	13,000	12,720	–	280	9,274	62	7,016	1,033	361	762	40
District of Columbia	5,977	5,011	4,857	–	154	966	–	188	–	–	–	778
Virginia	28,739	19,117	18,607	96	414	9,622	287	8,721	–	262	352	–
West Virginia	14,961	10,391	10,297	52	42	4,570	–	3,653	523	394	–	–
North Carolina	29,320	21,468	21,032	–	436	7,852	108	6,409	274	794	127	140
South Carolina	16,584	10,888	10,772	74	42	5,696	–	5,340	–	246	50	60
Georgia	30,328	22,060	20,528	1,228	304	8,268	–	7,869	–	279	120	–
Florida	46,520	37,164	36,362	602	200	9,356	–	8,229	–	925	128	74

Table 126. Beds in non-Federal short-stay and long-stay hospitals, according to specialty of hospital, geographic division, and State: United States, 1974—Continued

(Data are based on reporting by facilities)

Geographic division and State	Total non-Federal	Specialty of non-Federal short-stay hospital				Specialty of non-Federal long-stay hospital						
		Total	General	Psychiatric	Other	Total	General	Psychiatric	Chronic disease	Tuberculosis	Rehabilitation	Other
	Number of beds											
East South Central	82,383	63,974	63,068	449	457	18,409	–	16,035	698	1,354	34	288
Kentucky	17,130	14,436	14,217	69	150	2,694	–	2,286	–	324	34	50
Tennessee	27,747	21,366	21,047	151	168	6,381	–	4,894	673	576	–	238
Alabama	21,232	17,163	16,861	173	129	4,069	–	3,741	–	328	–	–
Mississippi	16,274	11,009	10,943	56	10	5,265	–	5,114	25	126	–	–
West South Central	117,032	94,495	92,515	622	1,358	22,537	–	19,402	231	803	312	1,789
Arkansas	10,955	9,236	9,149	–	87	1,719	–	1,719	–	–	–	–
Louisiana	22,254	17,002	16,625	44	333	5,252	–	4,065	–	201	50	936
Oklahoma	15,568	12,342	12,156	100	86	3,226	–	2,868	231	127	–	–
Texas	68,255	55,915	54,585	478	852	12,340	–	10,750	–	475	262	853
Mountain	45,385	37,951	36,903	648	400	7,434	80	6,017	515	160	25	637
Montana	5,375	3,901	3,901	–	–	1,474	–	1,314	–	160	–	–
Idaho	3,468	3,167	3,129	–	38	301	–	301	–	–	–	–
Wyoming	2,091	1,681	1,681	–	–	410	–	410	–	–	–	–
Colorado	12,644	10,759	10,248	443	68	1,885	80	1,213	–	–	–	592
New Mexico	5,115	3,816	3,657	44	115	1,299	–	957	317	–	25	–
Arizona	9,414	8,411	8,120	161	130	1,003	–	1,003	–	–	–	–
Utah	4,351	3,740	3,740	–	–	611	–	368	198	–	–	45
Nevada	2,927	2,476	2,427	–	49	451	–	451	–	–	–	–
Pacific	131,040	109,770	106,520	1,868	1,382	21,270	515	15,997	244	407	1,226	2,881
Washington	13,865	12,079	11,862	131	86	1,786	–	1,680	–	66	–	40
Oregon	11,197	9,025	8,935	–	90	2,172	–	2,172	–	–	–	–
California	101,632	85,417	82,607	1,737	1,073	16,215	515	11,721	–	99	1,226	2,654
Alaska	900	700	700	–	–	200	–	200	–	–	–	–
Hawaii	3,446	2,549	2,416	–	133	897	–	224	244	242	–	187

SOURCE: Division of Health Manpower and Facilities Statistics, National Center for Health Statistics: Data from the Master Facility Inventory.

Table 127. Beds in non-Federal short-stay, long-stay, and psychiatric hospitals per 1,000 population, according to geographic division and State: United States, 1974

(Data are based on reporting by facilities)

Geographic division and State	Civilian population in thousands	Type of non-Federal hospital		
		Short-stay (excluding psychiatric)	Long-stay (excluding psychiatric)	Psychiatric (short-stay and long-stay)
		Beds per 1,000 civilian population		
United States	209,689	4.54	0.30	1.30
New England	12,101	4.29	0.90	1.59
Maine	1,036	4.62	0.16	1.23
New Hampshire	803	4.19	0.06	1.84
Vermont	470	4.77	0.00	1.75
Massachusetts	5,785	4.70	1.27	1.56
Rhode Island	930	3.77	1.77	2.08
Connecticut	3,076	3.54	0.56	1.52
Middle Atlantic	37,208	4.61	0.48	2.26
New York	18,083	4.77	0.38	2.66
New Jersey	7,300	3.99	0.32	1.88
Pennsylvania	11,824	4.75	0.75	1.88
East North Central	40,786	4.66	0.24	1.02
Ohio	10,723	4.51	0.21	1.16
Indiana	5,319	4.40	0.19	1.16
Illinois	11,096	4.90	0.32	0.84
Michigan	9,084	4.43	0.17	0.93
Wisconsin	4,565	5.22	0.29	1.17
West North Central	16,592	5.81	0.15	0.93
Minnesota	3,915	5.98	0.22	0.92
Iowa	2,854	5.96	0.02	0.52
Missouri	4,752	5.40	0.27	1.09
North Dakota	624	6.87	0.00	1.39
South Dakota	676	5.61	0.11	1.47
Nebraska	1,531	6.15	0.00	0.71
Kansas	2,240	5.70	0.07	0.97
South Atlantic	36,672	4.26	0.28	1.54
Delaware	567	3.54	1.49	1.63
Maryland	4,041	3.22	0.56	1.74
District of Columbia	714	7.02	1.09	0.26
Virginia	4,751	4.00	0.19	1.86
West Virginia	1,790	5.78	0.51	2.07
North Carolina	5,265	4.08	0.27	1.22
South Carolina	2,711	3.99	0.13	2.00
Georgia	4,831	4.31	0.08	1.88
Florida	8,002	4.57	0.14	1.10
East South Central	13,281	4.78	0.18	1.24
Kentucky	3,321	4.33	0.12	0.71
Tennessee	4,108	5.16	0.36	1.23
Alabama	3,551	4.78	0.09	1.10
Mississippi	2,302	4.76	0.07	2.25
West South Central	20,355	4.61	0.15	0.98
Arkansas	2,052	4.50	0.00	0.84
Louisiana	3,733	4.54	0.32	1.10
Oklahoma	2,680	4.57	0.13	1.11
Texas	11,890	4.66	0.13	0.94

Table 127. Beds in non-Federal short-stay, long-stay, and psychiatric hospitals per 1,000 population, according to geographic division and State: United States, 1974—Continued

(Data are based on reporting by facilities)

Geographic division and State	Civilian population in thousands	Type of non-Federal hospital		
		Short-stay (excluding psychiatric)	Long-stay (excluding psychiatric)	Psychiatric (short-stay and long-stay)
		Beds per 1,000 civilian population		
Mountain	9,292	4.01	0.15	0.72
Montana	729	5.35	0.22	1.80
Idaho	793	3.99	0.00	0.38
Wyoming	356	4.72	0.00	1.15
Colorado	2,448	4.21	0.27	0.68
New Mexico	1,107	3.41	0.31	0.90
Arizona	2,126	3.88	0.00	0.55
Utah	1,169	3.20	0.21	0.31
Nevada	564	4.39	0.00	0.80
Pacific	27,403	3.94	0.19	0.65
Washington	3,427	3.49	0.03	0.53
Oregon	2,263	3.99	0.00	0.96
California	20,610	4.06	0.22	0.65
Alaska	311	2.25	0.00	0.64
Hawaii	792	3.22	0.85	0.28

SOURCE: Division of Health Manpower and Facilities Statistics, National Center for Health Statistics: Data from the Master Facility Inventory.

Table 128. Beds in non-Federal short-stay and long-stay hospitals per 1,000 population, according to specialty and location of hospital: United States, 1974

(Data are based on reporting by facilities)

Location of hospital	Total non-Federal	Specialty of non-Federal short-stay hospital				Specialty of non-Federal long-stay hospital						
		Total	General	Psychiatric	Other	Total	General	Psychiatric	Chronic disease	Tuberculosis	Rehabilitation	Other
	Beds per 1,000 resident population											
United States	6.09	4.56	4.45	0.05	0.06	1.53	0.02	1.24	0.10	0.04	0.03	0.11
Within SMSA	6.19	4.63	4.49	0.07	0.08	1.56	0.02	1.21	0.12	0.03	0.04	0.12
Large SMSA	5.96	4.62	4.44	0.08	0.10	1.34	0.01	0.94	0.15	0.02	0.04	0.17
Core counties	6.60	5.47	5.25	0.10	0.12	1.12	0.02	0.67	0.21	0.02	0.05	0.15
Fringe counties	4.55	2.71	2.64	0.04	0.04	1.83	0.00	1.56	0.03	0.02	0.03	0.20
Medium SMSA	6.24	4.47	4.36	0.06	0.05	1.77	0.05	1.48	0.09	0.05	0.04	0.07
Other SMSA	7.10	5.12	5.03	0.06	0.03	1.98	0.00	1.79	0.03	0.06	0.03	0.07
Outside SMSA	5.82	4.35	4.34	0.00	0.01	1.46	0.00	1.29	0.03	0.05	0.01	0.07
Adjacent to SMSA	5.70	3.99	3.98	0.00	0.01	1.71	0.01	1.53	0.02	0.06	0.00	0.09
Urbanized	5.76	4.23	4.21	–	0.02	1.53	0.02	1.32	0.04	0.01	0.00	0.14
Less urbanized	6.10	3.97	3.96	0.00	0.01	2.13	–	1.94	–	0.12	0.00	0.07
Thinly populated	3.07	2.77	2.77	–	–	0.30	–	0.28	–	0.02	–	–
Not adjacent to SMSA	5.94	4.74	4.73	0.00	0.01	1.20	–	1.04	0.05	0.03	0.03	0.05
Urbanized	6.45	5.22	5.21	0.00	0.01	1.23	–	1.11	0.00	0.06	0.04	0.02
Less urbanized	6.37	4.88	4.87	0.00	0.01	1.49	–	1.27	0.08	0.03	0.02	0.09
Thinly populated	3.61	3.40	3.40	–	–	0.21	–	0.16	0.05	–	–	–

NOTE: Excludes Alaska.

SOURCE: Division of Health Manpower and Facilities Statistics, National Center for Health Statistics: Data from the Master Facility Inventory.

Table 129. Non-Federal short-stay and long-stay hospitals which provide selected services, according to type of service: United States, 1974

(Data are based on reporting by facilities)

Type of hospital service	Type of non-Federal hospital			Type of non-Federal hospital		
	Total	Short-stay	Long-stay	Total	Short-stay	Long-stay
Number of non-Federal hospitals	6,983	6,358	625	6,983	6,358	625
	Number of hospitals reporting specified service			Percent of hospitals reporting specified service		
Abortion services	1,189	1,188	1	17.0	18.7	0.2
Blood bank	3,925	3,844	81	56.2	60.5	13.0
Burn care unit	161	159	2	2.3	2.5	0.3
Cobalt	780	778	2	11.2	12.2	0.3
Dental services	2,333	1,906	427	33.4	30.0	68.3
Electroencephalography	2,815	2,567	248	40.3	40.4	39.7
Emergency department	5,356	5,341	15	76.7	84.0	2.4
Extended care unit	787	692	95	11.3	10.9	15.2
Family planning service	408	399	9	5.8	6.3	1.4
Genetic counseling	221	213	8	3.2	3.4	1.3
Histopathology laboratory	3,066	2,960	106	43.9	46.6	17.0
Home care program	385	363	22	5.5	5.7	3.5
Hospital auxiliary	4,537	4,369	168	65.0	68.7	26.9
Inhalation therapy department	4,676	4,546	130	67.0	71.5	20.8
Intensive cardiac care unit	2,076	2,066	10	29.7	32.5	1.6
Intensive care unit	3,932	3,856	76	56.3	60.6	12.2
Occupational therapy department	1,696	1,208	488	24.3	19.0	78.1
Open-heart surgery facilities	504	504	–	7.2	7.9	–
Organ bank	162	161	1	2.3	2.5	0.2
Organized outpatient department	1,700	1,566	134	24.3	24.6	21.4
Pharmacy	6,014	5,507	507	86.1	86.6	81.1
Physical therapy department	4,733	4,374	359	67.8	68.8	57.4
Podiatrist services	1,177	919	258	16.9	14.5	41.3
Postoperative recovery room	5,064	4,942	122	72.5	77.7	19.5
Premature nursery	2,200	2,198	2	31.5	34.6	0.3
Psychiatric services	2,346	1,904	442	33.6	29.9	70.7
Psychiatric foster and/or home care	165	61	104	2.4	1.0	16.6
Radioisotope facility	2,961	2,940	21	42.4	46.2	3.4
Radium therapy	1,459	1,452	7	20.9	22.8	1.1
Rehabilitation services	684	549	135	10.0	8.6	21.6
Renal dialysis	804	797	7	11.5	12.5	1.1
Self-care unit	236	185	51	3.4	2.9	8.2
Social work department	3,519	2,996	523	50.4	47.1	83.7
Speech therapist services	1,405	1,179	226	20.1	18.5	36.2
Volunteer services department	2,716	2,299	417	38.9	36.2	66.7
X-ray therapy	1,939	1,889	50	27.8	29.7	8.0

NOTE: A hospital is classified as providing a specified service only when the hospital actually reported the service.

SOURCE: Division of Health Manpower and Facilities Statistics, National Center for Health Statistics: Data from the Master Facility Inventory.

Table 130. Employees per 100 patients in non-Federal short-stay and long-stay hospitals, according to geographic division and State: United States, 1974

(Data are based on reporting by facilities)

Geographic division and State	Type of non-Federal hospital		
	Total	Short-stay	Long-stay
	Full-time equivalent employees per 100 average daily patients		
United States	275	336	112
New England	293	394	134
Maine	293	342	135
New Hampshire	247	328	97
Vermont	266	340	136
Massachusetts	307	415	142
Rhode Island	238	409	92
Connecticut	296	385	151
Middle Atlantic	253	343	106
New York	264	368	108
New Jersey	233	300	108
Pennsylvania	244	325	103
East North Central	285	329	121
Ohio	273	325	103
Indiana	256	310	89
Illinois	299	335	144
Michigan	305	348	129
Wisconsin	273	304	143
West North Central	271	295	139
Minnesota	257	290	95
Iowa	273	283	160
Missouri	284	313	144
North Dakota	236	260	124
South Dakota	232	272	96
Nebraska	289	293	251
Kansas	274	294	174
South Atlantic	255	327	98
Delaware	236	356	102
Maryland	260	375	114
District of Columbia	366	415	121
Virginia	233	314	88
West Virginia	219	287	79
North Carolina	250	300	115
South Carolina	208	290	76
Georgia	267	346	97
Florida	281	331	96
East South Central	247	296	99
Kentucky	265	290	145
Tennessee	251	302	112
Alabama	254	299	93
Mississippi	210	293	62
West South Central	283	332	105
Arkansas	280	302	148
Louisiana	276	335	110
Oklahoma	281	337	107
Texas	287	335	96

Table 130. Employees per 100 patients in non-Federal short-stay and long-stay hospitals, according to geographic division and State: United States, 1974—Continued

(Data are based on reporting by facilities)

Geographic division and State	Type of non-Federal hospital		
	Total	Short-stay	Long-stay
	Full-time equivalent employees per 100 average daily patients		
Mountain	310	348	135
Montana	211	284	75
Idaho	287	298	165
Wyoming	257	300	114
Colorado	328	353	179
New Mexico	305	367	134
Arizona	355	380	136
Utah	326	355	170
Nevada	293	346	82
Pacific	334	385	121
Washington	331	366	109
Oregon	299	361	92
California	340	390	122
Alaska	313	412	230
Hawaii	319	374	186

SOURCE: Division of Health Manpower and Facilities Statistics, National Center for Health Statistics: Data from the Master Facility Inventory.

Table 131. Long-term care homes and beds, according to type of home: United States, 1963, 1969, and 1973

(Data are based on reporting by facilities)

Type of home	1963	1969	1973	1963	1969	1973
	Number of homes			Number of beds		
Total	16,701	18,910	21,834	568,560	943,876	1,327,704
Nursing care	8,128	11,484	14,873	319,224	704,217	1,107,358
Personal care with nursing	4,958	3,514		188,306	174,874	
Personal care without nursing	2,927	3,792	[1] 6,961	48,962	63,532	[1] 220,346
Domiciliary care	688	120		12,068	1,253	

[1] Includes personal care homes with nursing, personal care homes without nursing, and domiciliary care homes.

SOURCE: National Center for Health Statistics: Health Resources Statistics: Health Manpower and Health Facilities, 1975. DHEW Pub. No. (HRA) 76-1509. Health Resources Administration. Washington. U.S. Government Printing Office, 1976.

Table 132. Selected characteristics of nursing homes, according to certification status: United States, 1973-74

(Data are based on reporting by a sample of nursing homes)

Characteristic	Certification status					
	All facilities	Both Medicare and Medicaid certification [1]	Medicaid certification only			Not certified
			Total	Skilled nursing homes [2]	Intermediate care facilities	
Number of homes	15,700	4,200	7,900	3,500	4,400	3,600
Number of beds	1,174,800	441,000	572,800	320,500	252,300	161,000
Average bed size	75	105	73	92	57	45
Average total FTE employees per 100 beds	63.9	68.2	64.9	76.3	55.8	56.7
Nursing FTE employees per 100 beds	38.7	44.4	38.5	42.8	35.0	32.5
Administrative, medical, and therapeutic FTE employees per 100 beds	4.6	3.9	3.8	3.7	3.9	7.3
All other FTE employees per 100 beds	20.6	19.9	22.6	29.8	16.9	16.9
Number of residents	1,075,800	406,900	529,200	292,500	236,700	139,800
Number of resident days of care	368,906,000	136,292,900	180,756,500	98,908,100	81,848,400	51,856,600
Average occupancy rate	88.2	85.6	89.2	89.2	89.2	89.0

[1] Eight percent of these homes had only Medicare certification.

[2] Thirty-five percent of these homes were certified as both skilled nursing homes and intermediate care facilities.

NOTE: FTE = full-time equivalent.

SOURCE: National Center for Health Statistics: Selected operating and financial characteristics of nursing homes, United States: 1973-74 National Nursing Home Survey. Vital and Health Statistics. Series 13-Number 22. DHEW Pub. No. (HRA) 76-1773, Health Resources Administration. Washington. U.S. Government Printing Office, Dec. 1975.

Table 133. Selected characteristics of nursing homes, according to geographic region: United States, 1973-74
(Data are based on reporting by a sample of nursing homes)

Characteristic	Geographic region				
	United States	Northeast	North Central	South	West
Number of homes	15,700	3,100	5,600	4,100	2,900
Number of beds	1,174,800	250,800	407,200	302,900	214,000
Beds per 1,000 population 65 years and over	55.1	46.8	68.6	45.5	63.6
Average bed size	75	81	73	74	74
Average total FTE employees per 100 beds	63.9	68.9	70.2	56.1	57.1
Nursing FTE employees per 100 beds	38.7	41.7	40.1	36.0	36.4
Administrative, medical, and therapeutic FTE employees per 100 beds	4.6	5.3	4.6	4.4	4.2
All other FTE employees per 100 beds.	20.6	21.9	25.5	15.7	16.5
Number of residents	1,075,800	236,100	368,700	278,200	192,800
Number of resident days of care	368,906,000	80,996,400	127,460,800	94,577,100	65,871,800
Average occupancy rate	88.2	89.5	89.0	87.7	86.0

NOTE: FTE = full-time equivalent.

SOURCE: National Center for Health Statistics: Selected operating and financial characteristics of nursing homes, United States: 1973-74 National Nursing Home Survey, Vital and Health Statistics. Series 13-Number 22. DHEW Pub. No. (HRA) 76-1773. Health Resources Administration. Washington. U.S. Government Printing Office, Dec. 1975.

Table 134. Beds in long-term care homes and beds per 1,000 population 65 years and over, according to type of home, geographic division, and State: United States, 1973

(Data are based on reporting by facilities)

Geographic division and State	Population 65 years and over in thousands	Number of beds	Type of home		
			Total	Nursing care	Personal care and other [1]
			Beds per 1,000 resident population 65 years and over		
United States	21,333	1,327,704	62.3	51.9	10.3
New England	1,321	102,647	77.7	66.1	11.6
Maine	120	9,227	76.3	63.4	12.9
New Hampshire	84	5,873	69.9	62.1	7.8
Vermont	50	3,902	78.0	67.4	10.7
Massachusetts	652	53,858	82.6	70.7	11.9
Rhode Island	109	6,493	59.6	51.1	8.5
Connecticut	306	23,294	76.1	63.5	12.6
Middle Atlantic	4,044	193,281	47.8	38.2	9.6
New York	1,985	92,888	46.7	34.2	12.5
New Jersey	734	34,430	46.9	38.4	8.5
Pennsylvania	1,325	65,963	49.9	44.0	5.8
East North Central	3,951	280,059	70.9	58.7	12.1
Ohio	1,035	65,134	62.8	56.1	6.7
Indiana	514	34,247	66.8	58.1	8.7
Illinois	1,122	80,151	71.2	59.8	11.5
Michigan	785	48,567	61.7	49.2	12.5
Wisconsin	495	51,960	105.0	77.0	28.0
West North Central	1,984	168,168	84.8	69.2	15.5
Minnesota	425	44,661	105.1	88.7	16.4
Iowa	357	35,152	98.5	74.9	23.6
Missouri	583	33,644	57.7	50.1	7.6
North Dakota	70	6,631	94.7	65.2	29.5
South Dakota	83	7,795	93.9	79.9	14.0
Nebraska	189	17,396	92.0	77.8	14.2
Kansas	277	22,889	82.6	64.3	18.3
South Atlantic	3,308	135,768	41.0	34.4	6.7
Delaware	47	2,213	47.1	46.8	0.3
Maryland	324	17,755	54.5	49.7	4.8
District of Columbia	71	3,147	44.3	39.8	4.5
Virginia	398	16,732	42.0	35.0	7.0
West Virginia	203	4,753	23.3	17.2	6.1
North Carolina	457	22,145	48.6	30.5	18.1
South Carolina	211	8,131	38.4	35.4	2.9
Georgia	401	25,936	64.5	60.5	4.0
Florida	1,196	34,956	29.4	24.6	4.7
East South Central	1,364	55,734	40.9	34.7	6.1
Kentucky	354	18,177	51.2	37.0	14.3
Tennessee	415	14,827	35.8	30.8	5.0
Alabama	355	14,844	41.6	39.2	2.4
Mississippi	240	7,886	32.6	31.0	1.6
West South Central	1,996	144,978	72.6	68.3	4.4
Arkansas	258	17,952	69.6	66.2	3.4
Louisiana	330	17,004	51.7	50.3	1.4
Oklahoma	321	29,512	91.9	87.9	4.0
Texas	1,087	80,510	74.3	68.7	5.6

See footnote at end of table.

Table 134. Beds in long-term care homes and beds per 1,000 population 65 years and over, according to type of home, geographic division, and State: United States, 1973—Continued

(Data are based on reporting by facilities)

Geographic division and State	Population 65 years and over in thousands	Number of beds	Type of home		
			Total	Nursing care	Personal care and other [1]
			Beds per 1,000 resident population 65 years and over		
Mountain	781	43,328	55.5	49.3	6.2
Montana	72	4,759	67.0	56.0	11.0
Idaho	74	4,190	56.6	54.7	1.9
Wyoming	32	1,896	59.3	49.0	10.2
Colorado	200	16,670	83.4	75.6	7.7
New Mexico	82	3,345	40.8	32.3	8.5
Arizona	198	6,430	32.8	30.5	2.4
Utah	85	4,556	53.6	46.4	7.2
Nevada	38	1,482	39.0	31.6	7.4
Pacific	2,584	203,741	78.8	62.1	16.8
Washington	345	31,147	90.5	81.3	9.3
Oregon	245	18,306	74.7	57.8	16.9
California	1,935	150,956	78.3	59.9	18.3
Alaska	8	606	75.8	75.8	–
Hawaii	51	2,726	53.5	41.3	12.2

[1] Includes personal care homes with nursing, personal care homes without nursing, and domiciliary care homes.

SOURCE: National Center for Health Statistics: Health Resources Statistics: Health Manpower and Health Facilities, 1975. DHEW Pub. No. (HRA) 76-1509. Health Resources Administration. Washington. U.S. Government Printing Office, 1976.

Table 135. Mental health facilities which maintain selected service modes, according to type of facility: United States, January 1974

(Data are based on reporting by facilities)

Service mode	Type of facility										
	Psychiatric hospitals				Residential treatment centers for children	General hospitals			Federally funded community mental health centers	Freestanding outpatient psychiatric clinics	All other [2]
	Total	State and county	Veterans Administration [1]	Private or nonprofit		Total	Non-Federal government	Private or nonprofit			
Number of reporting facilities	613	319	119	175	314	746	145	601	380	1,026	72
	Percent of facilities maintaining specific type of mental health service mode										
Inpatient treatment	99.0	100.0	95.0	100.0	100.0	87.1	88.3	86.9	100.0	–	43.1
Day inpatient treatment	45.5	42.6	52.1	46.3	28.3	23.9	27.6	23.0	100.0	22.1	94.4
Other partial inpatient treatment [3]	14.0	12.9	10.1	18.9	–	7.4	7.6	7.3	---	1.0	13.9
Outpatient treatment	54.5	53.0	87.4	34.9	14.3	37.8	49.0	35.1	100.0	100.0	50.0
Halfway house	8.8	10.7	4.2	8.6	15.9	0.7	0.7	0.7	13.8	3.7	13.9
Emergency services	27.6	26.6	43.7	18.3	3.2	61.3	74.5	58.1	98.7	40.4	43.1

[1] Includes 27 VA neuropsychiatric hospitals and 92 psychiatric inpatient units of VA general medical and surgical hospitals.

[2] Includes nonfederally assisted community mental health centers and freestanding mental health day or night treatment facilities.

[3] Provision of mental health treatment in the evening, night, or weekend.

SOURCE: National Institute of Mental Health: Emergency services in psychiatric facilities, United States, January 1974. Statistical Note, No. 128. DHEW Pub. No. (ADM) 76-158. Alcohol, Drug Abuse, and Mental Health Administration. Washington. U.S. Government Printing Office, 1976.

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Table 136. Mental health facilities which maintain selected psychiatric emergency service modes, according to type of facility: United States, January 1974

(Data are based on reporting by facilities)

Psychiatric emergency service mode	Type of facility										
	Psychiatric hospitals				Residential treatment centers for children	General hospitals			Federally funded community mental health centers	Freestanding outpatient psychiatric clinics	All other [2]
	Total	State and county	Veterans Administration [1]	Private or nonprofit		Total	Non-Federal government	Private or nonprofit			
Number of reporting facilities	613	319	119	175	314	746	145	601	380	1,026	72
	Percent of facilities maintaining psychiatric emergency programs										
Walk-in	27.5	26.7	43.7	18.3	2.2	61.2	74.5	57.9	85.3	37.6	43.1
24 hours 7 days a week	24.4	22.6	42.0	16.0	1.9	59.0	69.7	56.4	---	2.8	27.8
Less than 24 hours or not every day	3.1	4.1	1.7	2.3	0.3	2.1	4.8	1.5	---	34.8	15.3
Telephone	14.5	17.8	13.4	9.1	2.5	19.7	29.6	17.3	89.5	32.2	37.5
24 hours 7 days a week	12.4	14.4	11.8	9.1	1.9	16.8	25.5	14.6	---	18.2	27.8
Less than 24 hours or not every day	2.1	3.4	1.7	–	0.6	2.9	4.1	2.7	---	14.0	9.7
Suicide prevention	11.6	13.5	12.6	7.4	1.3	14.8	24.8	12.5	---	23.5	33.3
24 hours 7 days a week	10.3	11.9	10.9	6.9	1.0	11.9	20.0	10.0	---	10.7	27.8
Less than 24 hours or not every day	1.3	1.6	1.7	0.5	0.3	2.9	4.8	2.5	---	12.8	5.5
Home visits	8.6	11.9	7.6	3.4	2.3	9.4	15.8	7.8	---	24.1	29.2
24 hours 7 days a week	3.4	4.7	3.4	1.1	1.3	1.6	3.4	1.2	---	5.8	11.1
Less than 24 hours or not every day	5.2	7.2	4.2	2.3	1.0	7.8	12.4	6.7	---	18.3	18.1
One or more of the above	27.6	26.7	43.7	18.3	3.2	61.3	74.5	58.1	[3]98.7	40.4	43.1

[1] Includes VA neuropsychiatric hospitals and psychiatric inpatient units of VA general medical and surgical hospitals.

[2] Includes nonfederally assisted community mental health centers and freestanding mental health day or night treatment facilities.

[3] Pertains only to walk-in and telephone services.

SOURCE: National Institute of Mental Health: Emergency services in psychiatric facilities, United States, January 1974. Statistical Note, No. 128. DHEW Pub. No. (ADM) 76-158. Alcohol, Drug Abuse, and Mental Health Administration. Washington. U.S. Government Printing Office, 1976.

SECTION IV

Health Expenditures

A. National Health Expenditures

During the fiscal year ending June 1976, the total amount spent for health in the United States rose by 14 percent to $139.3 billion, for an average of $638 per person. Following on the heels of an increase of similar magnitude in 1975, this brought the increase during the 2 years since the lifting of price controls to 31 percent. Since the growth in health care expenditures coincided with a general slowdown in economic activity, health expenditures represented a much larger share of the gross national product in 1976 (8.6 percent) than in 1974 (7.8 percent). The public share continued to grow, amounting to 42 percent of the total spent on health in 1976. The largest portion was spent on hospital services (39.8 percent), followed by physician services (18.9 percent).

The National Health Expenditures series represents the sum of expenditures for (1) health care by or on behalf of the Nation's population, (2) administration of health care programs, (3) construction of health care facilities, and (4) biomedical and other health-related research activities. The series, which is compiled and published annually by the Social Security Administration, describes the total annual cost to the Nation of health services and related activities by type of expenditure (i.e., for physicians, hospitals, etc.) and by source of funds (i.e., direct consumer payments, private health insurance benefits, and government programs). Excluded are expenditures for the education and training of physicians and other health workers, pollution control, occupational safety, and other nonmedical activities generally related to industrial and environmental health hazards.

The data are currently compiled and presented for each fiscal year, (ending on June 30), and summary data are presented for calendar years as well. The data come from a variety of sources, including the budgets and financial reports of Federal, State, and local governments, health industry groups such as the American Hospital Association, Blue Cross-Blue Shield plans, and commercial insurance companies; the Department of Commerce; and statistical reports from the Internal Revenue Service.

During the 47 years covered by the National Health Expenditures series, the gross national product increased from $101 billion to more than $1.6 trillion. During this period of tremendous expansion in the overall economy, expenditures for health increased 2½ times faster than did the gross national product. As a consequence, the health share of the gross national product grew from 3.5 percent to 8.6 percent. Furthermore, per capita spending for health care in 1976 was nearly 22 times what it was in 1929; this is an increase from $29 to $638 per person. Only during the depression years of the 1930's was there a reduction in per capita spending for health.

The level of health care spending is determined by the quantities of various services that are purchased and the price of each service. Quantities change as a result of changes in the size and characteristics of the population, and in the utilization patterns of various population groups. Rapid increases in health care prices, however, have been the primary force behind the huge growth in health expenditures.[a]

[a] See, for example, Klarman, H.E., Rice, D.P., Cooper, B.S., and Stettler, H.L. III, "Sources of Increase in Selected Medical Care Expenditures, 1929-1969," Social Security Administration, Office of Research and Statistics, Staff Paper No. 4, Washington, D.C., Apr. 1970.

The impact of inflation on health care expenditures and the sharply accelerated trend during the past 10 years is dramatically illustrated when expenditures data are deflated by the Consumer Price Index (CPI) rebased to 1950 = 100. The result is a rough estimate of what the change in expenditure since 1950 would have been had there been no price increases. Four categories of National health expenditures (total, hospital services, physicians' services, and dentists' services) have been deflated by four categories of the CPI (total medical care, semiprivate hospital room rates, physicians' fees, and dentists' fees). The estimates represent "real increases" in the services.

Between 1950 and 1976, total expenditures for health rose at an annual rate of 9.9 percent, with the largest increases occurring toward the end of the period. After adjustment for inflation, increases in expenditures averaged only 4.9 percent during the period. This means that about half of the increase in expenditures which occurred since 1950 can be attributed to price change. Hospital expenditures, the most rapidly growing component of health care costs, rose at an average annual rate of 11 percent between 1950 and 1976. After adjustment for the effects of inflation by use of the semiprivate room rate as a deflator, the annual increase in hospital expenditures was only about 2.2 percent, or 20 percent of the total increase. Expenditures for the services of physicians and dentists have increased at an annual rate of about 9 percent since 1950. Adjustment for price changes decreases the rise in spending for these services to about 4.5 percent per year. Thus about half of the expenditure increase for physicians and dentists took the form of increased amounts of service. Although these calculations are only rough approximations, they do illustrate the effect of higher prices on the level of expenditures for health care.

The money spent on health comes from both private and public sources. Private expenditures are defined as those paid directly by consumers, by private health insurance carriers, and by industry and philanthropic organizations. Public expenditures are those made by Federal, State, and local governments. Public expenditures include Medicare and Medicaid, which pay for most of the health care services of the aged and poor; programs that provide services directly to specified beneficiaries such as veterans, members of the armed services, and crippled children; and workmen's compensation benefits that are required by legislation but underwritten by private insurance carriers.

The enactment of Medicare and Medicaid in 1965 triggered large increases in public spending for health. Between 1965 and 1976, public expenditures rose at nearly twice the rate of private expenditures. By 1976 they accounted for more than 42 percent of all spending for health, up from a relatively stable 25-percent share during the years from 1950 to 1965. Public expenditures increased on a per capita basis from $48 in 1965 to $269 in 1976, while per capita spending from private sources increased from $149 to $369. During the period 1929 to 1976, total health expenditures grew at an annual rate of 8.1 percent. Private expenditures increased at an average annual rate of 7.2 percent, while public expenditures increased by 10.8 percent per year.

Expenditures for hospital care have long been the largest single category of health expenditures accounting for about 40 percent of the total. Between 1950 and 1976, expenditures for hospitals, nursing homes, health-related research, and the administrative expenses associated with health insurance rose at a faster than average rate. Expenditures for eyeglasses and appliances, drugs, and professional services other than physicians and dentists had the smallest annual rates of increase. Expenditures for nursing homes, while accounting for only 7.6 percent of health care spending in 1976, have grown at a rate of 21 percent a year since the enactment of Medicare and Medicaid, compared to 16 percent per year during the previous 10 years. The differential rates of increase of the various components have altered their respective shares of total health care spending since 1950. Generally, institutional services (i.e., those provided by hospitals and nursing homes) have claimed an increasing share of the health care dollar; and the shares for physicians, dentists, other noninstitutional providers, drugs, and eyeglasses and appliance have decreased.

Third-party payments, defined as all payments for health care which are not paid directly by the consumer, are growing in importance as a source of payment for personal health care. In

the private sector, the major source of third-party payments is private health insurance carriers (i.e., Blue Cross-Blue Shield plans and commercial insurance companies) supplemented to a small extent by industrial and philanthropic activities. Government sources of third-party payments include governmental payment for care provided by the private sector, as in Medicare and Medicaid, and programs that provide services directly to specified population groups. By 1976 third-party payments accounted for slightly more than two-thirds of the total financing of personal health care.

Private health insurance continues to be a major source of funds for families not eligible for coverage under government-sponsored programs. The share of personal health care expenditures provided by private health insurance, which was temporarily reduced after the passage of Medicare and Medicaid, has also increased in recent years. In 1976 it accounted for 26 percent of expenditures.

The government share of total expenditures for personal health care began to increase greatly in the mid-1960's, reaching 40 percent in 1976. This increase was accompanied by a decline in the relative importance of direct payments by consumers, particularly by the elderly and lower-income populations, who are the major beneficiaries of new government-sponsored programs. The percentage of personal health care expenditures paid by the Federal Government has been rising steadily since the enactment of Medicare and Medicaid, reaching 28 percent by 1976. On the other hand, the percentage contributed by State and local governments has remained fairly constant since the mid-1930's.

Table 137. Gross national product and national health expenditures: United States, selected fiscal years 1929-76
(Data are compiled from a number of government and private sources)

Fiscal year	Gross national product in billions	National health expenditures		
		Amount in millions	Percent of gross national product	Amount per capita
1929	$ 101.3	$ 3,589	3.5	$ 29.16
1935	68.9	2,846	4.1	22.04
1940	95.4	3,883	4.1	28.98
1950	264.8	12,027	4.5	78.35
1955	381.0	17,330	4.5	103.76
1960	498.3	25,856	5.2	141.63
1965	658.0	38,892	5.9	197.75
1966	722.4	42,109	5.8	211.56
1967	773.5	47,879	6.2	237.93
1968	830.2	53,765	6.5	264.37
1969	904.2	60,617	6.7	295.20
1970	960.2	69,201	7.2	333.57
1971	1,019.8	77,162	7.6	368.25
1972	1,111.8	86,687	7.8	409.71
1973	1,238.6	95,383	7.7	447.31
1974 [1]	1,361.2	106,321	7.8	495.01
1975 [1]	1,452.3	122,231	8.4	564.35
1976 [2]	1,611.8	139,312	8.6	637.97

[1] Revised estimates.

[2] Preliminary estimates.

SOURCES: Mueller, M. S., and Gibson, R. M.: National health expenditures, fiscal year 1975. Social Security Bulletin 39(2): 3-20, Feb. 1976.

Office of Research and Statistics, Social Security Administration: Selected data.

Table 138. National health expenditures and average annual percent change, according to type of expenditure in current and 1950 dollars: United States, selected fiscal years 1950-76

(Data are compiled from a number of government and private sources)

Fiscal year and period	Type of expenditure							
	All health expenditures [1]		Hospital		Physician		Dentist	
	Current $	1950 $	Current $	1950 $	Current $	1950 $	Current $	1950 $
	In millions							
1950	$ 12,027	$12,027	$ 3,698	$3,698	$ 2,689	$2,689	$ 940	$ 940
1955	17,330	14,346	5,689	4,081	3,632	3,091	1,457	1,263
1960	25,856	17,613	8,499	4,557	5,580	4,012	1,944	1,505
1965	38,892	23,345	13,152	5,286	8,405	5,296	2,728	1,896
1970	69,201	31,427	25,879	5,627	13,443	6,285	4,473	2,431
1971	77,162	32,765	29,133	5,593	15,098	6,564	4,908	2,516
1972	86,687	35,153	32,720	5,740	16,527	6,832	5,364	2,601
1973	95,383	37,523	36,155	6,039	17,995	7,253	6,101	2,871
1974	106,321	39,569	41,020	6,467	19,742	7,579	6,870	3,096
1975	122,231	40,434	48,224	6,531	22,925	7,803	7,810	3,177
1976	139,312	41,835	55,400	6,514	26,350	8,053	8,600	3,248
	Average annual percent change							
1950-76	9.9	4.9	11.0	2.2	9.2	4.3	8.9	4.8
1950-55	7.6	3.6	9.0	2.0	6.2	2.8	9.2	6.1
1955-60	8.3	4.2	8.4	2.2	9.0	5.3	5.9	3.6
1960-65	8.5	5.8	9.1	3.0	8.5	5.7	7.0	4.7
1965-70	12.2	6.1	14.5	1.3	9.8	3.5	10.4	5.1
1970-75	11.4	4.5	12.5	2.3	10.5	3.7	10.9	4.7
1970-71	11.5	4.3	12.6	−0.6	12.3	4.4	9.7	3.5
1971-72	12.3	7.3	12.3	2.6	9.5	4.1	9.3	3.4
1972-73	10.0	6.7	10.5	5.2	8.9	6.2	13.7	10.4
1973-74	11.5	5.5	13.5	7.1	9.7	4.5	12.6	7.8
1974-75	15.0	2.2	17.6	1.0	16.1	3.0	13.7	2.6
1975-76	14.0	3.5	14.9	−0.3	14.9	3.2	10.1	2.2

[1] Includes all other expenditures not shown separately.

NOTE: Expenditures in 1950 dollars were calculated by deflating current dollar expenditures by the Consumer Price Indexes for medical care, hospital room rates (semiprivate), physician fees, and dentist fees.

SOURCES: Mueller, M. S., and Gibson, R. M.: National health expenditures, fiscal year 1975. Social Security Bulletin 39(2): 3-20, Feb. 1976.

Office of Research and Statistics, Social Security Administration: Selected data.

Table 139. National health expenditures, according to source of funds: United States, selected fiscal years 1929-76

(Data are compiled from a number of government and private sources)

Fiscal year	All health expenditures in millions	Source of funds					
		Private			Public		
		Amount in millions	Amount per capita	Percent of total	Amount in millions	Amount per capita	Percent of total
1929	$ 3,589	$ 3,112	$ 25.28	86.7	$ 477	$ 3.88	13.3
1935	2,846	2,303	17.84	80.9	543	4.21	19.1
1940	3,883	3,101	23.14	79.9	782	5.84	20.2
1950	12,027	8,962	58.38	74.5	3,065	19.97	25.5
1955	17,330	12,909	77.29	74.5	4,421	26.46	25.5
1960	25,856	19,461	106.60	75.3	6,395	35.03	24.7
1965	38,892	29,357	149.27	75.5	9,535	48.48	24.5
1966	42,109	31,279	157.15	74.3	10,830	54.41	25.7
1967	47,879	32,026	159.15	66.9	15,853	78.78	33.1
1968	53,765	33,725	165.83	62.7	20,040	98.54	37.3
1969	60,617	37,680	183.50	62.2	22,937	111.70	37.8
1970	69,201	43,810	211.18	63.3	25,391	122.39	36.7
1971	77,162	48,387	230.92	62.7	28,775	137.32	37.3
1972	86,687	53,214	251.50	61.4	33,473	158.20	38.6
1973	95,383	58,715	275.35	61.6	36,668	171.96	38.4
1974 [1]	106,321	64,809	301.74	61.0	41,512	193.27	39.0
1975 [1]	122,231	71,361	329.48	58.4	50,870	234.87	41.6
1976 [2]	139,312	80,492	368.61	57.8	58,820	269.36	42.2

[1] Revised estimates.

[2] Preliminary estimates.

SOURCES: Mueller, M. S., and Gibson, R. M.: National health expenditures, fiscal year 1975. Social Security Bulletin 39(2): 3-20, Feb. 1976.

Office of Research and Statistics, Social Security Administration: Selected data.

Table 140. Average annual percent change in national health expenditures, according to source of funds: United States, selected fiscal years 1929-76

(Data are compiled from a number of government and private sources)

Period	All sources	Private	Public
	Average annual percent change		
1929-76	8.1	7.2	10.8
1929-35	−3.8	−4.9	2.2
1935-40	6.4	6.1	7.6
1940-50	12.0	11.2	14.6
1950-55	7.6	7.6	7.6
1955-60	8.3	8.6	7.7
1960-65	8.5	8.6	8.3
1965-70	12.2	8.3	21.6
1970-75	12.1	10.2	14.9
1970-71	11.5	10.4	13.3
1971-72	12.3	10.0	16.3
1972-73	10.0	10.3	9.5
1973-74	11.5	10.4	13.2
1974-75	15.0	10.1	22.5
1975-76	14.0	12.8	15.6

SOURCES: Mueller, M. S., and Gibson, R. M.: National health expenditures, fiscal year 1975. Social Security Bulletin 39(2): 3-20, Feb. 1976.

Office of Research and Statistics, Social Security Administration: Selected data.

Table 141. Amount and percent distribution of national health expenditures, according to type of expenditure: United States, selected fiscal years 1950-76

(Data are compiled from a number of government and private sources)

Type of expenditure	1950	1955	1960	1965	1970	1976[1]
	Amount in billions					
Total	$12.0	$17.3	$25.9	$38.9	$69.2	$139.3
Health services and supplies	11.2	16.4	24.2	35.7	64.1	131.0
Hospital care	3.7	5.7	8.5	13.2	25.9	55.4
Physician services	2.7	3.6	5.6	8.4	13.4	26.3
Dentist services	0.9	1.5	1.9	2.7	4.5	8.6
Nursing home care	0.2	0.3	0.5	1.3	3.8	10.6
Other professional services	0.4	0.5	0.8	1.0	1.4	2.4
Drugs and drug sundries	1.6	2.3	3.6	4.6	7.1	11.2
Eyeglasses and appliances	0.5	0.6	0.8	1.2	1.8	2.0
Expenses for prepayment and administration	0.3	0.6	0.8	1.2	2.1	7.3
Public health activities	0.4	0.4	0.4	0.7	1.4	3.3
Other health services	0.5	0.9	1.3	1.4	2.6	3.9
Research and construction	0.8	0.9	1.7	3.2	5.1	8.3
Research	0.1	0.2	0.6	1.4	1.8	3.3
Construction	0.7	0.7	1.1	1.8	3.3	5.0
	Percent distribution					
Total	100.0	100.0	100.0	100.0	100.0	100.0
Health services and supplies	93.3	94.8	93.4	91.8	92.6	94.0
Hospital care	30.8	32.9	32.8	33.9	37.4	39.8
Physician services	22.5	20.8	21.6	21.6	19.4	18.9
Dentist services	7.5	8.7	7.3	6.9	6.5	6.2
Nursing home care	1.7	1.7	1.9	3.3	5.5	7.6
Other professional services	3.3	2.9	3.1	2.6	2.0	1.7
Drugs and drug sundries	13.3	13.3	13.9	11.8	10.3	8.0
Eyeglasses and appliances	4.2	3.5	3.1	3.1	2.6	1.4
Expenses for prepayment and administration	2.5	3.5	3.1	3.1	3.0	5.2
Public health activities	3.3	2.3	1.5	1.8	2.0	2.4
Other health services	4.2	5.2	5.0	3.6	3.8	2.8
Research and construction	6.7	5.2	6.6	8.2	7.4	6.0
Research	0.8	1.2	2.3	3.6	2.6	2.4
Construction	5.8	4.0	4.2	4.6	4.8	3.6

[1] Preliminary estimates.

SOURCES: Derived from: Mueller, M. S., and Gibson, R. M.: National health expenditures, fiscal year 1975. Social Security Bulletin 39(2): 3-20, Feb. 1976.

Office of Research and Statistics, Social Security Administration: Selected data.

Table 142. Average annual percent change in national health expenditures, according to type of expenditure: United States, selected fiscal years 1950-76

(Data are compiled from a number of government and private sources)

Type of expenditure	1950-76	1950-60	1960-65	1965-70	1970-76
	Average annual percent change				
Total	9.9	8.0	8.5	12.2	12.4
Health services and supplies	9.9	8.0	8.1	12.4	12.7
Hospital care	11.0	8.7	9.2	14.4	13.5
Physician services	9.2	7.6	8.4	9.8	11.9
Dentist services	8.9	7.8	7.3	10.8	11.4
Nursing home care	16.5	9.6	21.1	23.9	18.6
Other professional services	7.1	7.2	4.6	7.0	9.4
Drugs and drug sundries	7.8	8.4	5.0	9.1	7.9
Eyeglasses and appliances	5.5	4.8	8.4	8.4	1.8
Expenses for prepayment and administration	13.1	10.3	8.4	11.8	23.1
Public health activities	8.5	0.0	11.8	14.9	15.4
Other health services	8.2	10.0	1.5	13.2	7.0
Research and construction	9.4	7.8	13.5	9.8	8.5
Research	14.4	19.6	18.4	5.2	10.6
Construction	7.9	4.6	10.3	12.9	7.2

SOURCES: Derived from: Mueller, M. S., and Gibson, R. M.: National health expenditures, fiscal year 1975. Social Security Bulletin 39(2): 3-20, Feb. 1976.

Office of Research and Statistics, Social Security Administration: Selected data.

Table 143. Amount and percent distribution of personal health care expenditures,[1] according to source of payment: United States, selected fiscal years 1929-76

(Data are compiled from a number of government and private sources)

Fiscal year	All personal health care expenditures	Direct payments	Third-party payments					
			Total	Private health insurance	Philanthropy and industry	Government		
						Total	Federal	State and local
	Aggregate amount in millions							
1929	$ 3,165	[2]$ 2,800	$ 365	---	$ 83	$ 282	$ 85	$ 197
1935	2,585	[2]2,134	452	---	70	382	89	293
1940	3,414	[2]2,799	615	---	92	523	133	389
1950	10,400	7,107	3,293	$ 879	312	2,102	979	1,124
1955	15,231	8,992	6,239	2,358	412	3,469	1,583	1,886
1960	22,729	12,576	10,153	4,698	525	4,930	2,102	2,828
1965	33,498	17,577	15,921	8,280	683	6,958	2,840	4,118
1966	36,216	18,668	17,548	8,936	720	7,892	3,349	4,542
1967	41,343	18,786	22,558	9,344	753	12,461	7,471	4,991
1968	46,521	19,098	27,424	10,444	780	16,200	10,401	5,797
1969	52,690	20,957	31,737	12,206	824	18,705	12,283	6,421
1970	60,113	24,272	35,841	14,406	890	20,545	13,403	7,142
1971	67,228	26,307	40,921	16,728	964	23,229	15,401	7,827
1972	74,828	28,141	46,687	18,620	1,035	27,032	18,126	8,906
1973[3]	82,490	30,348	52,142	20,955	1,125	30,062	20,178	9,884
1974[3]	91,315	32,989	58,326	23,050	1,220	34,056	22,974	11,082
1975[3]	105,745	35,553	70,192	26,894	1,331	41,966	28,866	13,100
1976[4]	120,431	39,099	81,332	31,359	1,556	48,417	33,683	14,735
	Percent distribution							
1929	100.0	88.5	11.5	---	2.6	8.9	2.7	6.2
1935	100.0	82.6	17.5	---	2.7	14.8	3.4	11.3
1940	100.0	82.0	18.0	---	2.7	15.3	3.9	11.4
1950	100.0	68.3	31.7	8.5	3.0	20.2	9.4	10.8
1955	100.0	59.0	41.0	15.5	2.7	22.8	10.4	12.4
1960	100.0	55.3	44.7	20.7	2.3	21.7	9.2	12.4
1965	100.0	52.5	47.5	24.7	2.0	20.8	8.5	12.3
1966	100.0	51.5	48.5	24.7	2.0	21.8	9.2	12.5
1967	100.0	45.4	54.5	22.6	1.8	30.1	18.1	12.1
1968	100.0	41.1	59.0	22.5	1.7	34.8	22.4	12.5
1969	100.0	39.8	60.3	23.2	1.6	35.5	23.3	12.2
1970	100.0	40.4	59.7	24.0	1.5	34.2	22.3	11.9
1971	100.0	39.1	60.9	24.9	1.4	34.6	22.9	11.6
1972	100.0	37.6	62.4	24.9	1.4	36.1	24.2	11.9
1973[3]	100.0	36.8	63.2	25.4	1.4	36.4	24.5	12.0
1974[3]	100.0	36.1	63.9	25.2	1.3	37.3	25.2	12.1
1975[3]	100.0	33.6	66.4	25.4	1.3	39.7	27.3	12.4
1976[4]	100.0	32.5	67.5	26.0	1.3	40.2	28.0	12.2

[1] Includes all expenditures for health services and supplies other than (a) expenses for prepayment and administration; (b) government public health activities; (c) expenditures on fundraising by philanthropies.

[2] Includes any insurance benefits and expenses for prepayment (insurance premiums less insurance benefits).

[3] Revised estimates.

[4] Preliminary estimates.

SOURCES: Mueller, M. S., and Gibson, R. M.: National health expenditures, fiscal year 1975. Social Security Bulletin 39(2): 3-20, Feb. 1976.

Office of Research and Statistics, Social Security Administration: Selected data.

B. Government Expenditures for Health Care

In fiscal year 1976, public expenditures for health comprised 42 percent of total health expenditures. Payments for health care are made under a variety of public programs designed to provide care or access to care for specified population groups. The two largest programs are Medicare and Medicaid.

Government expenditures for health services and supplies, defined as total national health expenditures less expenses for research and health facilities construction, reached an estimated $53.3 billion during the year ending June 1976. Medicare and Medicaid together accounted for about 60 percent of this total. The next biggest proportion (13 percent) was for the category of general hospital and medical care which includes the hospital and medical care provided directly by the Federal Government through the Indian Health Service Program and other parts of the U.S. Public Health Service and also outlays by State and local governments for hospital care (largely for psychiatric care). Federal outlays for veterans and for military personnel and their dependents make up the next largest category, followed by the largely State and local expenditures for other activities related to public health.

Nearly 60 percent of public expenditures, or $30.4 billion, were devoted to hospital care, with the largest amounts (both absolutely and proportionally) being generated by the Medicare program. Physicians' services accounted for $6.6 billion, or 12 percent of the total, followed closely by outlays for nursing home care at $5.9 billion (11 percent). Medicare and Medicaid accounted for most of the outlays for nursing home care, with Medicaid reporting $5.4 billion (35 percent of program expenditures) for such services.

Medicare benefits are the same in all States. Differences in average expenditure per Medicare enrollee do exist among the States and geographic regions, however, because of differences in the allowable costs and charges in each area and differences in the service utilization levels of enrollees. In both 1971 and 1974 per capita reimbursements for hospital services were highest in the Northeast and lowest in the South; average reimbursement per person for supplementary medical insurance was highest in the West and lowest in the North Central Region. New York, Massachusetts, and California were the States with the highest average reimbursement levels in 1974.

Medicaid, a federally aided program operated and administered by the States, provides medical services for certain low-income persons subject to Federal guidelines. While Federal and State Governments jointly fund the program in each State, the State determines benefits, rates of payment, and eligibility for services. In 1976 all States and territories except Arizona participated in the program. Under Medicaid, differences in levels of expenditure by State and Federal administrative region are in part attributable to differences in allowable charges and utilization patterns. Another major factor in the reported differences among States is the marked differences in the benefit packages themselves. For example, New York and California, which together accounted for 35 percent of all Medicaid outlays in 1975, not only have relatively large eligible populations but also provide more benefits to recipients than do many other States.

Medicaid programs generally cover a broader range of services than Medicare does. Medicaid benefits for intermediate care facilities, dental services, and drugs are among those not provided under Medicare. Despite the broader range, nearly 70 percent of Medicaid outlays nationwide in 1975 were for institutional health services (i.e., hospitals, skilled nursing homes, and intermediate care facilities). Only 10 percent were devoted to physicians' services and 3 percent to outpatient hospital care, and only 7 percent were spent for prescribed drugs.

Table 144. Estimated expenditures under public programs for health services and supplies, according to source of public funds and type of program: United States, fiscal year 1976

(Data are compiled from a number of government and private sources)

Source of public funds and type of program	Health services and supplies										
	Total	Hospital care	Physician services	Dentist services	Other professional services	Drugs and drug sundries	Eyeglasses and appliances	Nursing home care	Public health activities	Other health services	Administration
	Expenditure in millions										
All public programs	$53,300	$30,396	$6,632	$469	$793	$1,023	$114	$5,856	$3,255	$3,133	$1,627
Health insurance for aged and disabled [1, 2]	17,777	12,809	3,548	–	284	–	–	302	–	–	835
Temporary disability insurance (medical benefits) [3]	74	53	18	–	1	1	1	–	–	–	–
Workmen's compensation (medical benefits) [3]	2,125	1,072	902	–	66	43	43	–	–	–	–
Public assistance (vendor medical payments) [2]	15,320	4,888	1,774	390	397	944	–	5,365	–	835	728
General hospital and medical care	6,902	6,786	19	4	–	2	–	–	–	91	–
Defense department hospital and medical care (including military dependents) [4]	3,232	2,050	161	6	–	11	–	–	–	977	25
Maternal and child health services	593	90	57	14	46	13	18	–	–	350	5
Other public health activities	3,255	–	–	–	–	–	–	–	3,255	–	–
Veterans' hospital and medical care [4]	3,793	2,555	39	55	–	9	31	189	–	881	34
Medical vocational rehabilitation	229	93	114	–	–	–	22	–	–	–	–
Federal programs	36,247	21,394	4,884	288	540	550	61	3,417	1,243	2,548	1,322
Health insurance for aged and disabled [1, 2]	17,777	12,809	3,548	–	284	–	–	302	–	–	835
Workmen's compensation (medical benefits) [3]	66	43	17	–	4	1	1	–	–	–	–
Public assistance (vendor medical payments) [2]	8,381	2,666	968	213	216	515	–	2,926	–	455	422
General hospital and medical care	1,265	1,149	19	4	–	2	–	–	–	91	–
Defense department hospital and medical care (including military dependents) [4]	3,232	2,050	161	6	–	11	–	–	–	977	25
Maternal and child health services	306	47	42	10	36	11	11	–	–	144	5
Other public health activities	1,243	–	–	–	–	–	–	–	1,243	–	–
Veterans' hospital and medical care [4]	3,793	2,555	39	55	–	9	31	189	–	881	34
Medical vocational rehabilitation	183	74	92	–	–	–	17	–	–	–	–

See footnotes at end of table.

Table 144. Estimated expenditures under public programs for health services and supplies, according to source of public funds and type of program: United States, fiscal year 1976—Continued

(Data are compiled from a number of government and private sources)

Source of public funds and type of program	Health services and supplies										
	Total	Hospital care	Physician services	Dentist services	Other professional services	Drugs and drug sundries	Eyeglasses and appliances	Nursing home care	Public health activities	Other health services	Administration
	Expenditure in millions										
State and local programs	17,053	9,002	1,748	181	254	474	53	2,439	2,012	585	306
Temporary disability insurance (medical benefits)[3]	74	53	18	–	1	1	1	–	–	–	–
Workmen's compensation (medical benefits)[3]	2,059	1,029	885	–	62	41	41	–	–	–	–
Public assistance (vendor medical payments)[2]	6,939	2,222	806	177	180	429	–	2,439	–	379	306
General hospital and medical care	5,636	5,636	–	–	–	–	–	–	–	–	–
Maternal and child health services	287	43	15	4	10	3	6	–	–	205	–
Other public health activities	2,012	–	–	–	–	–	–	–	2,012	–	–
Medical vocational rehabilitation	46	19	23	–	–	–	4	–	–	–	–

[1] Includes premium payments for supplementary medical insurance by or in behalf of enrollees.

[2] Includes duplication in the Medicare and Medicaid amounts where premium payments for Medicare are financed by Medicaid for cash assistance recipients and, in some States, for the medically indigent.

[3] Includes medical benefits paid under public law by private insurance carriers and self-insurers.

[4] Payments for services outside the hospital (excluding "other health services") represent only those made under contract medical care programs.

SOURCE: Gibson, R. M., and Mueller, M. S.: National health expenditures, fiscal year 1976. Social Security Bulletin 40(4):3-22, Apr. 1977.

Table 145. Average monthly reimbursement per enrollee 65 years and over from Medicare hospital and medical insurance, according to geographic region, division, and State: United States, 1971 and 1974

(Data are based on Social Security Administration payment records)

Geographic region, division, and State	Hospital and/or medical insurance		Hospital insurance		Supplementary medical insurance	
	1971	1974	1971	1974	1971	1974
	Average monthly amount per enrollee					
United States	$29.71	$38.92	$21.84	$28.65	$ 8.35	$10.93
Northeast	34.10	45.35	24.99	33.43	9.57	12.52
New England	34.62	46.73	26.52	35.79	8.52	11.53
Maine	24.96	34.11	19.27	26.16	6.01	8.43
New Hampshire	25.57	34.71	19.60	26.13	6.34	9.02
Vermont	31.84	40.19	24.98	31.19	7.27	9.52
Massachusetts	37.66	51.18	28.85	40.25	9.30	11.63
Rhode Island	36.17	47.09	26.75	34.34	9.87	13.33
Connecticut	34.52	46.85	26.64	34.36	8.21	13.02
Middle Atlantic	33.93	44.89	24.49	32.65	9.92	12.84
New York	39.44	51.95	28.75	38.11	11.26	14.57
New Jersey	30.96	41.38	21.36	29.24	9.96	12.60
Pennsylvania	27.11	36.33	19.67	26.41	7.83	10.41
North Central	28.42	37.57	21.94	28.95	6.84	9.10
East North Central	28.72	38.61	22.19	29.95	6.89	9.16
Ohio	27.09	35.92	21.58	28.46	5.90	8.04
Indiana	26.04	34.09	20.01	25.98	6.33	8.46
Illinois	28.73	38.98	21.85	30.37	7.29	9.17
Michigan	32.46	45.67	24.74	35.12	8.08	11.02
Wisconsin	28.84	36.72	22.44	27.82	6.66	9.16
West North Central	27.84	35.51	21.42	26.99	6.76	8.97
Minnesota	32.28	41.47	25.29	31.77	7.33	10.14
Iowa	25.48	32.39	19.84	25.19	5.88	7.50
Missouri	27.66	33.55	21.14	25.11	6.94	9.98
North Dakota	28.19	39.74	22.29	30.79	6.23	9.44
South Dakota	25.05	31.43	20.00	24.84	5.34	6.97
Nebraska	25.21	32.23	18.62	23.82	6.91	8.77
Kansas	27.03	36.88	20.27	27.64	7.10	9.68
South	25.01	32.95	17.97	23.94	7.56	9.77
South Atlantic	25.60	34.62	18.29	24.95	7.83	10.48
Delaware	29.52	38.78	22.62	29.32	7.25	9.92
Maryland	29.83	42.17	22.98	31.91	7.60	11.26
District of Columbia	35.39	51.03	27.17	38.37	10.41	16.01
Virginia	22.02	30.66	17.01	22.65	5.49	8.75
West Virginia	19.84	27.27	15.99	21.45	4.12	6.26
North Carolina	21.85	28.64	16.94	22.08	5.25	7.11
South Carolina	16.84	26.60	11.88	20.60	5.38	6.67
Georgia	22.94	29.92	15.50	22.27	8.01	8.44
Florida	30.38	39.57	19.94	26.42	10.89	14.02
East South Central	21.88	28.23	16.30	21.19	6.02	7.71
Kentucky	21.79	27.94	16.91	22.51	5.26	5.99
Tennessee	21.57	28.44	16.00	20.94	5.97	8.09
Alabama	22.53	27.89	16.19	20.28	6.84	8.33
Mississippi	21.62	28.76	16.08	20.95	6.07	8.70
West South Central	26.27	33.43	18.64	24.17	8.19	10.01
Arkansas	20.10	26.32	14.54	18.36	5.96	8.54
Louisiana	22.42	28.89	16.69	21.57	6.51	8.28
Oklahoma	26.63	33.37	18.84	24.60	8.30	9.48
Texas	28.82	36.50	20.16	26.22	9.17	11.00

Table 145. Average monthly reimbursement per enrollee 65 years and over from Medicare hospital and medical insurance, according to geographic region, division, and State: United States, 1971 and 1974—Continued

(Data are based on Social Security Administration payment records)

Geographic region, division, and State	Hospital and/or medical insurance		Hospital insurance		Supplementary medical insurance	
	1971	1974	1971	1974	1971	1974
	Average monthly amount per enrollee					
West	34.00	43.04	23.92	29.83	10.62	13.96
Mountain	27.88	35.25	20.15	24.75	8.22	11.14
Montana	26.99	30.64	20.49	21.75	6.81	9.29
Idaho	24.07	33.15	17.89	24.41	6.48	9.15
Wyoming	23.77	29.54	18.15	22.27	5.95	7.65
Colorado	31.22	37.89	22.51	27.67	9.22	10.93
New Mexico	24.16	33.14	17.27	23.96	7.59	10.14
Arizona	30.85	38.14	21.93	25.18	9.49	13.64
Utah	19.86	27.05	13.74	17.99	6.46	9.59
Nevada	35.04	46.63	25.41	32.45	10.33	15.18
Pacific	35.81	45.43	25.04	31.39	11.32	14.82
Washington	25.18	32.91	17.47	22.87	8.06	10.50
Oregon	25.97	34.05	19.61	24.72	6.73	9.78
California	39.25	49.39	27.30	33.97	12.56	16.29
Alaska	25.26	41.58	17.50	29.13	9.79	15.45
Hawaii	26.62	35.76	18.68	24.45	8.42	12.23

SOURCES: Waldhauser, C. B.: Health insurance for the aged: Monthly reimbursements per person by State, 1972. Health Insurance Statistics. HI-72. DHEW Pub. No. (SSA) 76-11702. Social Security Administration. Washington. U.S. Government Printing Office, Oct. 15, 1975.

Office of Research and Statistics, Social Security Administration: Selected data.

Table 146. Percent distribution of medical vendor payments under the Medicaid program, by type of expenditure according to Standard Federal Administrative Region and State: United States, 1975

(Data are based on reporting by State Medicaid programs)

Standard Federal Administrative Region and State	Amount in thousands	Type of expenditure								
		All Medicaid expenditures	Inpatient hospital	Skilled nursing facility	Intermediate care facility	Physician services	Dentist services	Outpatient hospital services	Prescribed drugs	Other[1]
		Percent distribution								
All reporting States	$13,524,564	100.0	31.8	19.4	18.2	9.9	2.8	3.0	6.7	8.2
Region I	965,771	100.0	36.2	20.7	16.0	8.0	3.7	5.3	5.6	4.4
Connecticut	177,714	100.0	26.1	43.9	3.7	8.3	2.0	6.0	5.7	4.2
Maine	81,114	100.0	37.3	2.5	30.1	15.0	2.4	4.0	6.3	2.5
Massachusetts	577,115	100.0	39.3	18.7	14.9	6.8	4.4	5.7	5.1	5.1
New Hampshire	30,540	100.0	18.9	7.0	41.7	11.5	5.5	2.6	8.9	3.9
Rhode Island	79,793	100.0	43.8	10.9	23.5	5.8	2.8	3.8	6.9	2.5
Vermont[2]	19,493	100.0	29.6	6.4	33.2	14.0	3.1	3.0	7.7	2.9
Region II	3,758,300	100.0	36.0	22.9	13.1	6.0	1.9	0.8	3.7	15.6
New Jersey	401,726	100.0	37.5	1.8	27.7	11.4	4.8	6.6	6.4	3.8
New York	3,252,328	100.0	35.9	26.3	11.7	4.8	1.5	0.0	2.8	16.9
Puerto Rico	101,652	100.0	34.1	---	---	24.1	0.8	---	21.1	19.8
Virgin Islands	2,593	100.0	51.3	---	---	1.4	0.4	29.0	13.0	4.8
Region III	1,345,978	100.0	33.9	24.3	16.3	8.2	2.3	3.3	6.0	5.7
Delaware	16,803	100.0	34.9	2.6	24.2	17.8	---	8.2	9.1	3.2
District of Columbia	100,568	100.0	43.4	3.1	14.6	13.4	0.8	8.3	6.2	10.2
Maryland[3]	218,805	100.0	39.0	12.0	11.7	8.5	6.0	10.9	8.4	3.5
Pennsylvania	768,225	100.0	31.1	37.9	12.5	6.1	1.6	0.0	4.8	5.9
Virginia	197,528	100.0	31.7	2.7	35.8	11.6	2.2	5.1	6.5	4.4
West Virginia	44,049	100.0	45.4	1.1	18.0	13.9	2.7	---	11.2	7.8
Region IV	1,273,954	100.0	25.8	21.8	17.9	12.4	3.2	3.7	11.9	3.3
Alabama	150,865	100.0	22.0	31.6	15.3	11.8	1.8	2.8	10.4	4.3
Florida	187,937	100.0	30.0	33.9	3.3	12.4	2.4	4.3	10.9	2.8
Georgia	270,758	100.0	22.1	24.1	17.7	12.9	5.8	4.3	11.0	2.2
Kentucky	145,678	100.0	27.9	14.6	27.9	10.2	2.9	3.6	8.6	4.3
Mississippi	102,864	100.0	24.0	29.1	4.6	15.1	1.9	2.8	21.2	1.3
North Carolina	169,846	100.0	33.8	14.7	16.2	11.8	4.0	3.7	12.0	3.7
South Carolina	91,477	100.0	29.7	25.8	9.6	12.5	3.2	3.0	10.0	6.2
Tennessee	154,519	100.0	19.2	0.6	45.0	12.8	1.0	4.4	14.2	2.8

See footnotes at end of table.

Table 146. Percent distribution of medical vendor payments under the Medicaid program, by type of expenditure according to Standard Federal Administrative Region and State: United States, 1975—Continued

(Data are based on reporting by State Medicaid programs)

Standard Federal Administrative Region and State	Amount in thousands	Type of expenditure								
		All Medicaid expenditures	Inpatient hospital	Skilled nursing facility	Intermediate care facility	Physician services	Dentist services	Outpatient hospital services	Prescribed drugs	Other [1]
		Percent distribution								
Region V	2,727,555	100.0	29.5	15.8	21.8	12.0	3.4	3.9	7.3	6.3
Illinois	753,418	100.0	37.0	7.5	18.1	12.6	3.5	3.5	8.7	9.1
Indiana	191,286	100.0	21.3	13.2	37.2	8.1	2.2	3.6	7.1	7.4
Michigan	677,078	100.0	33.1	18.2	13.5	15.4	3.9	4.2	7.2	4.5
Minnesota	285,457	100.0	19.7	20.9	36.2	8.1	2.7	2.4	5.1	4.9
Ohio	413,277	100.0	34.3	17.8	12.5	11.6	3.8	6.4	9.4	4.2
Wisconsin	402,040	100.0	15.9	22.9	34.5	10.5	3.1	2.4	4.6	6.0
Region VI	978,285	100.0	19.4	5.5	48.0	11.2	0.7	2.0	9.4	3.6
Arkansas	104,570	100.0	15.7	21.1	32.4	10.8	3.7	1.3	13.3	1.7
Louisiana	174,757	100.0	22.3	1.3	42.8	8.6	---	2.7	18.3	4.0
New Mexico	31,794	100.0	31.2	0.3	28.7	13.1	3.6	4.1	11.0	8.1
Oklahoma	147,240	100.0	26.7	0.3	54.8	11.3	1.1	0.2	0.9	4.7
Texas	519,913	100.0	16.4	5.7	52.1	12.1	0.1	2.2	7.9	3.4
Region VII	390,083	100.0	28.2	4.0	36.5	11.5	3.5	3.2	9.4	3.7
Iowa	96,759	100.0	18.4	0.5	52.3	10.3	4.2	2.8	7.9	3.6
Kansas	115,987	100.0	28.8	2.9	36.8	10.5	3.6	3.1	8.2	6.2
Missouri	117,996	100.0	39.2	8.2	15.9	15.5	3.1	3.9	12.5	1.6
Nebraska	59,341	100.0	21.0	3.3	50.8	7.3	2.7	2.6	8.3	4.1
Region VIII	226,048	100.0	23.2	21.3	28.6	10.0	2.1	3.9	7.2	3.7
Colorado	104,655	100.0	25.4	16.7	31.6	9.9	0.4	5.8	7.6	2.5
Montana	30,600	100.0	21.8	22.8	23.4	14.7	4.3	2.1	5.9	5.0
North Dakota	24,856	100.0	25.9	33.3	16.5	6.4	2.6	1.1	8.7	5.5
South Dakota	23,985	100.0	17.4	24.2	36.3	9.8	1.2	1.6	6.7	2.8
Utah [3]	35,800	100.0	20.1	21.2	27.6	8.4	5.6	3.9	7.5	5.7
Wyoming	6,152	100.0	20.5	32.4	30.0	11.6	2.2	1.9	---	1.4
Region IX	1,546,903	100.0	36.8	22.1	1.8	14.7	3.9	4.9	7.1	8.6
California	1,483,990	100.0	37.2	21.9	1.5	14.6	3.8	5.0	7.1	9.0
Hawaii [3]	43,099	100.0	22.3	27.1	7.6	15.7	8.7	4.7	7.5	6.3
Nevada	19,814	100.0	33.9	22.1	8.6	14.1	5.1	5.2	7.1	4.0

See footnotes at end of table.

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Table 146. Percent distribution of medical vendor payments under the Medicai d program, by type of expenditure according to Standard Federal Administrative Region and State: United States, 1975—Continued

(Data are based on reporting by State Medicaid programs)

Standard Federal Administrative Region and State	Amount in thousands	Type of expenditure								
		All Medicaid expenditures	Inpatient hospital	Skilled nursing facility	Intermediate care facility	Physician services	Dentist services	Outpatient hospital services	Prescribed drugs	Other [1]
		Percent distribution								
Region X	311,688	100.0	24.4	23.3	21.4	10.6	4.9	3.3	6.1	6.0
Alaska	9,391	100.0	19.2	19.5	39.8	12.7	2.3	4.2	—	2.4
Idaho	29,281	100.0	15.8	14.4	43.5	12.8	2.4	3.2	5.7	2.4
Oregon	89,479	100.0	22.4	1.8	49.5	7.8	3.8	3.7	5.4	5.6
Washington	183,537	100.0	27.0	35.4	3.2	11.6	6.0	3.0	6.9	7.0

[1] Includes clinics, laboratory and radiological services, other practitioners' services, family planning services, and home health services.

[2] Data represent January through July only.

[3] Includes general assistance medical vendor payments.

NOTE: Arizona had no Title XIX program during calendar year 1975.

SOURCE: National Center for Social Statistics: Medical Assistance (Medicaid) Financed Under Title XIX of the Social Security Act, December 1975. Report B-1. DHEW Pub. No. (SRS) 76-03150. Social and Rehabilitation Service. Washington. U.S. Government Printing Office, Apr. 1976.

C. Age Differences in Expenditures for Health Care

The age distribution of the population has a direct bearing on the amount and distribution of the Nation's health care expenditures. Per capita expenditures for people 65 years and over, nearly all of whom are covered by Medicare, are higher than per capita expenditures for people under 65. This difference generally reflects the fact that older people experience more serious spells of illness and have a relatively greater prevalence of chronic conditions than younger people do. They are hospitalized more frequently than younger people and they stay longer when they are admitted.

In fiscal year 1975, $103.2 billion were spent for personal health care services—the health services and supplies received directly by individuals. Personal health care estimates are derived by subtracting from the total national health expenditures amounts devoted to research and medical facilities construction, administrative costs of government health programs, private fundraising activities for health, and the retained earnings of private health insurers.

Of the $103.2 billion, 15 percent ($15.4 billion) was spent to care for people under 19 years, 56 percent ($57.4 billion) for people aged 19-64, and 29 percent ($30.4 billion) for people 65 years and over. The average per capita health care bill during fiscal year 1975 was $1,360 in the oldest group, $472 in the intermediate group, and $212 in the youngest group. The amount spent per capita for the elderly was nearly 3 times the amount spent on behalf of the younger, working population. Per capita nursing home expenditures for the elderly were 37 times as great as such expenditures for people aged 19-64. Expenses for hospital care, drugs, physicians' services, and eyeglasses range from 1.9 to 2.6 times as great for the elderly as for persons aged 19-64. On the other hand, per capita dental care expenditures for older people were only half those for the group 19-64 years.

The health expenses of older people were publicly subsidized to a much greater extent than those of the younger population. Third-party payments, both private and public, accounted for about 67 percent of personal health care expenditures, with public payments accounting for about 40 percent of the amount spent for all ages. However, the public contribution varied from 66 percent for the elderly to 24 percent for people under 19 years during 1975.

Personal health care expenditures for the three age groups vary by type of expenditure (provider) and source of funds (public or private). In 1975 nearly half of the total spending for personal health care in the two older age groups (19-64 and 65 years and over) was for hospital care. Public programs covered a greater proportion of hospital expenses than other expenses for all age groups, paralleling the coverage of private health insurance. For the oldest age group, public sources (i.e., Medicare, Medicaid, and the Veterans Administration) paid 90 percent of the total bill for hospital services. Public sources, chiefly Medicaid, covered 41 percent of the total hospital services bill for the intermediate age group. Public expenditures for physician services utilized by the elderly and intermediate age groups amounted to about 60 and 20 percent, respectively.

For the elderly, Medicare covers the bulk of expenditures for hospital and physicians' services and a significant proportion of the cost of "other" practitioners' services, which is largely health care in the individual's home. Medicare does not cover expenses associated with dental services, outpatient drugs, eyeglasses and appliances, or "other health services." Some portion of the bill for these services may be picked up by Medicaid or other State and local programs.

Public and private third parties have paid a steadily increasing share of personal health care expenses for all ages, so that these payments accounted for two-thirds of personal health care spending in 1975. Medicare covered the largest portion of the health care bill for the elderly, but roughly one-third of their health care bills were paid by elderly patients directly for non-covered services, for required deductibles and coinsurance for covered services, and in premiums for private health insurance to cover some of the gaps in Medicare. For the population under 65 years, private health insurance coverage has expanded steadily during the last 10 years, accompanied by an increase in the share of expenses covered by public programs. One increase in public funding was due to the Social Security Amendments of 1972 which extended

Medicare coverage to disabled persons under 65 years. In fiscal year 1976, $856.3 million was paid in benefits to these individuals.

Medicare is the largest public program for the elderly, followed by Medicaid and then other State and local support for general hospital and medical services. The latter two programs also constitute the major source of government support for the health care of persons under 65. Substantial amounts are spent by the Defense Department and the Veterans Administration on the care of people aged 19-64 and 65 years and over. The Defense Department also contributes substantially to the care of people under 19 years through its program for military dependents.

Table 147. Amount and percent distribution of personal health care expenditures for persons 65 years and over, by source of funds according to type of expenditure: United States, fiscal year 1975

(Data are compiled from a number of government and private sources)

Type of expenditure	All sources	Private	Public		
			Total	Medicare	Other
	Amount in millions				
Total	$30,383	$10,466	$19,917	$12,749	$7,169
Hospital care	13,467	1,379	12,088	9,719	2,369
Physician services	4,862	1,987	2,875	2,628	247
Dentist services	540	502	38	–	38
Other professional services	441	220	221	167	54
Drugs and drug sundries	2,629	2,285	344	–	344
Eyeglasses and appliances	506	498	8	–	8
Nursing home care	7,650	3,571	4,079	234	3,845
Other health services	288	24	264	–	264
	Percent distribution				
Total	100.0	34.4	65.6	42.0	23.5
Hospital care	100.0	10.2	89.8	72.2	17.6
Physician services	100.0	40.9	59.1	54.1	5.1
Dentist services	100.0	92.9	7.1	–	7.1
Other professional services	100.0	49.8	50.2	38.0	12.2
Drugs and drug sundries	100.0	86.9	13.1	–	13.1
Eyeglasses and appliances	100.0	98.4	1.6	–	1.6
Nursing home care	100.0	46.7	53.3	3.1	50.3
Other health services	100.0	8.2	91.8	–	91.8

SOURCE: Mueller, M. S., and Gibson, R. M.: Age differences in health care spending, fiscal year 1975. Social Security Bulletin 39(6): 18-31, June 1976.

Table 148. Aggregate and per capita personal health care expenditures, according to age, source of funds, and type of expenditure: United States, fiscal year 1975
(Data are compiled from a number of government and private sources)

Type of expenditure	All ages			Under 19 years			19-64 years			65 years and over		
	All sources	Private	Public	All sources	Private	Public	All sources	Private	Public	All sources	Private	Public
	Aggregate expenditure in millions											
Total	$103,200	$62,276	$40,924	$15,406	$11,657	$3,749	$57,411	$40,153	$17,258	$30,383	$10,466	$19,917
Hospital care	46,600	20,957	25,643	5,173	3,063	2,110	27,960	16,515	11,445	13,467	1,379	12,088
Physician services	22,100	16,245	5,855	5,083	4,431	652	12,155	9,826	2,329	4,862	1,987	2,875
Dentist services	7,500	7,085	415	1,545	1,387	158	5,415	5,196	219	540	502	38
Other professional services	2,100	1,591	509	462	378	84	1,197	993	204	441	220	221
Drugs and drug sundries	10,600	9,695	905	2,014	1,893	121	5,957	5,517	440	2,629	2,285	344
Eyeglasses and appliances	2,300	2,198	102	379	365	15	1,415	1,335	80	506	498	8
Nursing home care	9,000	3,799	5,201	225	139	86	1,125	88	1,037	7,650	3,571	4,079
Other health services	3,000	707	2,293	525	1	524	2,187	682	1,505	288	24	264
	Per capita expenditure											
Total	$476.40	$287.48	$188.92	$212.14	$160.52	$51.62	$471.88	$330.03	$141.85	$1,360.16	$468.53	$891.63
Hospital care	215.12	96.74	118.38	71.23	42.17	29.05	229.82	135.74	94.07	602.89	61.75	541.14
Physician services	102.02	74.99	27.03	69.99	61.02	8.98	99.91	80.77	19.14	217.66	88.96	128.69
Dentist services	34.62	32.71	1.92	21.27	19.10	2.17	44.51	42.71	1.80	24.17	22.45	1.72
Other professional services	9.69	7.35	2.35	6.36	5.21	1.15	9.84	8.17	1.67	19.74	9.83	9.91
Drugs and drug sundries	48.93	44.76	4.18	27.73	26.07	1.66	48.96	45.35	3.62	117.68	102.30	15.38
Eyeglasses and appliances	10.62	10.15	0.47	5.23	5.03	0.20	11.63	10.97	0.65	22.65	22.29	0.36
Nursing home care	41.55	17.54	24.01	3.10	1.91	1.19	9.25	0.73	8.52	342.47	159.88	182.58
Other health services	13.85	3.26	10.59	7.23	0.01	7.22	17.98	5.61	12.37	12.89	1.05	11.84

NOTE: Data are preliminary estimates.

SOURCE: Mueller, M. S., and Gibson, R. M.: Age differences in health care spending, fiscal year 1975. Social Security Bulletin 39(6): 18-31, June 1976.

Table 149. Per capita expenditures for personal health care, according to source of payment and age: United States, fiscal years 1966-75

(Data are compiled from a number of government and private sources)

Age and fiscal year	All personal health care expenditures	Direct payment	Third-party payment			
			Total	Private health insurance	Govern-ment	Philan-thropy and industry
All ages	Per capita expenditure					
1966	$ 181.96	$ 93.79	$ 88.17	$ 44.90	$ 39.65	$3.62
1967	205.45	93.35	112.10	46.43	61.92	3.74
1968	228.75	93.91	134.84	51.35	79.66	3.84
1969	256.59	102.06	154.53	59.44	91.09	4.01
1970	289.76	117.00	172.76	69.44	99.03	4.29
1971	320.84	125.55	195.29	79.83	110.86	4.60
1972	353.00	132.73	220.27	88.00	127.37	4.89
1973 [1]	386.84	142.32	244.53	98.27	140.98	5.28
1974 [1]	419.44	145.77	273.66	112.21	155.78	5.68
1975 [2]	476.40	155.11	321.30	126.21	188.92	6.17
Under 65 years						
1966	154.96	79.13	75.82	42.25	30.09	3.48
1967	171.55	82.59	88.96	47.98	37.27	3.71
1968	185.39	85.22	100.17	53.11	43.26	3.80
1969	206.36	91.14	115.21	61.54	49.66	4.01
1970	232.50	100.71	131.79	71.98	55.50	4.31
1971	255.09	104.77	150.32	83.11	62.59	4.62
1972	278.23	106.96	171.27	91.81	74.52	4.04
1973 [1]	309.45	118.38	191.07	102.67	83.07	5.34
1974 [1]	333.39	117.98	215.41	117.38	92.27	5.76
1975 [2]	374.79	128.11	246.68	132.28	108.12	6.28
65 years and over						
1966	445.25	236.72	208.52	70.71	132.89	4.92
1967	535.03	198.01	337.03	31.38	301.59	4.05
1968	646.65	177.90	468.75	34.42	430.45	3.87
1969	735.19	206.02	529.17	39.42	485.75	4.00
1970	828.31	270.20	558.11	45.54	508.50	4.06
1971	925.98	316.78	609.20	49.67	555.15	4.38
1972	1,033.51	367.40	666.11	53.33	608.30	4.49
1973 [1]	1,081.35	357.16	724.19	58.81	660.69	4.70
1974 [1]	1,181.46	391.90	789.56	66.35	718.20	5.01
1975 [2]	1,360.16	389.88	970.28	73.44	891.63	5.22

[1] Revised estimates.

[2] Preliminary estimates.

SOURCE: Mueller, M. S., and Gibson, R. M.: Age differences in health care spending, fiscal year 1975. Social Security Bulletin 39(6): 18-31, June 1976.

Table 150. Percent distribution of per capita expenditures for personal health care, by source of payment according to age: United States, fiscal years 1966-75

(Data are compiled from a number of government and private sources)

Age and fiscal year	All personal health care expenditures	Direct payment	Third-party payment			
			Total	Private health insurance	Govern-ment	Philan-thropy and industry
	Percent distribution					
All ages						
1966	100.0	51.5	48.5	24.7	21.8	2.0
1967	100.0	45.4	54.6	22.6	30.1	1.8
1968	100.0	41.1	58.9	22.5	34.8	1.7
1969	100.0	39.8	60.2	23.2	35.5	1.6
1970	100.0	40.4	59.6	24.0	34.2	1.5
1971	100.0	39.1	60.9	24.9	34.6	1.4
1972	100.0	37.6	62.4	24.9	36.1	1.4
1973[1]	100.0	36.8	63.2	25.4	36.4	1.4
1974[2]	100.0	34.8	65.2	26.8	37.1	1.4
1975[2]	100.0	32.6	67.4	26.5	39.7	1.3
Under 65 years						
1966	100.0	51.1	48.9	27.3	19.4	2.2
1967	100.0	48.1	51.9	28.0	21.7	2.2
1968	100.0	46.0	54.0	28.7	23.3	2.1
1969	100.0	44.2	55.8	29.8	24.1	2.0
1970	100.0	43.3	56.7	31.0	23.9	1.9
1971	100.0	41.1	58.9	32.6	24.5	1.8
1972	100.0	38.4	61.6	33.0	26.8	1.8
1973[1]	100.0	38.3	61.7	33.2	26.8	1.7
1974[2]	100.0	35.4	64.6	35.2	27.7	1.7
1975[2]	100.0	34.2	65.8	35.3	28.8	1.7
65 years and over						
1966	100.0	53.2	46.8	15.9	29.8	1.1
1967	100.0	37.0	63.0	5.9	56.4	0.8
1968	100.0	27.5	72.5	5.3	66.6	0.6
1969	100.0	28.0	72.0	5.4	66.1	0.5
1970	100.0	32.6	67.4	5.5	61.4	0.5
1971	100.0	34.2	65.8	5.4	60.0	0.5
1972	100.0	35.6	64.5	5.2	58.9	0.4
1973[1]	100.0	33.0	67.0	5.4	61.1	0.4
1974[2]	100.0	33.2	66.8	5.6	60.8	0.4
1975[2]	100.0	28.7	71.3	5.4	65.6	0.4

[1] Revised estimates.

[2] Preliminary estimates.

SOURCE: Mueller, M. S., and Gibson, R. M.: Age differences in health care spending, fiscal year 1975. Social Security Bulletin 39(6): 18-31, June 1976.

Table 151. Estimated aggregate and per capita personal health care expenditures under public programs, according to age, source of public funds, and program: United States, fiscal year 1975

(Data are compiled from a number of government and private sources)

Program	All ages			Under 19 years			19-64 years			65 years and over		
	All public sources	Federal	State and local	All public sources	Federal	State and local	All public sources	Federal	State and local	All public sources	Federal	State and local
	Aggregate expenditure in millions											
Total	$40,924	$28,578	$12,346	$3,749	$2,391	$1,358	$17,258	$9,856	$7,402	$19,917	$16,331	$3,586
Health insurance for the aged and disabled—Medicare	14,121	14,121	---	3	3	---	1,355	1,355	---	12,762	12,762	---
Temporary disability insurance	73	---	73	---	---	---	73	---	73	---	---	---
Workmen's compensation (medical benefits)	1,830	51	1,779	---	---	---	1,773	49	1,724	57	2	55
Public assistance—Medicaid	12,487	6,692	5,795	2,098	1,125	974	5,475	2,934	2,541	4,914	2,633	2,280
General hospital and medical care	5,492	1,090	4,402	518	320	198	3,638	685	2,954	1,335	85	1,250
Defense department hospital and medical care (including military dependents)	2,989	2,989	---	726	726	---	2,173	2,173	---	90	90	---
Maternal and child health services	535	272	263	365	186	179	171	87	74	---	---	---
Veterans' hospital and medical care	3,206	3,206	---	---	---	---	2,450	2,450	---	756	756	---
Medical vocational rehabilitation	190	157	33	38	31	7	148	122	26	4	3	1
	Per capita expenditure											
Total	$188.91	$131.92	$56.99	$51.62	$32.95	$18.67	$141.88	$81.02	$60.86	$891.61	$731.06	$160.55
Health insurance for the aged and disabled—Medicare	65.18	65.18	---	0.09	0.09	---	11.14	11.14	---	571.31	571.31	---
Temporary disability insurance	0.34	---	0.34	---	---	---	0.60	---	0.60	---	---	---
Workmen's compensation (medical benefits)	8.45	0.24	8.21	---	---	---	14.58	0.40	14.18	2.55	0.08	2.47
Public assistance—Medicaid	57.64	30.89	26.75	28.87	15.48	13.39	45.01	24.12	20.89	219.93	117.87	102.07
General hospital and medical care	25.35	5.03	20.32	7.13	4.40	2.73	29.91	5.63	24.28	59.76	3.80	55.96
Defense department hospital and medical care (including military dependents)	13.80	13.80	---	9.99	9.99	---	17.87	17.87	---	4.03	4.03	---
Maternal and child health services	2.47	1.26	1.21	5.02	2.56	2.46	1.41	0.71	0.70	---	---	---
Veterans' hospital and medical care	14.80	14.80	---	---	---	---	20.14	20.14	---	33.84	33.84	---
Medical vocational rehabilitation	0.88	0.72	0.16	0.52	0.43	0.09	1.22	1.00	0.22	0.18	0.13	0.05

NOTE: Data are preliminary estimates.

SOURCE: Mueller, M. S., and Gibson, R. M.: Age differences in health care spending, fiscal year 1975. Social Security Bulletin 39(6):18-31, June 1976.

D. Health Insurance Coverage

An estimated 163 million persons, or 78 percent of the Nation's civilian population, were protected by private health insurance against some portion of the cost of hospital care by the end of 1974. This estimate is based on data compiled by the Social Security Administration from a number of sources—primarily insurance company estimates of enrollment, coverage, and financial experience with adjustments from other sources. Three-fourths of the population had coverage for physicians' services, but this was mostly limited to inhospital services such as surgery, inhospital physician visits, X-rays, and laboratory tests. Much of the coverage for physician visits in the office and home was under major-medical plans requiring considerable deductible payments and copayments. A relatively small proportion of the population had first dollar coverage for these services. For other services the proportion of the population covered by private insurance was much smaller. The extent of coverage for the same service varies widely among policies, as does the cost of these policies.

Private health insurance paid for about one-quarter of all health care expenses in fiscal year 1976. Direct payment by individuals accounted for about one-third of all expenditures, and the largest share was paid by the government (40 percent). The bulk of the private insurance expenditures were for hospital care (62 percent) and physician services (30 percent). Dental services and drugs and drug sundries were paid primarily by the consumer.

The rate of growth in enrollment for insurance covering hospitalization and physician services declined since 1960, as the market for these plans became increasingly saturated. In the meantime, however, benefit expenditures increased at an annual rate of 11-13 percent. The more rapid growth in insurance benefit expenditures is partly attributable to inflation, but undoubtedly also reflects an expansion in the scope of benefits.

Much of the private health insurance purchased by people 65 years and over is designed to supplement or extend the benefits received under Medicare (e.g., to pay the required deductibles and coinsurance). Since nearly all persons 65 years and over are covered by Medicare, although the numbers not covered have been increasing in recent years, the remainder of this section will be devoted to the insurance coverage of persons under 65 years. Also, since hospital insurance is basic to nearly all health insurance policies, hospital coverage will be used to differentiate between the insured and the uninsured population.

Data collected as a part of the 1974 Health Interview Survey provide further insight into the health insurance coverage of the population by various socioeconomic classifications. Overall these data showed that about 78 percent of the civilian noninstitutionalized population under 65 years had hospital insurance. (Provisional data from the 1976 Health Interview Survey indicate that coverage levels had remained about the same.) The proportion of people having such coverage increased with income, rising from 37 percent for the lowest income group (under $3,000) to more than 90 percent among families with incomes of $15,000 or more. Within each income group except the lowest, the percent covered increased with age. The relatively high percent of coverage of people aged 17-24 in the lowest income group is attributable to the number of young adults with low earnings who were still eligible for coverage under their parents' policies, who had policies purchased by their parents, or are covered as students.

Hospital insurance coverage also increased as income increased in each of the four geographic regions. The proportion of the population having insurance was highest in the Northeast and North Central Regions and lowest in the South and West. People living in metropolitan areas were somewhat more likely to have hospital insurance than those residing in nonmetropolitan areas, either in nonfarm or farm settings. Across all income and age categories proportionally more persons identified as white had hospital insurance coverage than did persons of all other races.

An estimated 38 million Americans under 65 years had no private hospital insurance coverage in 1974. People reported a number of reasons for not having insurance, not all of them strictly economic. One of the main reasons for not having insurance, reported by 31.9 percent

of those not covered, was eligibility for government-financed programs such as Medicaid, military programs including CHAMPUS, and Medicare disability benefits. Another large group (40.2 percent) characterized private health insurance as being too expensive. The two income categories under $10,000 showed no significant differences in the proportion of respondents citing this as a reason for not having insurance. Among families with annual incomes over $10,000 who did not have health insurance, it was less often described as being too expensive. Other people said that they saw no need for health insurance because of their good health (8.4 percent), that they did not believe in it (2.1 percent), that they were dissatisfied with previous insurance (2.2 percent), or that they could not get insurance (2.0 percent).

Table 152. Amount and percent distribution of personal health care expenditures, by source of payment according to type of expenditure: United States, fiscal year 1976

(Data are compiled from a number of government and private sources)

Type of expenditure	All personal health care expenditures	Direct payment	Third-party payment			
			Total	Private health insurance	Government	Philanthropy and industry
	Aggregate amount in millions					
Total	$120,431	$39,099	$81,332	$31,359	$48,417	$1,556
Hospital care	55,400	4,909	50,491	19,443	30,396	652
Physician services	26,350	10,198	16,152	9,502	6,632	18
Dentist services	8,600	6,970	1,630	1,160	469	0
Drugs and drug sundries	11,168	9,423	1,745	721	1,023	0
Other health services [1]	18,913	7,598	11,316	533	9,896	886
	Per capita amount					
Total	$551.50	$179.05	$372.46	$143.61	$221.72	$7.13
Hospital care	253.70	22.48	231.22	89.04	139.20	2.98
Physician services	120.67	46.70	73.97	43.51	30.37	0.08
Dentist services	39.38	31.92	7.46	5.31	2.15	0.00
Drugs and drug sundries	51.14	43.15	7.99	3.30	4.69	0.00
Other health services [1]	86.61	34.79	51.82	2.44	45.32	4.06
	Percent distribution					
Total	100.0	32.5	67.5	26.0	40.2	1.3
Hospital care	100.0	8.9	91.1	35.1	54.9	1.2
Physician services	100.0	38.7	61.3	36.1	25.2	0.1
Dentist services	100.0	81.1	18.9	13.5	5.5	–
Drugs and drug sundries	100.0	84.4	15.6	6.5	9.2	–
Other health services [1]	100.0	40.2	59.8	2.8	52.3	4.7

[1] Includes other professional services, eyeglasses and appliances, nursing home care, and other services not elsewhere classified.

SOURCES: Mueller, M. S., and Gibson, R. M.: National health expenditures, fiscal year 1976. Social Security Bulletin 40(4): 3-22, Apr. 1977.

Office of Research and Statistics, Social Security Administration: Selected data.

Table 153. Number and percent of persons with private health insurance coverage, according to age and type of coverage: United States, December 31, 1974

(Data are based on surveys of insurors)

Type of coverage	All ages		Under 65 years		65 years and over	
	Number insured in thousands	Percent of civilian population [1]	Number insured in thousands	Percent of civilian population [1]	Number insured in thousands	Percent of civilian population [1]
Hospital care	163,396	77.6	150,585	79.9	12,811	57.9
Physician services:						
Surgical services	159,518	75.7	147,570	78.3	11,948	54.0
Inhospital visits	155,022	73.6	146,110	77.5	8,912	40.3
X-ray and laboratory examinations	153,017	72.7	146,006	77.5	7,011	31.7
Office and home visits	125,183	59.4	117,321	62.3	7,862	35.5
Dental care	33,297	15.8	32,887	17.4	410	1.9
Prescribed drugs (out-of-hospital)	141,755	67.3	138,023	73.2	3,732	16.9
Private duty nursing	141,167	67.0	137,446	72.9	3,721	16.8
Visiting nurse service	136,687	64.9	132,044	70.1	4,643	21.0
Nursing home care	69,840	33.2	66,343	35.2	3,497	15.8

[1] Based on U.S. Bureau of the Census estimates as of January 1, 1975: all ages = 210,593,000; under 65 years = 188,467,000; and 65 years and over = 22,126,000.

SOURCE: Mueller, M. S., and Piro, P. A.: Private health insurance in 1974: a review of coverage, enrollment, and financial experience. Social Security Bulletin 39(3): 3-18, March 1976.

Table 154. Number and percent of persons under 65 years of age with private hospital insurance coverage, according to family income and age: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Family income and age	Population in thousands	Number insured in thousands	Percent insured
All incomes [1]			
All ages under 65 years	186,603	145,159	77.8
Under 17 years	62,957	46,482	73.8
17-24 years	29,564	21,415	72.4
25-44 years	51,218	41,967	81.9
45-64 years	42,864	35,295	82.3
Less than $3,000			
All ages under 65 years	10,643	3,958	37.2
Under 17 years	3,140	717	22.8
17-24 years	3,046	1,693	55.6
25-44 years	1,725	510	29.6
45-64 years	2,731	1,038	38.0
$3,000-$4,999			
All ages under 65 years	12,942	5,304	41.0
Under 17 years	4,603	1,266	27.5
17-24 years	2,592	1,174	45.3
25-44 years	2,570	1,014	39.5
45-64 years	3,177	1,850	58.2
$5,000-$6,999			
All ages under 65 years	17,071	10,213	59.8
Under 17 years	6,084	3,029	49.8
17-24 years	3,240	1,954	60.3
25-44 years	3,899	2,397	61.5
45-64 years	3,849	2,833	73.6
$7,000-$9,999			
All ages under 65 years	25,037	19,077	76.2
Under 17 years	8,519	6,048	71.0
17-24 years	4,205	3,076	73.2
25-44 years	6,918	5,428	78.5
45-64 years	5,394	4,524	83.9
$10,000-$14,999			
All ages under 65 years	49,293	43,294	87.8
Under 17 years	17,612	15,338	87.1
17-24 years	6,590	5,386	81.7
25-44 years	15,296	13,774	90.0
45-64 years	9,796	8,796	89.8
$15,000 or more			
All ages under 65 years	60,698	55,727	91.8
Under 17 years	19,621	17,922	91.3
17-24 years	8,315	7,180	86.3
25-44 years	18,228	16,983	93.2
45-64 years	14,533	13,643	93.9

[1] Includes unknown family income.

SOURCE: National Center for Health Statistics: Hospital and surgical insurance coverage among persons under 65 years of age in the United States, 1974. Monthly Vital Statistics Report. Vol. 25, No. 2, Supp. (3). DHEW Pub. No. (HRA) 76-1120. Health Resources Administration. Rockville, Md. May 19, 1976.

Table 155. Number and percent of persons under 65 years of age with private hospital insurance coverage, according to geographic region and family income: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Geographic region and family income	Population in thousands	Number insured in thousands	Percent insured	Geographic region and family income	Population in thousands	Number insured in thousands	Percent insured
Northeast				South			
All incomes [1]	43,558	35,638	81.8	All incomes [1]	58,878	42,682	72.5
Less than $3,000	1,594	657	41.2	Less than $3,000	4,914	1,720	35.0
$3,000-$4,999	2,478	838	33.8	$3,000-$4,999	5,211	2,311	44.3
$5,000-$6,999	3,698	2,234	60.4	$5,000-$6,999	6,546	3,970	60.6
$7,000-$9,999	5,355	4,374	81.7	$7,000-$9,999	8,647	6,270	72.5
$10,000-$14,999	12,052	10,801	89.6	$10,000-$14,999	14,121	12,044	85.3
$15,000 or more	15,513	14,510	93.5	$15,000 or more	15,304	13,734	89.7
North Central				West			
All incomes [1]	50,616	42,338	83.6	All incomes [1]	33,551	24,501	73.0
Less than $3,000	2,475	1,127	45.5	Less than $3,000	1,661	454	27.3
$3,000-$4,999	2,951	1,396	47.3	$3,000-$4,999	2,301	759	33.0
$5,000-$6,999	3,989	2,623	65.8	$5,000-$6,999	2,838	1,387	48.9
$7,000-$9,999	6,596	5,497	83.3	$7,000-$9,999	4,438	2,936	66.2
$10,000-$14,999	14,381	13,215	91.9	$10,000-$14,999	8,740	7,235	82.8
$15,000 or more	17,947	16,835	93.8	$15,000 or more	11,934	10,647	89.2

[1] Includes unknown family income.

SOURCE: National Center for Health Statistics: Hospital and surgical insurance coverage among persons under 65 years of age in the United States, 1974. Monthly Vital Statistics Report. Vol. 25, No. 2, Supp. (3). DHEW Pub. No. (HRA) 76-1120. Health Resources Administration. Rockville, Md. May 19, 1976.

Table 156. Number and percent of persons under 65 years of age with private hospital insurance coverage, according to place of residence and age: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Place of residence and age	Population in thousands	Number insured in thousands	Percent insured	Place of residence and age	Population in thousands	Number insured in thousands	Percent insured
All places of residence				Outside SMSA, nonfarm			
All ages under 65 years	186,603	145,159	77.8	All ages under 65 years	50,147	37,265	74.3
Under 17 years	62,957	46,482	73.8	Under 17 years	17,604	12,396	70.4
17-24 years	29,564	21,415	72.4	17-24 years	7,819	5,411	69.2
25-44 years	51,218	41,967	81.9	25-44 years	13,429	10,641	79.2
45-64 years	42,864	35,295	82.3	45-64 years	11,295	8,817	78.1
SMSA				Outside SMSA, farm			
All ages under 65 years	129,862	102,951	79.3	All ages under 65 years	6,595	4,943	75.0
Under 17 years	43,083	32,421	75.3	Under 17 years	2,271	1,665	73.3
17-24 years	20,907	15,409	73.7	17-24 years	838	595	71.0
25-44 years	36,277	30,166	83.2	25-44 years	1,512	1,161	76.8
45-64 years	29,595	24,956	83.3	45-64 years	1,974	1,523	77.2

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

Table 157. Number and percent of persons under 65 years of age with private hospital insurance coverage, according to color, family income, and age: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Age	White			All other		
	Less than $5,000	$5,000-$9,999	$10,000 or more	Less than $5,000	$5,000-$9,999	$10,000 or more
	Population in thousands					
All ages under 65 years	16,188	35,193	101,562	7,397	6,915	8,429
Under 17 years	4,416	11,683	34,236	3,328	2,920	2,997
17-24 years	4,345	6,292	13,605	1,293	1,153	1,299
25-44 years	2,931	9,068	30,810	1,364	1,749	2,715
45-64 years	4,496	8,151	22,911	1,412	1,092	1,418
	Number insured in thousands					
All ages under 65 years	7,218	25,231	91,923	2,045	4,059	7,098
Under 17 years	1,338	7,586	30,753	646	1,491	2,506
17-24 years	2,442	4,409	11,589	426	621	977
25-44 years	1,104	6,622	28,355	420	1,203	2,401
45-64 years	2,334	6,615	21,225	554	743	1,214
	Percent insured					
All ages under 65 years	44.6	71.7	90.5	27.6	58.7	84.2
Under 17 years	30.3	64.9	89.8	19.4	51.1	83.6
17-24 years	56.2	70.1	85.2	32.9	53.9	75.2
25-44 years	37.7	73.0	92.0	30.8	68.8	88.4
45-64 years	51.9	81.2	92.6	39.2	68.0	85.6

SOURCE: National Center for Health Statistics: Hospital and surgical insurance coverage among persons under 65 years of age in the United States, 1974. Monthly Vital Statistics Report. Vol. 25, No. 2, Supp. (3). DHEW Pub. No. (HRA) 76-1120. Health Resources Administration. Rockville, Md. May 19, 1976.

Table 158. Percent distribution of persons under 65 years of age with no private hospital insurance coverage, by reason for not having insurance according to family income and age: United States, 1974

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Family income and age	Number with no private hospital insurance in thousands	Reason for not having private hospital insurance coverage							
		Total	Can't get insurance	Don't believe in insurance	Dissatisfied with previous insurance	Covered by government program [1]	Healthy—no need for insurance	Too expensive	Other or unknown
		Percent distribution							
All incomes [2]									
All ages under 65 years	37,498	100.0	2.0	2.1	2.2	31.9	8.4	40.2	13.3
Under 17 years	15,045	100.0	0.7	1.4	2.0	40.1	6.2	39.9	9.7
17-24 years	7,420	100.0	1.1	2.1	1.9	23.6	11.9	40.3	19.1
25-44 years	8,281	100.0	1.8	2.5	2.4	27.3	9.7	40.5	15.7
45-64 years	6,752	100.0	6.0	3.0	2.6	28.3	7.8	40.5	11.8
Less than $5,000									
All ages under 65 years	13,857	100.0	2.2	1.3	1.5	35.6	6.3	46.1	7.0
Under 17 years	5,603	100.0	0.7	*	1.2	44.7	4.3	44.4	4.1
17-24 years	2,624	100.0	*	2.1	1.6	25.8	11.4	46.1	12.0
25-44 years	2,698	100.0	2.0	1.9	1.6	33.1	6.8	47.2	7.4
45-64 years	2,933	100.0	6.5	1.3	1.9	29.3	5.1	48.4	7.6
$5,000-$9,999									
All ages under 65 years	11,978	100.0	1.9	1.9	2.2	29.0	8.2	44.0	12.8
Under 17 years	5,188	100.0	*	1.5	2.2	34.5	6.5	44.9	9.9
17-24 years	2,291	100.0	*	1.7	2.0	24.0	10.9	42.2	18.0
25-44 years	2,783	100.0	1.5	2.0	2.2	22.6	9.7	45.9	16.0
45-64 years	1,717	100.0	7.1	3.3	2.8	29.4	7.5	40.3	9.5
$10,000-$14,999									
All ages under 65 years	5,161	100.0	1.6	2.6	2.1	31.1	11.0	31.3	20.3
Under 17 years	1,956	100.0	*	*	2.2	41.5	8.5	29.4	16.7
17-24 years	1,067	100.0	*	*	*	20.0	14.5	33.8	28.4
25-44 years	1,264	100.0	*	3.6	*	28.2	11.6	31.2	21.1
45-64 years	827	100.0	4.8	5.3	*	25.4	11.7	33.3	16.9

See footnotes at end of table.

Table 158. Percent distribution of persons under 65 years of age with no private hospital insurance coverage, by reason for not having insurance according to family income and age: United States, 1974—Continued

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

Family income and age	Number with no private hospital insurance in thousands	Reason for not having private hospital insurance coverage							
		Total	Can't get insurance	Don't believe in insurance	Dissatisfied with previous insurance	Covered by government program [1]	Healthy—no need for insurance	Too expensive	Other or unknown
$15,000 or more		Percent distribution							
All ages under 65 years	3,817	100.0	1.7	3.4	3.9	34.5	12.3	20.6	23.6
Under 17 years	1,266	100.0	*	3.6	3.7	45.8	9.5	17.3	19.0
17-24 years	923	100.0	1.2	*	4.1	23.6	14.3	24.7	29.5
25-44 years	764	100.0	*	*	*	28.5	13.7	20.6	26.7
45-64 years	664	100.0	*	*	*	36.7	12.8	20.8	20.0

[1] Such as Medicaid, Medicare, military.

[2] Includes persons with unknown family income.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the Health Interview Survey.

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Table 159. Percent distribution of personal health care expenditures, by source of payment according to type of expenditure: United States, selected fiscal years 1950-76

(Data are compiled from a number of government and private sources)

Type of expenditure and fiscal year	Personal health care expenditures in millions	Total	Direct payment	Third-party payment			
				Total	Private health insurance	Govern-ment	Philan-thropy and industry
Hospital care		Percent distribution					
1950	$ 3,698	100.0	34.2	65.8	16.5	45.7	3.6
1955	5,689	100.0	23.6	76.3	27.4	45.9	3.0
1960	8,499	100.0	18.6	81.4	36.8	42.0	2.6
1965	13,152	100.0	18.5	81.5	41.7	37.5	2.3
1970	25,879	100.0	12.3	87.7	35.5	50.8	1.4
1971	29,133	100.0	10.2	89.8	36.5	51.9	1.4
1972	32,720	100.0	8.8	91.2	36.0	53.9	1.3
1973	36,155	100.0	10.0	90.1	36.1	52.7	1.3
1974 [1]	41,020	100.0	12.2	87.8	34.3	52.2	1.3
1975 [1]	48,224	100.0	9.8	90.2	34.0	55.0	1.1
1976 [2]	55,400	100.0	8.9	---	35.1	54.9	1.2
Physician services							
1950	$ 2,689	100.0	84.8	15.2	10.0	4.9	0.3
1955	3,632	100.0	71.2	28.7	21.9	6.6	0.2
1960	5,580	100.0	66.0	34.0	27.3	6.5	0.2
1965	8,405	100.0	63.2	36.8	30.4	6.3	0.1
1970	13,443	100.0	44.9	55.1	33.2	21.8	0.1
1971	15,098	100.0	43.8	56.1	34.2	21.8	0.1
1972	16,527	100.0	43.0	57.0	34.8	22.1	0.1
1973	17,995	100.0	40.5	59.5	36.4	23.0	0.1
1974 [1]	19,742	100.0	39.9	60.1	36.4	23.6	0.1
1975 [1]	22,925	100.0	39.0	61.0	36.0	24.9	0.1
1976 [2]	26,350	100.0	38.7	61.3	36.1	25.2	0.1
All other services							
1950	$ 4,013	100.0	88.8	11.3	---	7.0	4.3
1955	5,910	100.0	85.7	14.3	---	10.4	3.9
1960	8,650	100.0	84.5	15.6	0.6	11.6	3.4
1965	11,941	100.0	82.3	17.7	2.0	12.6	3.1
1970	20,791	100.0	71.7	28.3	4.4	21.5	2.4
1971	22,997	100.0	71.9	28.1	4.8	20.9	2.4
1972	25,581	100.0	70.9	29.1	4.3	22.5	2.3
1973	28,340	100.0	68.6	31.4	4.8	24.3	2.3
1974 [1]	30,553	100.0	65.8	34.2	5.8	26.1	2.3
1975 [1]	34,595	100.0	63.2	36.8	6.5	28.1	2.2
1976 [2]	38,681	100.0	62.0	38.0	6.2	29.4	2.3

[1] Revised estimates.

[2] Preliminary estimates.

SOURCES: Mueller, M. S., and Gibson, R. M.: National health expenditures, fiscal year 1975. Social Security Bulletin 39(2): 3-20, Feb. 1976.

Office of Research and Statistics, Social Security Administration: Selected data.

Table 160. Persons enrolled under private health insurance plans, benefit expenditures for enrollees, and average annual percent change, according to type of service: United States, selected years 1950-74

(Data are based on surveys of insurers)

Year and period	Enrollment in thousands		Benefit expenditures in millions	
	Hospital care	Physician services	Hospital care	Physician services
1950	81,691	55,950	$ 680	$ 312
1955	113,976	98,000	1,679	857
1960	140,055	127,091	3,304	1,593
1965	160,485	148,236	5,790	2,680
1970	190,758	179,152	10,008	4,908
1971	193,308	181,191	11,279	5,430
1972	198,132	185,153	12,242	6,092
1973	201,684	190,359	13,154	6,683
1974	207,895	194,576	15,006	7,795
	Average annual percent change			
1950-74	4.0	5.3	13.8	14.3
1950-55	6.9	11.9	19.8	22.4
1955-60	4.2	5.3	14.5	13.2
1960-65	2.8	3.1	11.9	11.0
1965-74	2.9	3.1	11.1	12.6

SOURCE: Mueller, M. S., and Piro, P. A.: Private health insurance in 1974: a review of coverage, enrollment, and financial experience. Social Security Bulletin 39(3):3-20, March 1976.

E. Medical Care Price Changes

The Consumer Price Index (CPI), compiled by the Department of Labor's Bureau of Labor Statistics, is the major source of information regarding price changes in the American economy. While the CPI is often said to measure changes in the "cost of living," its correct technical definition is more restrictive. The CPI is designed to measure the change in prices of a given "market basket" of goods and services representative of the purchases of urban wage earners and clerical workers. In other words, the CPI measures changes over time in the prices of the same set of goods and services, excluding (at least in concept) changes in the quality and quantity purchased. The prices of representative health services and drugs are included in the medical care index, and health insurance premiums are estimated by using proxy measures for changes in the price of covered services and in overhead. The data are collected directly from providers located in 56 metropolitan and nonmetropolitan areas across the country.

The CPI has been criticized on two counts, (1) for lack of taking changes in the quality of health services and products into account, and (2) for items priced not being representative of actual medical treatments and practices. Nevertheless, the medical care component of the CPI is still the most widely used indicator of health care inflation.

Historically, medical care price increases have exceeded the increases registered by the total (all items) Consumer Price Index, although the rate of increase has varied over different periods of time. The overall CPI in 1976 was 2.4 times as high as in 1950, having increased at an average rate of 3.4 percent per year. During the same interval, the price of medical care more than tripled (3.4) and increased at an annual rate of 4.9 percent. Charges for hospital rooms have increased at an annual rate of 8.8 percent, physicians' fees at 4.8 percent, dentists' charges at 3.9 percent, and drug prices at 1.4 percent.

The price of medical care has risen at a higher than average rate during the past 2 years, in part compensating for the smaller rates of increase imposed during the Economic Stabilization Program. The price of medical care averaged 12 percent higher in 1975 than in 1974, led by increases in hospital charges of 14.9 percent and in physicians' fees of 12.3 percent. The rate of increase in medical care prices has slowed somewhat (to 9.5 percent) in 1976 as has the rate for the overall CPI (5.3 percent). This rate of inflation is about the same as was reported for 1974, but is considerably more than the 6 to 7 percent rates experienced prior to the beginning of the Economic Stabilization Program in late 1971.

The imposition of price and wage controls under the Economic Stabilization Program (ESP), which extended from August 1971 to April 1974, had a particularly dramatic impact on health care prices. As is shown in the following table, the imposition of controls reduced the rate of health care inflation by more than one-third the rate of the previous 2 years. This was followed by large "catchup" increases immediately after the expiration of the program.

Table B. Average annual percent change in specified health items in the Consumer Price Index (CPI), by time period: United States

Item	Before ESP (fiscal years 1969-71)	During ESP (August 1971-April 1974)	After ESP (April 1974-June 1976)	12 months ending April 1975	14 months ending June 1976
	Average annual percent change[1]				
CPI, all items	5.6	6.4	8.0	10.2	6.2
Medical care, total	6.7	4.3	11.3	13.9	9.2
Medical care services	7.6	4.9	11.9	14.5	9.6
Hospital service charges	---	[2]4.6	14.0	16.8	11.7
Physicians' fees	7.4	4.0	12.5	14.0	11.3
Dentists' fees	6.4	4.2	8.8	11.8	6.4
Drugs and prescriptions	1.2	0.7	7.6	9.2	6.2

[1] Based on monthly indexes corresponding to the months during which controls were in effect.
[2] Rate of change based on percentage change from January 1972 rather than August 1971.

The CPI measures average price increases for the Nation as a whole, but the rate of increase has not been uniform across the country. Data are available on annual percentage changes in the price of medical care and its major subgroups for nine large metropolitan areas for the period between December 1968 and December 1976. Variations in both the rate and the timing of medical care price changes occurred among the different areas reflecting local providers' pricing decisions and local economic conditions.

Medical care prices in all but one of the cities rose at a faster rate than the average for all U.S. cities. Among the nine cities, Detroit experienced the largest increase over the 8-year period, averaging 9.0 percent per year, while prices in St. Louis rose an average of only 6.5 percent. Prices in Atlanta, Baltimore, and New York rose by about 8 percent per year. The increases in Chicago, Los Angeles, and San Francisco were slightly above the U.S. average of 7.4 percent for the period. It should be emphasized that these data are rates of change and are not indicative of the comparative price levels among cities.

The Consumer Price Index for prescription drugs has been the subject of particular criticism during recent years because, it is said, the index as presently constituted is not a representative measure of the prices actually paid by consumers for the wide variety of prescriptions available. When the CPI drug price index is compared with other measures of prescription drug prices, it is apparent that the other measures have increased much more rapidly than has the CPI component. However, unlike those in the CPI, prices in the other measures represent averages per prescription which have not been adjusted to exclude the price effects of changes over time in the size of prescriptions, mix of drugs represented by those prescriptions, or changes in the pharmacy business itself.

Table 161. Selected estimates of average prices and price indexes for prescription drugs: United States, 1960-74

(Data are based on multiple sources)

Year	Lilly Digest		National Prescription Audit		American Druggist		Drug Topics		CPI prescription component
	Average price	Index	Average price	Index	Average price	Index	Average price	Index	
1960	$3.19	87.2	$3.22	88.7	$3.22	92.3	$2.98	89.8	115.3
1961	3.25	88.8	3.27	90.1	3.22	92.3	2.97	89.5	111.5
1962	3.32	90.7	3.26	89.8	3.21	92.0	3.06	92.2	107.1
1963	3.39	92.6	3.35	92.3	3.23	92.6	3.09	93.1	104.5
1964	3.41	93.2	3.42	94.2	3.26	93.4	3.12	94.0	103.1
1965	3.48	95.1	3.48	95.9	3.35	96.0	3.20	96.4	102.0
1966	3.59	98.1	3.56	98.1	3.43	98.3	3.26	98.2	101.8
1967	3.66	100.0	3.63	100.0	3.49	100.0	3.32	100.0	100.0
1968	3.70	101.1	3.70	101.9	3.56	102.0	3.41	102.7	98.3
1969	3.90	105.7	3.86	106.3	3.68	105.5	3.57	107.5	99.6
1970	4.06	110.1	4.02	110.7	3.77	108.0	3.67	110.5	101.2
1971	4.21	115.0	4.19	115.4	3.92	112.3	3.78	113.9	101.3
1972	4.38	119.7	4.32	119.0	4.00	114.6	4.40	132.5	100.9
1973	4.54	124.0	4.45	122.6	4.16	119.2	4.45	134.0	100.5
1974	4.81	131.4	4.70	129.5	4.32	123.8	4.60	138.6	102.9

NOTE: 1967 = 100 on all price indexes.

SOURCE: Fulda, T. R.: Prescription Drug Data Summary, 1974. DHEW Pub. No. (SSA) 76-11928. Social Security Administration. Washington. U.S. Government Printing Office, 1976.

Table 162. Consumer Price Index (1967=100) for all items and for medical care components: United States, selected years 1950-76
(Data are based on reporting by samples of providers and other retail outlets)

Item	1950	1955	1960	1965	1970	1971	1972	1973	1974	1975	1976				
											Total	March	June	Sept.	Dec.
	Consumer Price Index														
CPI, all items	72.1	80.2	88.7	94.5	116.3	121.3	125.3	133.1	147.7	161.2	170.5	167.5	170.1	172.6	174.3
Less medical care	---	---	89.4	94.9	116.1	120.9	124.9	132.9	147.7	160.9	169.7	166.8	169.4	171.7	173.2
CPI, all services	58.7	70.9	83.5	92.2	121.6	128.4	133.3	139.1	152.1	166.6	180.4	177.2	179.5	183.2	185.8
All medical care	53.7	64.8	79.1	89.5	120.6	128.4	132.5	137.7	150.5	168.6	184.7	180.2	183.7	187.9	192.3
Medical care services	49.2	60.4	74.9	87.3	124.2	133.3	138.2	144.3	159.1	179.1	197.1	192.5	195.8	200.6	205.7
Hospital service charges [1]	---	---	---	---	---	---	102.0	105.6	115.1	132.3	148.7	145.4	147.1	151.6	154.8
Semiprivate room	30.3	42.3	57.3	75.9	145.4	163.1	173.9	182.1	201.5	236.1	268.6	261.5	265.1	275.2	281.5
Operating room charges	---	---	---	82.9	142.4	156.2	168.6	179.1	201.3	239.4	274.8	265.9	270.5	281.8	290.3
X-ray diagnostic series, upper G.I.	---	---	---	90.9	110.3	124.9	129.1	131.8	140.6	156.2	174.6	169.8	173.3	179.1	181.0
Professional services:															
Physician fees	55.2	65.4	77.0	88.3	121.4	129.9	133.8	138.2	150.9	169.4	188.5	184.3	188.3	192.2	195.6
General physician, office visits	54.9	65.4	75.9	87.3	122.6	131.4	134.8	139.5	154.3	173.9	193.8	189.3	193.4	197.8	201.7
General physician, house visits	52.9	61.2	75.0	87.6	122.4	131.0	136.7	141.7	151.3	170.5	189.8	185.6	190.0	193.2	196.7
Herniorrhaphy (adult)	---	---	---	91.3	115.0	123.4	128.2	131.3	138.6	152.3	169.3	164.3	169.1	173.0	176.7
Tonsillectomy and adenoidectomy	60.7	69.0	80.3	91.0	117.1	125.2	129.9	132.3	144.2	163.3	179.2	175.1	179.9	182.8	185.4
Obstetrical cases	51.2	68.6	79.4	89.0	121.8	129.0	133.8	128.1	149.0	167.2	192.1	187.8	192.1	196.8	198.7
Pediatric care, office visits	---	---	---	85.8	122.7	132.0	136.2	140.5	153.4	172.5	192.7	189.0	192.1	195.9	200.1
Psychiatrist, office visits	---	---	---	92.1	119.4	124.8	129.2	133.6	141.0	153.0	163.9	162.6	164.4	165.6	166.6
Dentist fees	63.9	73.0	82.1	92.2	119.4	127.0	132.3	136.4	140.8	161.9	172.2	169.4	171.6	174.5	177.9
Other professional services:															
Examination, prescription, and dispensing eyeglasses	73.5	77.0	85.1	92.8	113.5	120.3	124.9	129.5	138.6	149.6	158.9	156.7	158.7	160.5	162.4
Routine laboratory tests	---	---	---	94.8	111.4	116.1	120.4	122.8	135.4	151.4	160.5	158.0	159.3	164.0	163.9
Drugs and prescriptions	88.5	94.7	104.5	100.2	103.6	105.4	105.6	105.9	109.6	118.8	126.0	123.9	126.0	127.4	128.9
Prescriptions	92.6	101.6	115.3	102.0	101.2	101.3	100.9	100.5	102.9	109.3	115.2	113.7	115.2	116.4	117.5
Over-the-counter items	---	---	---	98.0	106.2	110.2	111.3	112.4	117.6	130.1	138.9	136.1	138.9	140.6	142.5

[1] Jan. 1972 = 100 (the date the index was introduced).

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor: Consumer Price Index. Various releases.

Table 163. Average annual percent change in Consumer Price Index for all items and for medical care components: United States, selected years 1950-76

(Data are based on reporting by samples of providers and other retail outlets)

Item	1950-55	1955-60	1960-65	1965-70	1970-75	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
	Average annual percent change										
CPI, all items	2.2	2.0	1.3	4.2	6.8	4.3	3.3	6.2	11.0	9.1	5.3
Less medical care	---	---	1.2	4.1	6.7	4.1	3.3	6.4	11.1	8.9	5.5
CPI, all services	3.9	3.3	2.0	5.7	6.5	5.6	3.8	4.4	9.3	9.5	8.3
All medical care	3.8	4.1	2.5	6.1	7.0	6.5	3.2	3.9	9.3	12.0	9.5
Medical care services	4.2	4.4	3.1	7.3	7.6	7.3	3.7	4.4	10.2	12.6	10.1
Hospital service charges	---	---	---	---	---	---	---	3.5	9.0	14.9	12.4
Semiprivate room	6.9	6.3	5.8	13.9	10.2	12.2	6.6	4.7	10.7	17.2	13.8
Operating room charges	---	---	---	11.4	10.9	9.7	7.9	6.2	12.4	18.9	14.8
X-ray diagnostic series, upper G.I.	---	---	---	5.1	7.2	7.4	3.4	2.1	6.7	11.1	11.8
Professional services:											
Physician fees	3.5	3.3	2.8	6.0	6.9	7.0	3.0	3.3	9.2	12.3	11.3
General physician, office visits	3.6	3.0	2.9	7.0	7.2	7.2	2.6	3.5	10.6	12.7	11.4
General physician, house visits	3.0	4.2	3.2	6.9	6.9	7.0	4.4	3.7	6.8	12.7	11.3
Herniorrhaphy (adult)	---	---	---	4.7	5.8	7.3	3.8	2.4	5.6	9.9	11.2
Tonsillectomy and adenoidectomy	2.6	3.1	2.5	5.2	6.9	6.9	3.8	2.2	8.5	13.3	9.7
Obstetrical cases	6.0	3.0	2.3	6.5	6.5	5.9	3.7	3.2	7.9	12.2	14.9
Pediatric care, office visits	---	---	---	7.4	7.1	7.0	3.2	3.2	9.2	12.5	11.7
Psychiatrist, office visits	---	---	---	5.3	6.3	4.5	3.9	3.4	5.5	8.5	7.1
Dentist fees	2.7	2.4	2.4	5.3	6.3	6.4	4.2	3.0	7.6	10.3	6.4
Other professional services:											
Examination, prescription, and dispensing eyeglasses	1.0	2.0	1.7	4.1	5.7	6.0	3.8	3.7	7.1	7.9	6.2
Routine laboratory tests	---	---	---	3.3	6.3	4.2	3.7	2.0	10.3	11.8	6.0
Drugs and prescriptions	1.4	2.0	0.8	0.7	2.8	1.7	0.2	0.3	3.5	8.4	6.1
Prescriptions	1.9	2.0	−2.2	−0.1	1.6	0.1	−0.4	−0.4	2.4	6.2	5.4
Over-the-counter items	---	---	---	1.6	4.1	3.8	1.0	1.0	4.5	10.7	6.8

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor: Consumer Price Index. Various releases.

Table 164. Annual percent change in consumer prices for medical care subgroups: United States, selected large metropolitan areas, December 1968-December 1976
(Data are based on reporting by samples of providers and other retail outlets)

Medical care subgroup	U.S. city average	Atlanta	Baltimore	Chicago	Detroit	Los Angeles	New York	Philadelphia	St. Louis	San Francisco
December 1968-December 1969	Annual percent change									
Medical care	6.0	8.9	8.1	5.7	6.6	6.6	8.7	7.4	5.4	5.3
Medical care services	7.1	10.5	9.4	6.8	7.1	7.1	10.7	8.4	6.0	5.7
Physician fees	7.3	8.1	6.7	3.5	8.0	9.8	10.1	8.0	6.0	4.7
Dentist fees	7.5	11.9	4.7	14.7	6.1	3.4	9.8	7.1	8.8	6.7
Hospital daily service charges	12.0	19.5	23.9	11.9	13.3	8.4	21.0	18.3	7.7	14.3
Drugs and prescriptions	1.1	0.3	1.5	0.5	2.1	3.6	−0.2	2.8	2.5	2.6
December 1969-December 1970										
Medical care	7.4	8.0	11.5	8.5	10.3	5.6	10.1	10.6	6.7	5.2
Medical care services	8.3	9.0	13.2	9.6	10.9	6.1	10.9	12.6	7.8	5.5
Physician fees	8.1	9.3	8.1	6.5	7.7	7.0	14.0	6.7	3.6	8.1
Dentist fees	5.6	3.9	10.2	8.3	13.8	6.2	2.8	9.2	9.9	3.0
Hospital daily service charges	13.5	8.0	26.4	16.7	22.8	8.8	16.7	24.9	14.9	5.2
Drugs and prescriptions	2.4	2.0	2.2	2.9	5.2	2.9	5.3	−0.2	0.9	3.6
December 1970-December 1971										
Medical care	4.8	5.4	8.0	3.7	7.0	4.4	5.0	4.7	3.0	5.0
Medical care services	5.3	6.3	9.6	5.1	7.3	4.9	5.3	5.4	3.3	5.8
Physician fees	5.2	4.8	10.2	3.7	5.7	2.7	4.5	4.1	5.2	5.4
Dentist fees	6.4	1.9	7.3	6.7	9.4	5.7	6.5	8.7	1.6	7.3
Hospital daily service charges	8.9	11.3	14.9	11.2	11.8	13.2	9.8	11.6	5.3	10.3
Drugs and prescriptions	1.3	0.0	−1.9	−3.5	3.8	1.3	3.3	0.5	0.7	0.1
December 1971-December 1972										
Medical care	3.3	3.0	4.4	3.5	4.1	3.1	3.8	3.7	2.3	4.2
Medical care services	3.8	3.2	5.0	4.2	4.4	3.3	4.6	4.3	2.5	4.9
Physician fees	2.4	0.2	2.6	1.6	1.0	1.8	4.9	2.7	1.5	3.2
Dentist fees	2.8	7.3	4.7	2.9	1.1	0.6	2.9	0.7	0.5	4.2
Hospital daily service charges	---	---	---	---	---	---	---	---	---	---
Drugs and prescriptions	0.0	1.6	0.1	−0.4	1.4	0.6	−0.3	−0.3	0.6	−0.4
December 1972-December 1973										
Medical care	5.2	6.9	6.7	5.2	6.8	6.1	4.1	6.3	5.4	4.2
Medical care services	5.8	7.8	7.7	5.8	7.6	7.2	4.9	7.0	6.2	4.7
Physician fees	4.0	4.9	4.2	4.7	6.0	4.4	4.0	7.5	3.3	2.2
Dentist fees	3.7	4.2	6.8	1.9	2.0	9.1	0.9	5.1	2.4	3.6
Hospital daily service charges	4.3	6.7	5.3	4.6	3.8	4.7	4.8	2.2	4.9	4.5
Drugs and prescriptions	0.7	1.2	0.5	1.8	−1.3	−0.5	−0.2	1.0	0.7	0.2

Table 164. Annual percent change in consumer prices for medical care subgroups: United States, selected large metropolitan areas, December 1968-December 1976—Continued

(Data are based on reporting by samples of providers and other retail outlets)

Medical care subgroup	U.S. city average	Atlanta	Baltimore	Chicago	Detroit	Los Angeles	New York	Philadelphia	St. Louis	San Francisco
December 1973-December 1974	Annual percent change									
Medical care	12.4	12.6	10.9	12.9	12.0	12.3	14.0	11.1	11.2	11.6
Medical care services	13.3	13.8	11.5	13.9	11.8	13.0	14.5	11.9	12.0	12.5
Physician fees	13.3	13.6	9.8	11.6	11.7	13.6	12.0	11.1	11.8	14.3
Dentist fees	11.4	9.6	15.4	14.0	17.8	9.3	12.2	11.8	12.2	9.9
Hospital daily service charges	14.2	16.7	11.5	14.9	8.0	13.4	18.6	12.7	13.6	12.5
Drugs and prescriptions	6.9	4.0	5.8	6.0	14.8	7.1	10.5	5.9	6.4	5.4
December 1974-December 1975										
Medical care	9.9	11.2	6.4	11.2	14.3	12.1	10.8	12.3	7.6	14.3
Medical care services	10.3	11.4	5.7	11.8	15.1	13.1	11.0	12.8	8.2	15.3
Physician fees	11.8	10.5	9.9	9.7	15.8	20.1	15.8	10.1	5.4	23.8
Dentist fees	7.8	12.8	8.0	10.6	10.4	4.9	4.4	6.2	16.1	4.1
Hospital daily service charges	13.0	13.0	3.8	19.4	20.3	16.3	11.3	23.0	11.7	15.5
Drugs and prescriptions	7.4	9.8	12.3	6.7	5.7	4.4	9.4	8.6	3.6	6.3
December 1975-December 1976										
Medical care	10.1	8.0	8.6	11.6	11.0	11.4	10.3	8.4	10.3	9.7
Medical care services	10.7	8.7	9.3	12.4	11.5	12.1	11.2	9.0	10.9	10.2
Physician fees	9.7	6.0	8.2	10.3	7.6	13.5	7.3	7.5	7.7	7.9
Dentist fees	6.8	1.7	7.1	10.3	12.6	4.4	8.1	7.6	11.0	13.9
Hospital daily service charges	11.4	9.7	10.7	13.0	12.6	12.2	16.6	8.5	12.9	10.6
Drugs and prescriptions	5.7	2.6	3.4	6.4	5.0	5.3	5.0	4.3	6.3	5.5

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor: Selected data from the Consumer Price Index.

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F. Hospital Expenses

The extremely rapid increase in the amounts that hospitals charge for their services was noted in the discussion of trends in prices. In the long run, given the prevailing system of hospital financing in the United States, one ought to observe that this trend is rather closely connected to trends in the expenses incurred by hospitals (i.e., for wages, salaries, equipment, purchased goods, and purchased services). In the short run, such a close relationship between revenues and expenses need not hold.

Revenues are in part a function of the amounts hospitals charge for particular services. Because it is the only indicator that is available over a long period of time, the hospital semiprivate room component of the Consumer Price Index (CPI) is used here to compare trends in hospital charges with trends in the costs to hospitals of providing services. Because room charges exclude the cost of such ancillary services as drugs, laboratory tests, and operating rooms, the use of this indicator is not ideal. It is possible that the charges for such services have changed at a different rate from room charges; further the proportion of the total hospital bill due to ancillary services has been increasing. On the other hand, the rate of change in the room charge component of the CPI has, each year, been rather close in magnitude to the rate of change shown by a more comprehensive indicator of hospital charges that has been compiled only since 1972.

The statistics suggest that the rapid rise during the past 25 years in the average daily semiprivate room charges by hospitals has been matched by an increase of approximately the same magnitude in the cost of providing hospital care. Since 1970, however, total hospital expenses per inpatient day, even adjusting for the more rapid growth in the volume of ambulatory services than inpatient days, have increased at a somewhat higher rate than semiprivate room charges. This departure from the normal concomitance of increases in charges with increases in hospital expenses occurred during the 1971-74 period when the Economic Stabilization Program was in effect. During this program, increases in the amounts hospitals were permitted to charge for particular units of service were more tightly regulated than were increases in the expenses incurred by hospitals in providing the services. Since the end of the Economic Stabilization Program in April 1974, the rates of increase in hospital charges and in hospital expenses have been more nearly equal.

Payroll expenses account for about 60 percent of the cost of operating a hospital, and from 1950 until about 1960 they increased at a faster rate than did nonpayroll expenses. Since then, nonpayroll expenses for purchased goods and services, new equipment, and overhead have been increasing at a faster rate. Higher payroll costs represent increases in the number of workers employed, higher wage rates, upgrading in the skills of hospital workers as they treat patients with increasingly complex technology, and shortening of hospital work weeks. The last two factors are chiefly responsible for the long-term increase in the number of personnel per 100 patients.

The driving force behind hospital cost inflation is said to be the demand for a larger number and more expensive services, which has been caused by higher incomes, the spread of health insurance coverage, and the availability of improved and more costly procedures for treatment and diagnosis. For most of the period since 1951, the increasing unit costs (i.e., wage rates and the prices of purchased goods and services) of hospital inputs have been responsible for somewhat more than half of the total increase, with expenses associated with improvement and expansion of services accounting for the remainder. Stated another way, changes in the quantity and quality of services provided by hospitals have accounted for a little less than half of the increased expense of providing hospital care.

Table 165. Indicators of hospital cost and price inflation: United States, selected years, 1950-75

(Data are based on reporting by samples of hospitals)

Year and period	CPI: hospital semiprivate room charges (1967 = 100)	Total expense per patient day	Expense per adjusted patient day	Expense per admission	Expense per adjusted admission
1950	30.3	$15.62	—	$127.23	—
1955	42.3	23.12	—	179.79	—
1960	57.3	32.23	—	244.54	—
1965	75.9	44.48	$40.56	345.65	$310.79
1966	83.5	48.15	43.66	382.05	337.54
1967	100.0	54.08	49.46	447.64	409.04
1968	113.6	61.38	55.80	519.21	471.30
1969	128.8	70.03	64.26	587.99	539.25
1970	145.4	81.01	73.73	668.67	610.10
1971	163.1	92.31	83.43	743.15	675.01
1972	173.9	105.21	94.61	830.13	744.88
1973	182.1	114.69	101.78	897.20	796.65
1974	201.5	128.05	113.21	994.17	878.84
1975	236.1	151.42	133.08	1,166.80	1,016.79
	Average annual percent change				
1950-75	8.6	9.5	—	9.3	—
1950-60	6.6	7.5	—	6.8	—
1960-65	5.8	6.7	[1]7.5	7.2	[1]7.5
1965-70	13.9	12.7	12.7	14.1	14.4
1970-75	10.2	13.3	12.5	11.8	10.8
1969-71	12.5	14.8	13.9	12.4	11.9
1971-73	5.7	11.5	10.5	9.9	8.6
1973-75	13.9	14.9	14.3	14.0	13.0

[1] Average annual percent increase from 1963 to 1965.

SOURCES: American Hospital Association: Hospital Statistics, 1976 Edition, Chicago, Ill., 1976. (Copyright: reprinted with permission.)

Bureau of Labor Statistics, U.S. Department of Labor: Consumer Price Index. Various releases.

Table 166. Hospital expenses per patient day, total personnel and number per 100 patients, and average annual percent change: United States, selected years 1950-75

(Data are based on reporting by samples of hospitals)

Year and period	Expenses per patient day			Personnel	
	Total	Payroll	Nonpayroll	Number in thousands	Per 100 patients
1950	$ 15.62	$ 8.86	$ 6.76	662	178
1955	23.12	14.26	8.86	826	203
1960	32.23	20.08	12.15	1,080	226
1965	44.48	27.44	17.04	1,386	246
1967	54.08	32.44	21.64	1,619	265
1969	70.03	41.36	28.67	1,824	280
1970	81.01	47.30	33.71	1,929	292
1971	92.31	53.80	38.51	1,999	301
1972	105.21	59.79	45.42	2,056	310
1973	114.69	63.86	50.83	2,149	315
1974	128.05	69.83	58.22	2,289	326
1975	151.42	80.34	71.08	2,399	339
	Average annual percent change				
1950-75	9.5	9.2	9.9	5.2	2.6
1950-55	8.2	10.0	5.6	4.5	2.7
1955-60	6.9	7.1	6.5	5.5	2.2
1960-65	6.7	6.4	7.0	5.1	1.7
1965-70	12.7	11.5	14.6	6.8	3.5
1970-75	13.3	11.1	16.1	4.5	3.0

SOURCE: American Hospital Association: Hospital Statistics, 1976 Edition, Chicago, Ill., 1976. (Copyright: reprinted with permission.)

Table 167. Factors contributing to increases in average hospital expenses per patient day: United States, selected years 1951-75

(Data are based on multiple sources)

Item	1951-60	1960-65	1965-67	1967-69	1969-71	1971-73	1973-75
	Average annual percent increase						
Total increase	7.5	6.7	10.3	13.8	14.8	11.5	14.9
Increase in wages and prices	3.8	3.5	4.1	8.0	8.2	5.9	9.5
Wage rates	5.2	4.7	4.7	9.9	10.0	6.6	8.3
Prices of hospital purchases	1.5	1.3	2.9	4.8	5.1	4.9	13.9
Change in services	3.7	3.2	6.2	5.8	6.6	5.6	5.4
Hospital employees	3.1	1.7	3.8	2.8	3.7	2.3	8.2
Other expenses	4.6	5.6	9.6	9.8	10.3	10.0	4.7

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics: Consumer Price Index. Various releases.

American Hospital Association: Hospital Statistics, 1976 Edition, Chicago, Ill., 1976. (Copyright: reprinted with permission.)

American Hospital Association: Hospitals, Guide Issues, various years. (Copyright: reprinted with permission.)

G. Nursing Homes: Selected Financial Characteristics

In late 1973 and early 1974 when the latest national survey of nursing homes was conducted, the average monthly charge per resident for all aspects of care was $479. Almost 46 percent of the homes had average monthly charges of less than $400, and 71 percent had average charges under $500.

It is important to compare costs and charges; however, the data needed for such a comparison are not available for precisely the same reference period. The data on charges refer to the end of 1973 while the data on costs refer to the average cost in 1972. Thus the midpoint for the charge data is approximately 18 months later than the midpoint for the cost data. Inflation would have increased costs during the 18 months. The time difference should be kept in mind while comparing costs with charges.

The 1972 average total cost per resident day in the Nation's nursing homes was $15.63, about 59 percent of which ($9.17) was labor expenses. As a result of the high dependence of the industry on services provided by nursing personnel, wages paid the nursing staff made up 58 percent of total wages and slightly more than a third of total expenses.

Nursing homes in the Northeast averaged substantially larger total monthly charges per resident ($651) in 1973-74 than those averaged by homes in any of the other geographic regions. Although there was some variation in the estimate for the other regions (i.e., the West $454, the North Central Region $433, and the South $410), the differences were not statistically significant.

Total costs per resident day averaged higher in the Northeast ($19.60) than in any other region in 1972. The primary cause of this regional disparity in nursing home costs was the labor component. Labor costs per resident day in the Northeast averaged $12.03, which was 35 percent larger than the next highest average for this category ($8.90 in the North Central Region). The total of operating, fixed, and miscellaneous costs per resident day also averaged higher in the Northeast ($7.57) than in any of the other regions, except possibly the West ($6.88), although the difference was not statistically significant. The substantially higher costs in the Northeast, particularly the cost of labor, seem to offer the best explanation for the higher resident charges in that region.

Because of the requirements and standards which nursing homes must meet for eligibility for reimbursement under the Medicare and Medicaid programs, and because different levels of care are provided, depending on certification status, it is useful to compare charges and costs for nursing homes by eligibility for participation in these programs.

The average total monthly charge data indicate that the charges per resident in 1973-74 were highest for homes certified under both Medicare and Medicaid. Charges decreased with the level of certification status of the home and the correspondingly lower levels and intensity of care provided. The estimated difference between subsequent levels of certified homes, from Medicare and Medicaid certified homes to skilled nursing homes to intermediate care facilities, was $108. The estimated average monthly charge for residents in noncertified homes ($329) was the lowest charge for the four certification status groups, although only $47 less than the average for the intermediate care facilities ($376).

Table 168. Selected financial characteristics of nursing homes, according to geographic region: United States, 1972-74
(Data are based on reporting by samples of nursing homes)

Financial characteristic	All regions	Northeast	North Central	South	West
1973-1974 resident charges:					
Average total monthly charge per resident	$479	$651	$433	$410	$454
Percent of homes by average total monthly charge per resident:					
Less than $299	17.8	13.2	19.5	21.3	14.2
$300-$399	28.1	9.1	33.6	41.1	18.7
$400-$499	25.3	17.7	24.8	24.6	36.2
$500-$599	14.9	17.5	15.8	8.1	23.9
$600 or more	13.9	42.5	13.5	4.9	7.1
1972 facility costs:					
Average total costs per resident day	$15.63	$19.60	$15.05	$13.50	$15.62
Labor costs per resident day	9.17	12.03	8.90	7.71	8.74
Nursing staff costs per resident day	5.36	6.52	5.32	4.69	5.18
Operating, fixed, and miscellaneous costs per resident day	6.46	7.57	6.16	5.79	6.88
Percent of homes by average total costs per resident day:					
Less than $10.00	23.0	9.1	29.6	29.4	15.4
$10.00-$14.99	36.3	25.0	34.7	43.0	41.8
$15.00-$19.99	22.9	29.0	21.6	17.4	27.4
$20.00 or more	17.8	37.0	14.2	10.3	15.5
Percent of homes by average labor costs per resident day:					
Less than $4.00	8.5	4.5	7.1	13.6	7.7
$4.00-$7.99	41.8	17.1	47.8	52.6	40.8
$8.00-$11.99	32.0	41.0	30.3	23.2	39.1
$12.00 or more	17.7	37.4	14.8	10.6	12.4
Percent of homes by average fixed costs per resident day:					
Less than $1.00	19.6	20.9	22.3	24.8	4.5
$1.00-$1.99	32.4	24.7	32.7	37.9	32.1
$2.00-$2.99	22.4	20.2	23.9	21.4	23.4
$3.00 or more	25.6	34.2	21.1	16.0	40.0
Percent of homes by average operating costs per resident day:					
Less than $2.00	20.0	5.5	23.6	25.3	21.0
$2.00-$2.99	39.7	36.0	39.7	38.4	46.0
$3.00-$3.99	18.8	24.8	15.9	19.3	17.1
$4.00 or more	21.5	33.7	20.9	17.0	15.7
Percent of homes by average miscellaneous costs per resident day:					
Less than $0.50	55.5	44.9	62.0	59.7	47.9
$0.50-$0.99	26.8	30.2	25.6	25.9	26.8
$1.00-$1.99	12.7	19.9	8.0	10.0	18.1
$2.00 or more	5.0	5.0	4.4	4.5	7.3

SOURCE: National Center for Health Statistics: Selected operating and financial characteristics of nursing homes, United States, 1973-74 National Nursing Home Survey. Vital and Health Statistics. Series 13, No. 22. DHEW Pub. No. (HRA) 76-1773. Health Resources Administration. Washington. U.S. Government Printing Office, Dec. 1975.

Table 169. Selected financial characteristics of nursing homes, according to certification status: United States, 1972-74

(Data are based on reporting by samples of nursing homes)

Financial characteristic	Certified for both Medicare and Medicaid [1]	Certified for Medicaid only			Not certified
		Total	Skilled nursing homes [2]	Intermediate care facilities	
1973-1974 resident charges:					
Average total monthly charge per resident	$592	$435	$484	$376	$329
Percent of homes by average total monthly charge per resident:					
Less than $299	2.0	10.3	3.0	16.1	53.7
$300-$399	6.6	42.3	25.4	55.6	21.1
$400-$499	29.8	28.3	41.0	18.1	13.2
$500-$599	28.6	11.5	16.0	7.9	6.3
$600 or more	33.0	7.7	14.6	2.3	5.6
1972 facility costs:					
Average total costs per resident day	$21.17	$13.53	$15.58	$11.99	$14.03
Labor costs per resident day	12.13	8.24	9.65	7.18	7.89
Nursing staff costs per resident day	6.91	4.89	5.66	4.30	4.67
Operating, fixed, and miscellaneous costs per resident day	9.04	5.29	5.93	4.81	6.15
Percent of homes by average total costs per resident day:					
Less than $10.00	2.7	25.1	10.2	36.4	41.5
$10.00-$14.99	21.0	47.9	46.4	49.1	27.5
$15.00-$19.99	37.9	16.2	26.3	8.5	20.9
$20.00 or more	38.5	10.8	17.1	6.1	10.1
Percent of homes by average labor costs per resident day:					
Less than $4.00	0.4	5.1	1.2	8.0	25.6
$4.00-$7.99	18.3	56.1	42.2	66.6	36.5
$8.00-$11.99	48.7	27.3	38.3	19.0	23.6
$12.00 or more	32.6	11.6	18.4	6.5	14.4
Percent of homes by average fixed costs per resident day:					
Less than $1.00	6.4	18.0	15.7	19.7	38.5
$1.00-$1.99	17.9	40.9	32.8	47.0	30.0
$2.00-$2.99	24.4	25.6	27.7	24.1	12.7
$3.00 or more	51.3	15.5	23.8	9.2	18.9
Percent of homes by average operating costs per resident day:					
Less than $2.00	5.5	23.9	16.0	29.8	28.0
$2.00-$2.99	28.1	49.7	48.3	50.7	30.5
$3.00-$3.99	28.6	14.4	18.5	11.3	17.6
$4.00 or more	37.9	12.1	17.2	8.2	23.9
Percent of homes by average miscellaneous costs per resident day:					
Less than $0.50	40.7	62.9	55.8	68.3	55.7
$0.50-$0.99	23.8	25.7	29.0	23.2	32.7
$1.00-$1.99	26.8	7.7	11.7	4.6	7.8
$2.00 or more	8.7	3.7	3.5	3.9	3.8

[1] 8 percent of these homes were certified for Medicare only.

[2] 35 percent of these homes were certified as both skilled nursing homes and intermediate care facilities.

SOURCE: National Center for Health Statistics: Selected operating and financial characteristics of nursing homes, United States, 1973-74 National Nursing Home Survey. Vital and Health Statistics. Series 13, No. 22. DHEW Pub. No. (HRA) 76-1773. Health Resources Administration. Washington. U.S. Government Printing Office, Dec. 1975.

H. Physicians' Fees, Incomes, and Expenses

Between 1969 and 1974, the latest year for which data are available from the American Medical Association, net incomes of physicians rose at an average annual rate of 5.2 percent. During the same period, fees for initial office visits (a rough measure of the unit price of physician care) advanced an average of 8.8 percent a year. Expenses rose at an even faster rate, 10.7 percent per year. Internists, pediatricians, and obstetrician-gynecologists reported larger increases in income than the average for all specialties; internists reported lower than average increases in their fees.

The trends in physician incomes, fees, and expenses document the depressing effect of the Economic Stabilization Program of 1972 and 1973 on the growth of physician incomes. The rates of increase in these three measures correspond with the general slowdown measured by the Consumer Price Index for 1972 and 1973. Physician fees rose an average of 3.0 percent a year from 1971 to 1973; incomes increased a little faster (3.6 percent); and expenses, which appear to have been under better control in 1973 than in previous years, rose 5.5 percent on the average. The data for 1974 document the "catching up" fees and incomes which occurred after the expiration of controls. Incomes and fees increased faster than in any other year of the 1969-74 period, 5.5 percent and 15.1 percent, respectively. Expenses which were less affected by the controls also rose sharply in 1974, but at a rate below the 5-year average.

Examination of the net income figures by specialty indicates little change in the net income ranking among physicians between 1969 and 1974. Surgeons and obstetrician-gynecologists ranked first and second in 1969 with average net incomes of $48,848 and $43,690, respectively. As of 1974, these specialties continued their high relative rankings with net incomes of $60,031 and $58,238, respectively. On the other end of the scale, in 1969, psychiatrists and pediatricians ranked sixth and seventh among the seven specialty groups with net incomes of $33,916 and $31,812, respectively. In 1974 these two specialties remained at the lower end of the income ladder, but had switched places, with psychiatrists moving to the seventh position with net incomes of $39,937. Pediatricians, whose net incomes increased at an above average growth rate of 6.4 percent per year, moved to the sixth position with net incomes of $43,429.

Table 170. Net income from medical practice, according to specialty: United States, 1969-74

(Data are based on reporting by samples of physicians in office-based practice)

Specialty	1969	1970	1971	1972	1973	1974 [1]	Average annual percent change 1969-74
	Average net income						
All specialties	$39,727	$41,789	$45,278	$47,240	$48,574	$51,224	5.2
General practice	34,734	33,859	39,823	41,277	41,915	43,808	4.8
Internal medicine	37,630	40,251	42,869	44,692	47,809	51,115	6.3
Surgery	48,848	50,701	54,045	56,041	57,228	60,031	4.2
Pediatrics	31,812	34,799	38,503	38,879	41,166	43,429	6.4
Obstetrics and gynecology	43,690	47,904	54,045	53,165	55,357	58,238	5.9
Psychiatry	33,916	39,986	37,248	39,124	38,536	39,997	3.4
Anesthesiology	39,647	39,432	47,293	49,536	48,092	50,780	5.1

[1] Estimated by physician respondents.

SOURCE: American Medical Association: Profiles of Medical Practice, 1975-76, Chicago, Ill., 1976. (Copyright: reprinted with permission.)

Table 171. Tax deductible professional expenses, according to specialty: United States, 1969-74

(Data are based on reporting by samples of physicians in office-based practice)

Specialty	1969	1970	1971	1972	1973	1974 [1]	Average annual percent change 1969-74
	Average total tax deductible professional expenses						
All specialties	$21,224	$24,279	$28,919	$31,318	$32,176	$35,351	10.7
General practice	24,170	24,183	32,060	34,543	33,961	36,930	8.9
Internal medicine	21,352	24,951	28,265	31,269	33,983	36,974	11.6
Surgery	25,474	27,065	32,863	35,750	38,009	41,566	10.3
Pediatrics	18,898	24,887	28,469	29,994	32,392	35,361	13.4
Obstetrics and gynecology	23,303	27,735	33,337	36,461	37,172	41,772	12.4
Psychiatry	9,258	13,287	12,973	14,091	14,329	15,227	10.5
Anesthesiology	9,095	11,180	12,699	13,937	13,973	16,312	12.4

[1] Estimated by physician respondents.

SOURCE: American Medical Association: Profiles of Medical Practice, 1975-76. Chicago, Ill., 1976. (Copyright: reprinted with permission.)

Table 172. Fee for initial office visit, according to specialty: United States, 1969-74

(Data are based on reporting by samples of physicians in office-based practice)

Specialty	1969	1970	1971	1973	1974 [1]	Average annual percent change 1969-74
	Average fee for initial office visit					
All specialties	$12.80	$14.23	$16.00	$16.98	$19.55	8.8
General practice	7.83	8.46	9.65	10.74	12.02	9.0
Internal medicine	16.58	17.81	20.38	20.51	23.12	6.9
Surgery	12.93	14.72	16.43	17.69	18.88	7.9
Pediatrics	9.48	9.95	11.18	12.20	14.48	8.9
Obstetrics and gynecology	13.14	14.23	17.59	19.68	22.08	10.9
Psychiatry	30.27	32.64	35.58	37.51	41.39	6.5

[1] Estimated by physician respondents.

NOTE: No comparable data point is available for 1972.

SOURCE: American Medical Association: Profiles of Medical Practice, 1975-76. Chicago, Ill., 1976. (Copyright: reprinted with permission.)

Table 173. Fee for initial office visit, according to geographic division and specialty: United States, 1974

(Data are based on reporting by a sample of physicians in office-based practice)

Geographic division	Specialty				
	General practice	Internal medicine	Surgery	Obstetrics and gynecology	Pediatrics
	Average fee for initial office visit				
United States	$12.02	$23.12	$18.88	$22.08	$14.48
New England	11.85	19.16	18.04	21.96	15.55
Middle Atlantic	11.42	25.59	21.51	24.61	14.36
East North Central	10.96	19.27	17.56	19.48	13.99
West North Central	10.52	22.18	18.34	17.40	15.67
South Atlantic	13.27	25.22	19.13	23.91	11.61
East South Central	9.38	28.46	16.19	18.88	12.08
West South Central	10.69	23.54	18.70	21.34	15.86
Mountain	13.07	24.32	16.33	18.13	18.75
Pacific	14.94	22.67	19.56	22.79	16.26

SOURCE: American Medical Association: Profiles of Medical Practice, 1975-76. Chicago, Ill., 1976. (Copyright: reprinted with permission.)

J. Dentists' Incomes

The average net income of dentists rose by 17 percent between 1970 and 1972, an average rate of 8.2 percent per year according to the American Dental Association's 1973 Survey of Dental Practice. In comparison, the average annual increase in net income for physicians was 6.3 percent for the same period. The 1972 average net income of independent (nonsalaried) dentists was $35,698, based in an average gross income of $71,814. During that year, half of all independent dentists earned a net income of $32,500 or more. Independent dentists in all listed specialties earned higher incomes than did dentists in general practice, led by endodontists with average net incomes of $61,264 and orthodontists with $52,253. Dentists practicing in moderately large cities with populations greater than 100,000 but less than 1,000,000 earned the highest net incomes, while those working in the smallest cities had the lowest net incomes. Among the five largest U.S. cities, Los Angeles had the highest average dentists' income ($40,807), and Philadelphia, where dentists earned less than the national average, had the lowest.

Table 174. Income of dentists, according to type of practice: United States, 1972
(Data are based on reporting by a sample of dentists)

Type of practice	All dentists		Independent (nonsalaried) dentists			
	Median net income	Mean net income	Median net income	Mean net income	Mean gross income	Mean net as percent of gross
All types of practice	$31,000	$34,455	$32,500	$35,698	$71,814	49.7
General practitioner	30,000	31,936	30,700	32,826	68,232	48.1
Specialist	40,000	45,247	45,000	49,070	88,525	55.4
Endodontist	44,000	52,484	51,400	61,264	104,443	58.7
Oral surgeon	40,000	44,711	45,000	47,562	85,056	55.9
Orthodontist	43,000	49,381	47,000	52,253	90,665	57.6
Pedodontist	36,850	40,256	41,100	42,227	82,123	51.4
Periodontist	40,000	44,739	43,000	45,988	87,394	52.6
Prosthodontist	24,600	30,923	*	*	*	*
Other specialists	25,500	31,745	*	*	*	*

SOURCE: American Dental Association: The 1973 Survey of Dental Practice. Chicago, Ill., 1974.

Table 175. Income of independent (nonsalaried) dentists, according to size of city and 5 large cities: United States, 1972
(Data are based on reporting by a sample of dentists)

City size and city	Median net income	Mean net income	Mean gross income	Mean net as percent of gross
All city sizes	$32,500	$35,698	$71,814	49.7
Less than 2,500	27,150	28,287	55,574	50.9
2,500-25,000	30,050	32,905	65,884	49.9
25,000-100,000	33,900	36,021	72,181	49.9
100,000-1,000,000	34,000	38,026	77,490	49.1
1,000,000 or more	33,200	37,838	74,523	50.8
New York	33,000	37,625	74,338	50.6
Chicago	35,000	35,563	69,241	51.4
Los Angeles	35,600	40,807	90,252	45.2
Philadelphia	24,400	32,945	58,895	55.9
Detroit	37,000	35,858	76,035	47.2

SOURCE: American Dental Association: The 1973 Survey of Dental Practice. Chicago, Ill., 1974.

K. The Economic Cost of Illness

Most of the discussion relating to costs and expenditures for health care is concerned with the direct cost of diagnosis, treatment, and prevention of illness: who gets sick, who needs medical care, how much does it cost, who pays for it, and how can the system best be managed and resources allocated to provide optimal care for all who need it? A related issue, and one which has not perhaps received enough attention, is the question of the total cost to society of illness and the relative burden that can be attributed to various types of illness.

A major study of the cost of illness [b] has established a means of estimating the total costs of illness and permitted comparison of the costs of major disease categories. This study was updated in 1976 to account for changes in treatment modes and shifts in the incidence of various diseases, as well as changes in health care costs and workers' earnings.

The total economic cost of illness, taking into account the direct costs of treatment and the losses attributable to morbidity and mortality at a 4 percent discount rate, was nearly $189 billion in 1972. This was twice the 1963 cost of $93.5 billion. The major growth was in direct costs, which tripled in the 9-year period. These direct costs were responsible for the largest share of total costs in 1972, accounting for 40 percent. In 1963 losses due to mortality had been the leading contributor to the total, accounting for over half, while direct costs were responsible for only 24.1 percent.

The ranking of total economic costs by diagnosis changed slightly between 1963 and 1972. In 1972 about $40 billion or one-fifth of the total cost, was for persons with diseases of the circulatory system. Accidents accounted for $27 billion, followed by diseases of the digestive system (including dental care) and cancer which each cost about $17 billion. Diseases of the circulatory system accounted for about the same share of the total in both years. Accidents grew in importance because of the relatively higher number of deaths from accidents. Cancer dropped in the ranking with a relatively smaller number of cancer victims in the "unable to work" category in 1972 than in 1963.

The economic cost of illness is measured in terms of the direct outlays for prevention, detection, and treatment of illness and also the indirect costs related to the loss in the economy's output due to the disability (morbidity) and premature death (mortality) of workers. Indirect costs from morbidity and mortality are estimated on the basis of lost income and include an imputed value for the services of housewives. The earnings that would have been received in the absence of disability or premature death are estimated, and then discounted over an expected lifetime at rates of 4 and 6 percent.

The direct costs of illness are total national health expenditures for the appropriate calendar years. In addition to expenditures for disease prevention, detection, and treatment, included are outlays for research, training, and the construction of health care facilities. Where possible, these direct costs have been allocated among disease categories, using data from several independent sources.

Morbidity losses are those related to absence from work because of illness, the inability to work at all, or the inability of housewives to perform their tasks. Morbidity costs are calculated by applying average earnings by age and sex to work losses, imputing a dollar value to housewives' services and applying it to their bed days, and applying labor force participation rates and earnings, by age and sex, to the numbers of people who are institutionalized or too sick to be employed or keep house.

Mortality losses are calculated using the "human capital" approach, which involves the estimation of earnings over an expected lifetime. The method used in this study takes into account variations in life expectancy for different age, sex, and racial groups, variations in their respective labor force participation rates, changes in current and anticipated earnings at successive ages, the imputed value of housewives' earnings, and the discounted present value of lifetime earnings when rates of return on investment of 4 and 6 percent are assumed.

[b] Rice, D. P., Estimating the Cost of Illness (Health Economics Series No. 6), U.S. Department of Health, Education, and Welfare, Public Health Service, May 1966.

Table 176. Estimated amount and percent distribution of costs of morbidity and mortality, with present value of lifetime earnings discounted at 4 percent and at 6 percent, according to diagnosis: United States, 1972

(Data are based on multiple sources)

Percent discount of present value of lifetime earnings and diagnosis	Total	Direct costs	Indirect costs		Total	Direct costs	Indirect costs	
			Morbidity	Mortality			Morbidity	Mortality
	Amount in millions				Percent distribution			
4-percent discount								
Total	$188,789	$75,231	$42,323	$71,235	100.0	100.0	100.0	100.0
Infective and parasitic diseases	3,443	1,412	1,200	831	1.8	1.9	2.8	1.2
Neoplasms	17,367	3,872	862	12,633	9.2	5.1	2.0	17.7
Endocrine, nutritional, and metabolic diseases	5,930	3,436	1,137	1,357	3.1	4.6	2.7	1.9
Diseases of the blood and blood-forming organs	921	491	220	210	0.5	0.7	0.5	0.3
Mental disorders	13,917	6,985	6,179	753	7.4	9.3	14.6	1.1
Diseases of the nervous system and sense organs	10,951	5,947	3,944	1,060	5.8	7.9	9.3	1.5
Diseases of the circulatory system	40,060	10,919	6,417	22,724	21.2	14.5	15.2	31.9
Diseases of the respiratory system	16,454	5,931	7,089	3,434	8.7	7.9	16.7	4.8
Diseases of the digestive system	17,487	11,100	2,606	3,781	9.3	14.8	6.2	5.3
Diseases of the genitourinary system	6,456	4,471	1,249	736	3.4	5.9	3.0	1.0
Complications of pregnancy, childbirth, and the puerperium	2,932	2,607	245	80	1.6	3.5	0.6	0.1
Diseases of the skin and subcutaneous tissue	2,052	1,525	460	67	1.1	2.0	1.1	0.1
Diseases of the musculoskeletal system and connective tissue	8,948	3,636	5,103	209	4.7	4.8	12.1	0.3
Congenital anomalies	1,903	381	238	1,284	1.0	0.5	0.6	1.8
Accidents, poisonings, and violence	26,678	5,121	3,883	17,674	14.1	6.8	9.2	24.8
Other	13,294	7,398	1,494	4,402	7.0	9.8	3.5	6.2
6-percent discount								
Total	$174,934	$75,231	$42,323	$57,380	100.0	100.0	100.0	100.0
Infective and parasitic diseases	3,234	1,412	1,200	622	1.8	1.9	2.8	1.1
Neoplasms	15,641	3,872	862	10,907	8.9	5.1	2.0	19.0
Endocrine, nutritional, and metabolic diseases	5,717	3,436	1,137	1,144	3.3	4.6	2.7	2.0
Diseases of the blood and blood-forming organs	875	491	220	164	0.5	0.7	0.5	0.3
Mental disorders	13,782	6,985	6,179	618	7.9	9.3	14.6	1.1
Diseases of the nervous system and sense organs	10,703	5,947	3,944	812	6.1	7.9	9.3	1.4
Diseases of the circulatory system	37,430	10,919	6,417	20,094	21.4	14.5	15.2	35.0
Diseases of the respiratory system	15,764	5,931	7,089	2,744	9.0	7.9	16.7	4.8
Diseases of the digestive system	16,931	11,100	2,606	3,225	9.7	14.8	6.2	5.6
Diseases of the genitourinary system	6,344	4,471	1,249	624	3.6	5.9	3.0	1.1
Complications of pregnancy, childbirth, and the puerperium	2,914	2,607	245	62	1.7	3.5	0.6	0.1
Diseases of the skin and subcutaneous tissue	2,040	1,525	460	55	1.2	2.0	1.1	0.1
Diseases of the musculoskeletal system and connective tissue	8,913	3,636	5,103	174	5.1	4.8	12.1	0.3
Congenital anomalies	1,375	381	238	756	0.8	0.5	0.6	1.3
Accidents, poisonings, and violence	21,649	5,121	3,883	12,645	12.4	6.8	9.2	22.0
Other	11,625	7,398	1,494	2,733	6.6	9.8	3.5	4.8

NOTE: The discount rates on lifetime earnings were used to calculate the indirect costs of mortality.

SOURCE: Cooper, B. S., and Rice, D. P.: The economic cost of illness revisited. Social Security Bulletin. 39(2):21-36, Feb. 1976.

Table 177. Estimated amount and percent distribution of costs of illness, according to diagnosis: United States, 1963 and 1972

(Data are based on multiple sources)

Diagnosis	Amount in millions		Percent distribution	
	1963	1972	1963	1972
Total	$93,500	$188,789	100.0	100.0
Infective and parasitic diseases	2,135	3,443	2.3	1.8
Neoplasms	10,590	17,367	11.3	9.2
Endocrine, nutritional, and metabolic diseases	2,623	5,930	2.8	3.1
Diseases of the blood and blood-forming organs	373	921	0.4	0.5
Mental disorders	7,277	13,917	7.8	7.4
Diseases of the nervous system and sense organs	6,795	10,951	7.3	5.8
Diseases of the circulatory system	20,948	40,060	22.4	21.2
Diseases of the respiratory system	7,413	16,454	7.9	8.7
Diseases of the digestive system	7,837	17,487	8.4	9.3
Diseases of the genitourinary system	2,560	6,456	2.7	3.4
Complications of pregnancy, childbirth, and the puerperium	1,517	2,932	1.6	1.6
Diseases of the skin and subcutaneous tissue	450	2,052	0.5	1.1
Diseases of the musculoskeletal system and connective tissue	2,783	8,948	3.0	4.7
Congenital anomalies	1,243	1,903	1.3	1.0
Accidents, poisonings, and violence	11,811	26,678	12.6	14.1
Other	7,146	13,294	7.6	7.0

NOTE: Present value of future earnings is calculated at a 4-percent discount rate. See previous table.

SOURCE: Cooper, B. S., and Rice, D. P.: The economic cost of illness revisited. Social Security Bulletin. 39(2):21-36, Feb. 1976.

L. Research and Development Support

In fiscal year 1975, $4.6 billion from both public and private sources were spent for research and development in medical and health-related activities. Federal Government research and development (R&D) expenditures reached a level of $19.0 billion in fiscal year 1975. Of this total, $2.80 billion, or 14.7 percent of the total Federal R&D effort, was devoted to health. Expenditures by the Department of Health, Education, and Welfare were $2.2 billion, or 77 percent of the total Federal health effort. More specifically, the biomedical research conducted by the National Institutes of Health was funded at $1.74 billion, or 66 percent of the Federal health total.

Expenditures for health-related R&D rose at an annual rate of nearly 12 percent between 1960 and 1975, spurred mainly by the increase in Federal Government expenditures. In 1960, the Federal share of the total was 50 percent; by 1975 this share had risen to 61 percent. The second largest contributor was private industry, which devoted the greatest share of its expenditures to drug research and development.

As impressive as the growth of expenditures has been, the purchasing power of these funds has been eroded significantly over the years as a result of the price and wage-rate inflation which has occurred in the national economy as a whole. The National Institutes of Health have developed, through a contract, a price deflator for biomedical research and development which permits an examination of changes in expenditures on a "constant dollar" basis (i.e., eliminating the illusory gains lost to inflation). Between 1960 and 1975, national health R&D expenditures increased at an annual "real" rate of 6.6 percent, and Federal expenditures rose at a rate of 8.0 percent. Fifty-six percent of the increase in health-related R&D expenditures was offset by inflation, compared to nearly two-thirds of the growth in gross national product during the same period. Most of the growth in "real" outlays for medical and health-related research occurred between 1960 and 1968, when expenditures increased at an average annual rate of 10.4 percent. Between 1968 and 1975 the rate of increase slowed to 2.4 percent.

Table 178. Federal obligations for all research and development and for health research and development, according to agency: United States, fiscal year 1975

(Data are based on multiple sources)

Agency	Total R&D	Health R&D total	Health R&D as percent of total R&D
	Amount in millions		
All Federal agencies	$19,044.3	$2,798.9	14.7
Department of Health, Education, and Welfare	2,375.2	2,762.2	91.0
National Institutes of Health, PHS	1,845.5	1,845.5	100.0
Other Public Health Service	278.5	278.5	100.0
National Institute of Education	69.9	---	---
Office of Education	45.9	---	---
Office of the Secretary [1]	103.1	23.1	22.4
Social and Rehabilitation Service	9.6	3.6	37.8
Social Security Administration	22.6	11.5	50.7
Other agencies	16,669.3	636.7	3.8
Department of Agriculture	420.1	61.4	14.6
Department of Commerce	215.4	5.5	2.6
Department of Defense	9,012.5	115.9	1.3
Department of Interior	280.8	9.0	3.2
Department of Labor	25.4	2.0	8.0
Department of State	27.9	6.4	22.9
Department of Transportation	311.6	11.9	3.8
Consumer Product Safety Commission	[2] 6.0	7.6	---
Energy Research and Development Administration	2,072.3	163.9	7.9
Environmental Protection Agency	257.7	38.1	14.8
National Aeronautics and Space Administration	3,064.4	74.9	2.4
National Science Foundation	595.0	44.7	7.5
Tennessee Valley Authority	16.6	0.5	2.9
Veterans Administration	94.8	94.8	100.0
All other departments and agencies	268.8	---	---

[1] Includes the Office of Human Development and the Office of the Assistant Secretary, Education.

[2] Excludes $1.6 million in obligations for scientific and technical information activities in support of research and development.

SOURCE: National Institutes of Health, Office of Program Planning and Evaluation: Selected data.

Table 179. National support for health research and development and average annual percent change, according to source of funds: United States, selected fiscal years 1960-75

(Data are based on multiple sources)

Fiscal year and period	Total	Government		Industry [1]	Nonprofit organization
		Federal	State		
	Expenditure in millions				
1960	$ 900	$ 448	$ 78	$ 253	$121
1965	1,884	1,174	103	450	157
1970	2,805	1,667	150	795	193
1971	3,107	1,877	163	860	207
1972	3,454	2,147	179	925	203
1973	3,667	2,225	201	1,033	208
1974	4,390	2,754	222	1,187	227
1975	4,610	2,799	239	1,322	250
	Average annual percent change				
1960-75	11.5	13.0	7.8	11.7	5.0
1960-65	15.9	21.2	5.7	12.2	5.3
1965-70	8.3	7.3	7.8	12.1	4.2
1970-75	10.4	10.9	9.8	10.7	5.3
1970-71	10.8	12.6	8.7	8.2	7.3
1971-72	11.2	14.4	9.8	7.6	—1.9
1972-73	6.2	3.6	12.3	11.7	2.5
1973-74	19.7	23.8	10.4	14.9	9.1
1974-75	5.0	1.6	7.7	11.4	10.1

[1] Includes expenditures for drug research. These expenditures are included in the "drugs and sundries" component of the Social Security Administration's National Health Expenditure Series, not under "research."

SOURCE: National Institutes of Health, Office of Program Planning and Evaluation: Selected data.

Table 180. National support for health research and development in 1965 dollars and average annual percent change, according to source of funds: United States, selected fiscal years 1960-75

Fiscal year	Total	Government		Industry [1]	Nonprofit organization
		Federal	State		
	Expenditure in millions				
1960	$1,022	$ 509	$ 89	$287	$137
1965	1,884	1,174	103	450	157
1970	2,212	1,315	118	627	152
1971	2,315	1,399	121	641	154
1972	2,452	1,524	127	657	144
1973	2,485	1,508	136	700	141
1974	2,796	1,754	141	756	145
1975	2,655	1,612	138	761	144
	Average annual percent change				
1960-75	6.6	8.0	3.0	6.7	0.3
1960-65	13.0	18.2	3.0	9.4	2.8
1965-70	3.3	2.3	2.8	6.9	—0.6
1970-75	3.7	4.2	3.2	3.9	—1.1
1970-71	4.7	6.4	2.5	2.2	1.3
1971-72	5.9	8.9	5.0	2.5	—6.5
1972-73	1.3	—1.0	7.1	6.5	—2.1
1973-74	12.5	16.3	3.7	8.0	2.8
1974-75	—5.0	—8.1	—2.1	0.7	—0.7

[1] Includes expenditures for drug research. These expenditures are included in the "drugs and sundries" component of the Social Security Administration's National Health Expenditure Series, not under "research."

NOTE: Expenditures shown in the previous table were deflated using the Biomedical Research and Development deflator (1965 = 100) developed for the National Institutes of Health by Westat, Inc.

SOURCE: National Institutes of Health, Office of Program Planning and Evaluation: Selected data.

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APPENDIX I

Description and Sources of Data

Index

Introduction

APPENDIX I

Description and Sources of Data

Introduction

This report consolidates the most current data on the health of the population of the United States, the availability and use of health resources, and health care costs and financing. The information was obtained from the data files and/or published reports of many governmental and nongovernmental agencies and organizations. In each case, the sponsoring agency or organization collected data using its own methods and procedures, and therefore the data in this report vary considerably with respect to source, method of collection, definitions, and reference period.

Although a detailed description and comprehensive evaluation of each data source is beyond the scope of this appendix, users should be aware of the general strengths and weaknesses of the different data collection systems. For example, population-based surveys obtain socioeconomic data, data on family characteristics, and information on the impact of an illness such as days lost from work or limitation of activity. However, they were limited by the amount of information a respondent remembers or is willing to report. Detailed medical information such as precise diagnoses or the types of operations performed may not be known and so will not be reported.

Conversely, health care providers, such as physicians and hospitals, usually had good diagnostic information, but little or no information about the socioeconomic characteristics of individuals or the impact of an illness on the individual.

The population covered by different data collection systems may not be the same, and understanding the differences is critical in interpreting the data. Data on vital statistics and national expenditures cover the entire population. Most data on morbidity and utilization of health resources cover only the civilian noninstitutionalized population. Thus statistics are not included for military personnel, who are usually young, and for institutionalized people, who may, for example, be prisoners of any age or nursing home residents, who are usually old.

All data collection systems are subject to error, and records may be incomplete or contain inaccurate information. People may not remember essential information, a question may not mean the same thing to different respondents, and some institutions or individuals may not respond at all. The sponsoring agencies do the best they can, but it is not always possible to measure the magnitude of these errors or their impact on the data. Where possible, the tables have notes describing the universe and the method of data collection to enable the user to place his own evaluation on the data.

Data collection systems based on samples have, in addition to errors mentioned above, sampling error, which is a measure of the variability introduced because only a sample of the universe was taken. In general, data with large sampling errors are not shown in this report. Most tables also show when the data are based on a sample.

The fact that a sample has an additional

source of error does not mean that sample data are less reliable than full-count data. Frequently the money saved by taking only a sample is spent on reducing other forms of error through more pretesting of survey forms, better quality control, and other measures.

The descriptive summaries which follow provide a general overview of study design, methods of data collection, and reliability and validity of the data. More complete and detailed discussions are found in the publications referenced at the end of each summary. The data set or source is listed under the agency or organization that sponsored the data collection.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

HEALTH RESOURCES ADMINISTRATION

National Center for Health Statistics

A. *Vital Registration System*

The vital registration system of the National Center for Health Statistics (NCHS) collects and publishes data on births and deaths in the United States. Fetal deaths are classified and tabulated separately from other deaths. The Division of Vital Statistics obtains information from the registration offices of all States, certain cities that perform their own data collection, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam.

Until 1972 microfilm copies of all deaths and a 50-percent sample of births were received from all registration areas and processed by NCHS. Beginning in 1972 some States began sending their data to NCHS through the Cooperative Health Statistics System (CHSS). States that participate in the CHSS program process 100 percent of their death and birth records and send the entire data file to NCHS on computer tape. The number of participating States has grown from 6 in 1972 to 23 in 1975.

The standard certificates of birth, death, and fetal death recommended by NCHS are modified in each registration area to serve the area's needs. However, most certificates conform closely in content and arrangement to the standard certificate, and all certificates contain a minimum data set required by NCHS.

In most areas, practically all births and deaths are registered. The most recent survey of the completeness of birth registration, conducted on a sample of births during 1964-68, showed that 99.3 percent of all births in the United States during that period were registered. No comparable information is available for deaths, but it is generally believed that death registration in the United States is at least as complete as birth registration. However, there are isolated areas in the United States where underreporting of births and deaths is severe enough to affect the validity of local statistics.

Because all natality statistics for non-CHSS areas and all 1972 mortality statistics are based on a 50-percent sample of certificates, these statistics are subject to sampling variability. Except for very small estimates, sampling errors are small relative to the size of the statistics themselves, because of the large proportion of the total file in the sample.

For more information, see: National Center for Health Statistics, *Vital Statistics of the United States, 1972,* Vol. I, Part A, DHEW Pub. No. (HRA) 76-1100, and Vol. II, Part A, DHEW Pub. No. (HRA) 76-1101, Health Resources Administration, Washington, U.S. Government Printing Office, 1976.

B. *National Mortality Survey*

The National Mortality Survey was a sample survey of all deaths of persons aged 35-84 occurring in the United States during 1966-68. This

followback survey obtained information on smoking histories and social characteristics of the deceased, and data were secured from questionnaires mailed to spouses or ex-spouses, parents, offspring, other relatives, and friends or neighbors of the deceased.

The records for the survey were selected from the 10-percent Current Mortality Sample (CMS), a systematic sample of records sent to the National Center for Health Statistics (NCHS) monthly from each State registration office to enable NCHS to produce provisional mortality statistics. The CMS records were stratified by month of death, geographic area, age, and cause of death. A systematic sample of records was selected from each stratum, with differing sampling rates in the various strata. The average sampling rate was 1 in 26, so the average overall sampling rate was 1 in 260 eligible deaths. This rate yielded a sample of 19,526 cases. Questionnaires were returned for 18,013 cases, a response rate of 92.3 percent. To minimize nonresponse bias, data for nonresponse cases were imputed using data from decedents with similar characteristics.

Item nonresponse on the returned questionnaires ranged from 6.4 percent for the question "Did . . . smoke a pipe?" to 15.3 percent for family income, and was uniformly distributed between these extremes. Values for missing data were imputed by NCHS.

For general information on the National Mortality Survey, see: National Center for Health Statistics, "Health insurance coverage of adults who died in 1964 or 1965, United States," *Vital and Health Statistics,* PHS Pub. No. 1000-Series 22-No. 10, Public Health Service, Washington, U.S. Government Printing Office, Oct. 1969. For specific information on the 1966-68 Survey, write to Director, Division of Vital Statistics, National Center for Health Statistics, 3700 East-West Highway, Hyattsville, Md. 20782.

C. *National Survey of Family Growth*

Data from the National Survey of Family Growth (NSFG) are based on a five-stage probability sample of civilian noninstitutionalized women living in the coterminous United States who are less than 45 years of age and who are currently married, previously married, or single mothers with their own children currently living in the household.

The counties and independent cities of the United States were combined to form a frame of primary sampling units (PSU's), and 101 PSU's were selected as the first-stage sample for Cycle I of NSFG. The next three stages produced a clustered sample of 28,998 households within the 101 PSU's. A household screener interview in 26,028 of these households (89.8 percent) produced a fifth-stage sample of 10,879 women, of whom 9,817 (90.2 percent) were interviewed.

The overall item nonresponse for the completed interviews was 2.1 percent. Nonresponse rates for frequently used items include 6.8 percent for family income, 0.5 percent for education, and 0.2 percent for age. Missing items were imputed from completed questionnaires for similar respondents.

To produce estimates for the entire population of eligible U.S. women, data for the interviewed sample women are inflated by the reciprocal of the probability of selection at each stage of sampling and adjusted for both screener and interview nonresponse. In addition, estimates for ever-married women in 12 age-race classes are poststratified to benchmark population values based on data from the U.S. Bureau of the Census Current Population Survey.

Quality control procedures for interviewer selection and training, field listing, and data processing are built into NSFG to minimize nonsampling error and bias. In addition, the nonresponse adjustments in the estimator are designed to minimize the effect of nonresponse bias by assigning to nonrespondents the characteristics of similar respondents. Sampling errors for NSFG are estimated by balanced half-sample replication.

Discussion of the balanced half-sample technique, summary sampling error charts, and detailed information on the NSFG sample design are available in the report: National Center for Health Statistics, "Sample design, estimation procedures and variance estimation for Cycle I of the National Survey of Family Growth," *Vital and Health Statistics,* Series 2, Health Resources Administration, DHEW, Rockville, Md., to be published.

D. *National Reporting System for Family Planning Services*

The National Reporting System for Family Planning Services (NRSFPS) continually collects data on the services provided and contraceptives used in organized family planning programs located in the United States, Guam, Puerto Rico, and the U.S. Virgin Islands. Not all agencies providing family planning services are enrolled in NRSFPS; specifically excluded are private physicians who provide services in their offices to private patients.

Of the 5,614 sites on the NRSFPS roll in 1975, 4,940 submitted data to NRSFPS. Data for 1975 from participating service sites may be incomplete for one of two reasons: clinic visit record forms were not completed for some patients, and/or some forms were not submitted by February 1, 1976, the cutoff date for processing. Data for 12 months are included in the 1975 tabulations for 65 percent of the participating clinics; some, but not all, of the remaining clinics were in service for less than 12 months in 1975.

The counts obtained from NRSFPS contain an unknown amount of duplication, since a patient who received services from more than one project reporting to NCHS was counted as a separate person in each project. While not subject to sampling error, the data are subject to respondent, recording, and processing errors.

For more information, see Haupt, Barbara J., The National Reporting System for Family Planning Services, *Health Services Reports,* 88 (7) : 637-639, Aug.-Sept. 1973.

E. *Health Interview Survey*

The Health Interview Survey (HIS) is a continuing nationwide sample survey in which data are collected by the U.S. Bureau of the Census through personal household interviews. Information is obtained on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, and other health topics. The household questionnaire is revised each year and supplemental topics are added and deleted. For most topics, data are collected over an entire calendar year. The universe for HIS is the civilian noninstitutionalized population of the United States. Members of the Armed Forces, U.S. nationals living in foreign countries, and persons who died during the reference period are excluded.

The survey is based on a multistage probability cluster sample of 376 primary sampling units selected from approximately 1,900 geographically defined units in the first stage and 12,000 segments containing about 42,000 eligible occupied households in the final stage. The usual HIS sample is about 116,000 persons in 40,000 interviewed households in a year. The response rate is ordinarily about 96 percent of the eligible households. National estimates are based on a four-stage estimation procedure involving inflation by the reciprocal of the probability of selection, a nonresponse adjustment, ratio adjustment, and poststratification.

For more detailed information on the HIS design, limitations of data, and sampling errors of the estimates, see: National Center for Health Statistics, "Current estimates from the Health Interview Survey, United States, 1974," *Vital and Health Statistics,* Series 10-No. 100, DHEW Pub. No. (HRA) 76-1527, Health Resources Administration, Washington, U.S. Government Printing Office, Sept. 1975.

F. *Health and Nutrition Examination Survey*

This survey collects needed health-related data which can be obtained only by direct physical examinations, clinical and laboratory tests, and related measurement procedures. In Cycle I of the Health and Nutrition Examination Survey (HANES I), a major purpose was to measure and monitor, over time, indicators of the nutritional status of the American people. In addition, a more detailed health examination including assessment of unfulfilled health needs and determination of a number of health conditions, such as dermatological and ophthalmological conditions, various chronic diseases, and related measures was given to a subsample.

The HANES target population is the civilian noninstitutionalized population aged 1-74 residing in the coterminous United States, except for people residing on any of the reservation lands set aside for the use of American Indians. The sample design is a multistage, stratified probability sample of clusters of persons in land-based segments. The sample areas consist of 65

primary sampling units (PSU's) selected from the 1,900 PSU's in the coterminous United States. Within each PSU a systematic random sample of segments was selected which overrepresented segments in enumeration districts with an average family income of less than $3,000 in 1960. Each segment consisted of an expected eight housing units. A household interview was conducted in each housing unit to identify household members and select the sample persons for the nutrition examination at specified rates by age and sex groups. A subsample of persons aged 25-74 also was selected to receive the more detailed health examination. Groups at high risk of malnutrition were oversampled at known rates throughout the process.

Data were collected in two mobile examination centers (MEC's) by specially trained teams of examination staff. The MEC's were set up once for a period of 3-6 weeks in each of the 65 sample locations. Health examination representatives completed medical histories in households and arranged appointments for sample persons to be examined at MEC's. Household interviews were completed for over 96 percent of the 28,043 persons selected for the HANES I sample, and about 75 percent (20,749) were examined between 1971 and 1974.

The estimation procedure used to produce national statistics involves inflation by reciprocals of the probabilities of selection, adjustment for nonresponse, and a poststratified ratio adjustment to population totals. Sampling errors also are estimated to measure the reliability of the statistics.

For more information on HANES I, see: National Center for Health Statistics, "Plan and operation of the Health and Nutrition Examination Survey, United States-1971-1973," *Vital and Health Statistics,* Series 1-Nos. 10a and 10b, DHEW Pub. No. (HSM) 73-1310, Health Services and Mental Health Administration, Washington, U.S. Government Printing Office, Feb. 1973.

G. *Master Facility Inventory*

The Master Facility Inventory (MFI) is a comprehensive file of inpatient health facilities in the United States. The three broad categories of facilities in the MFI are: hospitals, nursing and related care homes, and other custodial or remedial care facilities. To be included in the MFI, hospitals must have at least six inpatient beds, and nursing and related care homes must have at least three inpatient beds.

The MFI is kept current by the periodic addition of names and addresses obtained from State licensing agencies for all newly established inpatient facilities. In addition, annual surveys of hospitals and a biennial survey of nursing homes are conducted to update name and location, type of business, number of beds, and number of residents or patients in the facilities. The response rates for the 1973 nursing home survey and the 1974 hospital survey were 96 and 92 percent, respectively.

Statistics derived from these surveys were adjusted for both facility and item nonresponse. Missing items on the questionnaire were imputed, when possible, by using information reported by the same facility in a previous survey. When data were not available from a previous census for a responding facility, the data were imputed by using data from similar responding facilities. Similar facilities are defined as those with the same types of business, ownership, and service, and approximately the same bed size.

Estimates of completeness of coverage for the MFI are available for 1973 but not 1974. Coverage of hospitals was about 90-percent complete in the 1973 MFI. Surveys conducted by the U.S. Bureau of the Census for the National Center for Health Statistics indicated that coverage was about 90-percent complete for the number of beds in the nursing and related care homes and about 98-percent complete for beds in other types of institutions.

For more detailed information on the MFI, see: National Center for Health Statistics, "Design and methodology of the 1967 Master Facility Inventory Survey," *Vital and Health Statistics,* PHS Pub. No. 1000-Series 1-No. 9, Public Health Service, Washington, U.S. Government Printing Office, Jan. 1971.

H. *Health Manpower Inventories*

The National Center for Health Statistics publishes data on health manpower from many sources. Physician data are derived from the

American Medical Association's (AMA) Physician Masterfile. The Masterfile contains data on "every" physician in the United States, both members and nonmembers of AMA, and on those graduates of American medical schools temporarily practicing overseas. The file also includes graduates of foreign medical schools who are in the United States. A file is initiated on each individual upon entry into medical school or, in the case of foreign graduates, upon entry into the United States. A census of physicians is conducted every 3 years to update the file information on professional activities, specialization, and present employment status. The last census from which data are available was conducted in 1973. Between censuses, AMA keeps the file current by continuous checks of professional publications and State licensure notices for changes in any physician's activities. When a change is noted, the physician is sent another copy of the questionnaire. The general response rate to the questionnaires is about 87 percent.

Data on other health occupations are acquired from State licensing agencies and from professional organizations such as the American Dental Association, the American Nurses' Association, the American Optometric Association, the National Association of Boards of Pharmacy, the American Chiropractic Association, the American Podiatry Association, and the American Registry of Radiologic Technologists.

For more information, see: National Center for Health Statistics, *Health Resources Statistics: Health Manpower and Health Facilities, 1975*, DHEW Pub. No. (HRA) 76-1509, Health Resources Administration, Washington, U.S. Government Printing Office, 1976.

J. Hospital Discharge Survey

The Hospital Discharge Survey (HDS) is a continuing nationwide sample survey of short-stay hospitals in the United States. The scope of HDS covers discharges from general and specialty hospitals located in the 50 States and the District of Columbia, exclusive of military and Veterans Administration hospitals and hospital units in institutions such as prisons or homes for dependent children. Only hospitals having six or more beds for patient use and in which the average length of stay for all patients is less than 30 days are included in the survey.

The sample was selected from a frame of 7,407 short-stay hospitals listed in the Master Facility Inventory. A two-stage stratified sample design was used, and hospitals were stratified according to bed size and geographic region. The largest hospitals were selected with certainty in the sample, and the probability of selection of a hospital decreased as the bed size of the hospital decreased. Within each sample hospital, a systematic random sample of discharges is selected from the daily listing sheet. The within-hospital sampling ratio for selecting discharges varies inversely with the probability of selection of the hospital, so that the overall probability of selecting a discharge is approximately the same in each bed-size class.

Survey hospitals use an abstract form to transcribe data from the face sheet of hospital records. Forms were completed by either hospital staff or representatives of the National Center for Health Statistics.

The basic unit of estimation for HDS is the sample patient abstract. The estimation procedure involves inflation by reciprocals of the probabilities of selection, adjustment for nonresponding hospitals and missing abstracts, and ratio adjustments to fixed totals. Of the 497 hospitals selected for the survey, 464 were in scope and 424 participated in the survey in 1974.

For more detailed information on the design of HDS and the magnitude of sampling errors associated with HDS estimates, see: National Center for Health Statistics, "Utilization of short-stay hospitals: Annual summary for the United States, 1974," *Vital and Health Statistics*, Series 13-No. 26, DHEW Pub. No. (HRA) 76-1777, Health Resources Administration, Washington, U.S. Government Printing Office, Sept. 1976.

K. National Nursing Home Survey

The National Center for Health Statistics conducted this survey during the fall of 1973 and the winter of 1974 to collect data on nursing homes, their expenditures, residents, and staff. The scope of the National Nursing Home Survey (NNHS) encompassed nursing homes which provided some level of nursing care; personal care homes and domiciliary care homes

were excluded. The sample of 2,118 homes was selected from 17,685 nursing homes in the sampling frame, which consisted of homes classified as nursing care homes in the 1971 Master Facility Inventory and those opening for business in 1972. Of this sample, 7 percent did not fit the universe definition at the time of the survey and hence were excluded. In each sampled home random samples of about 10 residents and 14 employees were chosen.

Data on facilities were collected by personal interviews with administrators; facilities' accountants completed questionnaires on expenditures. Resident data were collected by personal interview of a nurse familiar with the care provided to the resident. The nurse relied on the medical record and working knowledge of the residents. Employees completed a self-administered questionnaire. Response rates were 97 percent for facilities, 88 percent for expenditures, 98 percent for residents, and 82 percent for staff.

Statistics from NNHS were derived by a ratio-estimating procedure. The estimation of the number of establishments and establishment data not related to bed size involved inflation by the reciprocal of the probability of selecting the sample establishment. Statistics were adjusted for failure of a home to respond, failure to fill out one of the questionnaires, and failure to complete an item on a questionnaire. The estimates from the survey are subject to both sampling and nonsampling errors.

For more detailed information on the NNHS design and the magnitude of sampling errors associated with the estimates, see: National Center for Health Statistics, "Selected operating and financial characteristics of nursing homes, United States: 1973-74 National Nursing Home Survey," *Vital and Health Statistics,* Series 13-No. 22, DHEW Pub. No. (HRA) 76-1773, Health Resources Administration, Washington, U.S. Government Printing Office, Dec. 1975.

L. National Ambulatory Medical Care Survey

The National Ambulatory Medical Care Survey (NAMCS) is a continuing national probability sample of ambulatory medical encounters. The scope of the survey covers physician-patient encounters in the offices of physicians classified by the American Medical Association or American Osteopathic Association as "office-based, patient care" physicians. Federally employed physicians and certain specialty physicians are excluded.

A multistage probability design is employed. The first-stage sample consists of 87 primary sampling units (PSU's) selected from about 1,900 such units, into which the United States has been divided. In each sample PSU, a sample of practicing physicians was selected. The final stage involves selection of a random week of the year, and the selection of samples of patient visits during that week.

For the 1973 survey, 1,695 physicians were selected for the sample, of whom 1,441 were found to be eligible for NAMCS and were asked to participate. A total of 1,103 physicians (76.5 percent of those eligible) participated in the study, providing data concerning a random sample of about 30,000 patient visits.

The estimation procedure used in NAMCS has basically three components: (1) inflation by reciprocals of the probabilities of selection, (2) adjustment for nonresponse, and (3) ratio adjustment to fixed totals.

For more detailed information on the design of NAMCS and the magnitude of sampling errors associated with NAMCS estimates, see: National Center for Health Statistics, "The National Ambulatory Medical Care Survey: 1973 Summary, United States, May 1973-April 1974," *Vital and Health Statistics,* Series 13-No. 21, DHEW Pub. No. (HRA) 76-1772, Health Resources Administration, Washington, U.S. Government Printing Office, Oct. 1975.

CENTER FOR DISEASE CONTROL

Bureau of Epidemiology

A. *National Morbidity Reporting System*

The National Morbidity Reporting System collects demographic, clinical, and laboratory data, primarily from State and territorial health agencies, to provide national surveillance for conditions such as rabies, aseptic meningitis, diphtheria, tetanus, encephalitis, and food-borne

outbreaks. Completeness of reporting varies greatly, since not all cases receive medical care and not all treated conditions are reported.

Estimates of underreporting were made for two diseases, measles and viral hepatitis. Generally about 10 to 15 percent of all cases of measles that occur in the United States are reported to the Center for Disease Control. A similar estimate of about 15 to 20 percent has been made for viral hepatitis.

Depending on the disease, data are collected weekly or monthly and are analyzed to detect epidemiologic trends or to locate cases requiring control efforts. Data are published weekly and summarized annually.

For more information, see: Center for Disease Control, "Reported morbidity and mortality in the United States, 1975," *Morbidity and Mortality Weekly Report,* 24 (54), Aug. 1976; or write to Center for Disease Control, Chief, National Morbidity and Mortality Statistical Activity, Bureau of Epidemiology, Atlanta, Ga. 30333.

B. *Abortion Surveillance*

The Center for Disease Control (CDC) acquires abortion service statistics by State of occurrence from two sources: (1) central health agencies and (2) hospitals and facilities. Since the initiation of epidemiologic surveillance of abortions in 8 States in 1969, the number of States from which statewide abortion data were reported increased to 36 in 1974. By 1974 most of the 36 central health agencies had established direct reporting systems, although a few collected data by surveying abortion facilities. Inquiries by CDC to hospitals and facilities provided information for 15 States which did not collect statewide abortion data.

The total number of abortions reported to CDC is about 15 percent less than the total estimated independently by the Alan Guttmacher Institute, the research and development division of the Planned Parenthood Federation of America, Inc.

For more information, see: Center for Disease Control, *Abortion Surveillance 1974,* DHEW Pub. No. (CDC) 76-8276, Public Health Service, Washington, U.S. Government Printing Office, Apr. 1976; or write to Center for Disease Control, Attn: Director, Family Planning Evaluation Division, Bureau of Epidemiology, Atlanta, Ga. 30333.

Bureau of State Services

A. *Venereal Disease*

All States require that each case of syphilis and gonorrhea which comes to medical attention be reported to the State or local health officer. Chancroid, granuloma inguinale, and lymphogranuloma venereum are also reportable in most States. Every 3 months each State submits to the Public Health Service a statistical summary of cases reported during the quarter. All cases not previously reported in the State, regardless of duration of infection or previous treatment status, are counted in the statistical report of cases. Reported morbidity, as reported cases are sometimes called, indicates the result of case-detection activities.

The trend of rates of reported cases of early syphilis over a period of years may indicate incidence trends if no significant changes have occurred in casefinding efforts or completeness of case reporting. Similarly, the trend of reported cases of syphilis in all stages of disease can indicate prevalence trends subject to the same limitations. Therefore, trends in reported cases and rates must be interpreted with caution, since they reflect changes in disease incidence and prevalence and in casefinding efforts and completeness of case reporting.

Cases of primary and secondary syphilis are reportable by law in all 50 States and the District of Columbia. In FY 1975 physicians and clinics in the United States reported 25,746 cases to State or local health departments, but this number understates actual incidence because: (1) cases occur which are not diagnosed in the primary or secondary stages, and (2) many diagnosed cases are not reported to health departments. The Venereal Disease Control Division estimated that the actual incidence of syphilis in fiscal year 1975 was about 82,000 cases, of which 25,746 were reported to health departments.

Gonorrhea in general is underreported for the same reasons as syphilis. In gonorrhea, however, underdiagnosis occurs much more frequently in women than in men because most infected females exhibit no evidence of infection. The

Venereal Disease Control Division estimated that at least 2,600,000 cases of gonorrhea occurred in the United States in fiscal year 1975, of which 945,945 were reported to health departments.

Data are published annually in *VD Fact Sheet.* For more information, see: Center for Disease Control, *VD Fact Sheet, 1975,* 32d ed., DHEW Pub. No. (CDC) 76-8195, Public Health Service, Atlanta, Ga.; or write to: Center for Disease Control, Venereal Disease Control Division, Bureau of State Services, Atlanta, Ga. 30333.

B. *U.S. Immunization Survey*

This system is the result of a contractual agreement between the Center for Disease Control (CDC) and the U.S. Bureau of the Census. The Immunization Survey is conducted during September of each year through the Current Population Survey, which is separately described in this appendix.

The reporting system contains demographic variables and vaccine history, along with disease history when relevant to vaccine history. The system is used to estimate the immunity level of the Nation's childhood population against the vaccine preventable diseases, and from time to time immunity level data on the adult population are collected. Data have been available since 1959 and are published annually by CDC.

For more information, write to: Center for Disease Control, Immunization Division, Bureau of State Services, Atlanta, Ga. 30333.

Bureau of Health Education

A. *Smoking and Health*

A series of telephone surveys on cigarette smoking were conducted under contract. Representative samples of telephone numbers were randomly selected by computer from a data bank that included all possible combinations of area codes, telephone exchanges, and subscriber numbers, with a sufficient additional number of selections to allow for the elimination of nonresidential telephones. Standardized questionnaires, requiring about 15 minutes, were administered by trained interviewers.

One set of surveys was for adults, defined as those age 21 years and over. In the 1975 survey, 13,650 interviews were accomplished from an initial set of 19,264 telephone numbers for a 70.8-percent response rate. This survey also included interviews in person in households not having a telephone; of the 1,140 total eligible households selected for interview, 525 interviews were completed (i.e., a 46.1-percent response rate).

The surveys of teenagers covered persons aged 12-18. Since a 1968 survey had indicated that the addition of nontelephone households to the sample resulted in very little change in the data obtained from telephone households, subsequent surveys of teenagers did not include nontelephone surveys. In the 1974 survey, interviews were completed with 2,553 teenagers.

For more information, see: Center for Disease Control and National Institutes of Health, *Adult Use of Tobacco, 1975,* Public Health Service, Atlanta, Ga., June 1976; and National Institutes of Health, *Teenage Smoking, National Patterns of Cigarette Smoking, Ages 12 Through 18 in 1972 and 1974,* DHEW Pub. No. (NIH) 76-931, Public Health Service, Bethesda, Md.; or write to: Center for Disease Control, Bureau of Health Education, National Clearinghouse for Smoking and Health, Atlanta, Ga. 30333.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

National Institute of Mental Health

A. *Surveys of Mental Health Facilities*

The Survey and Reports Branch, Division of Biometry and Epidemiology, National Institute of Mental Health (NIMH) conducts several surveys of mental health facilities. Some of the data in this report are derived from more than one of these surveys. Response rates for most of the items on these surveys are relatively high, as is the case with data presented in this report, for which the rate is 90 percent or better. However,

for some survey items, the response rate may be somewhat lower.

The Inventories of Mental Health Facilities are the primary source of NIMH data used in this report. This data system is based on questionnaires mailed to over 3,000 mental health facilities in the United States as of January 1974 including 625 psychiatric hospitals, 796 non-Federal general hospitals with psychiatric services, 340 residential treatment centers for emotionally disturbed children, 400 federally funded community mental health centers, 1,092 freestanding outpatient psychiatric clinics, and 77 other types of multi-service or day or night facilities.

Other surveys conducted by the Survey and Reports Branch encompass sample surveys of patients coming under care in State, county, and private mental hospitals, outpatient psychiatric services, and general hospital inpatient psychiatric units in order to determine the characteristics of patients served by these facilities.

For more information, see: National Institute of Mental Health, "Emergency services in psychiatric facilities, United States, January 1974," *Statistical Note,* No. 128, DHEW Pub. No. (ADM) 76-158, Alcohol, Drug Abuse, and Mental Health Administration, Washington, U.S. Government Printing Office, 1976; or write to: Division of Biometry and Epidemiology, National Institute of Mental Health, 5600 Fishers Lane, Rockville, Md. 20857.

National Institute on Drug Abuse

A. *Drug Abuse Warning Network*

The Drug Abuse Warning Network (DAWN) is an information system supported jointly by the Drug Enforcement Administration and the National Institute on Drug Abuse. In part, the system collects information on drug-related medical emergencies in 24 standard metropolitan statistical areas (SMSA's) of the country. In 21 of the 24 SMSA's an attempt is made to enlist all emergency rooms in short-term non-Federal general hospitals into the system. In three SMSA's, because of the large number of qualifying facilities, emergency room coverage is on a sampling basis. A responsible individual on the staff at each facility in the survey is assigned to fill out data forms, which are then sent to DAWN field monitors, who check the incoming data forms.

Data are published in "Project DAWN III" and in standard monthly and annual reports. For more information, write to: National Clearinghouse for Drug Abuse Information, National Institute on Drug Abuse, 11400 Rockville Pike, Rockville, Md. 20852.

National Institute on Alcohol Abuse and Alcoholism

A. *National Study of Adolescent Drinking Behavior, Attitudes, and Correlates*

This study was conducted under contract from the National Institute on Alcohol Abuse and Alcoholism to better understand the extent and nature of adolescent alcohol use in the United States. The study was based on a nationwide probability sample of students in grades 7-12 in the coterminous United States and the District of Columbia. A stratified two-stage sample design was used. The sample was selected from a frame of classrooms. All students in each sample classroom filled out a 35-page questionnaire during regular school hours and in the school facilities. One questionnaire applicable to all grade levels was used. It was designed to be completed in about 45 minutes. Questionnaires were completed by 13,122 students from 643 classrooms, resulting in a 72.7-percent response rate, which included replacement classrooms.

For more information, see: Rachal, J. V., et al., *A National Study of Adolescent Drinking Behavior, Attitudes and Correlates,* Research Triangle Park, N.C., Research Triangle Institute, Apr. 1975. The report is available only from: National Technical Information Service, 2585 Port Royal Rd., Springfield, Va. 22161. Include order number (PB-246-002/AS); cost is $11.00.

B. *Survey of Drinking Attitudes*

This survey of drinking attitudes of persons 18 years and over in the United States was conducted for the National Institute on Alcohol Abuse and Alcoholism (NIAAA) by the Opinion Research Corporation. A national probability sample of households was selected, and one

person 18 years or over was interviewed in each selected household. A random sample of 60 U.S. counties was selected. In each county, a minor civil division (MCD), as defined by the U.S. Bureau of the Census, was selected using a probability sampling method. Households were selected within sample MCD's by randomly choosing one or more addresses from a list of households and then interviewing persons in a cluster of adjacent households. The interviews in a cluster did not begin at the household selected from the list, but at the adjacent household. Telephone directories were the sources of locations of household starting points.

The survey was conducted during the period December 6, 1974, to January 22, 1975, with 2,157 persons being interviewed. Proper weights were introduced into the tabulated data so that the results represent the total U.S. population 18 years and over.

For more information, see: Rappeport, M., Labow, P., and Williams, J., *The Public Evaluates the NIAAA Public Education Campaign,* Vols. I and II, Princeton, Opinion Research Corporation, July 1975; available from: Opinion Research Corporation, North Harrison Street, Princeton, N.J.

C. *Study on Alcoholism and Treatment*

The Rand Corporation conducted a study on alcoholism sponsored by a grant from the National Institute on Alcohol Abuse and Alcoholism. The study was conducted through the Harris Survey, a household interview survey of the general population of the United States. Alcohol consumption data are based on information from a self-administered form. The data were collected in four waves between August 1972 and January 1974. Each wave was an independent national probability sample of approximately 1,500 persons 18 years and over. All waves were combined to produce a total sample size of approximately 6,300 adults.

For more information, see: Armor, D. J., Polich, J. M., and Stambul, H. B., *Alcoholism and Treatment,* Rand Corporation, June 1976. This report is available only from Rand Corporation, Publications Department, 1700 Main Street, Santa Monica, Calif. 90406. The cost of the report is $7.00.

SOCIAL SECURITY ADMINISTRATION

A. *Estimates of National Health Expenditures*

Estimates of public and private expenditures for health are compiled annually by type of expenditure and source of funds. The data for several Federal health programs are taken from the Office of Management and Budget's special analysis of health programs, while data for the remaining Federal health programs are supplied directly by the various agencies.

Non-Federal expenditure estimates come from an array of sources. American Hospital Association data on hospital finances, increased slightly to allow for osteopathic hospitals, are the primary source for estimates relating to hospital care. Estimated expenditures for the services of dentists and physicians in private practice are based on the gross income from self-employed practice reported to the Internal Revenue Service, while the salaries of dentists and physicians on the staffs of hospitals and hospital outpatient facilities are considered a component of hospital care.

Expenditures for the education and training of medical personnel are considered to be expenditures for education, and where they can be separated, they are excluded from health expenditures. Expenditures for drugs, drug sundries, eyeglasses, and appliances exclude those provided to inpatients and are estimated principally from the report of personal consumption expenditures in the Department of Commerce's national income accounts in the *Survey of Current Business.* Nursing home care expenditures by both public and private sources are based on data from the National Nursing Home Survey conducted by the National Center for Health Statistics. Data on the financial experience of

health insurance organizations come from special Social Security Administration analyses of private health insurers. Expenditures for construction represent "value put in place" for hospitals, nursing homes, medical clinics, and medical research facilities but not for private office buildings providing office space for private practitioners.

For more specific information on items included and excluded and on the general methodology used, see: Gibson, R. M., and Mueller, M. S., "National health expenditures, fiscal year 1976," *Social Security Bulletin,* 40 (4) : 3-20, Apr. 1977.

B. *Private Health Insurance*

Annual estimates are made of the net number of persons and the percent of the population with private insurance coverage for hospital care, various physicians' services, and other major types of health care.

Two sets of estimates of people having private health insurance for hospital care and surgical services are used: (1) those of the Health Insurance Association of America (HIAA) and (2) those of the Office of Research and Statistics, which are based on data collected in the Health Interview Survey of the National Center for Health Statistics. Financial data for Blue Cross and Blue Shield Plans are based on financial statements supplied by the Blue Cross Association and the National Association of Blue Shield Plans. Data on premium income and benefit expense of the health insurance business of insurance companies are provided by HIAA and are based on figures published by the National Underwriter Company. The data are adjusted by HIAA to eliminate premiums and estimated losses for accidental death and dismemberment insurance and to include any companies not appearing in the National Underwriter figures.

For a fuller description of data sources and methods of adjustment and estimation, see: Mueller, M. S., "Private health insurance in 1974: A review of coverage, enrollment, and financial experience," *Social Security Bulletin,* 40 (5) : 3-20, Apr. 1977.

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DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

A. *Current Population Survey*

This is a monthly nationwide panel survey of a scientifically selected sample representing the civilian noninstitutionalized population and is subject to sampling error. The sample is located in 461 areas comprising 923 counties and independent cities with coverage in every State and the District of Columbia. About 55,000 housing units and other quarters are designated for the sample at any time, of which about 47,000 are occupied by households eligible for interview; of these, in turn, about 4 to 6 percent are, for various reasons, unavailable for interview.

For more information, see: U.S. Bureau of the Census, "Population estimates and projections," *Current Population Reports,* Series P-25, No. 545, Washington, U.S. Government Printing Office, Apr. 1975.

B. *Population Estimates and Projections*

National estimates are derived by use of decennial census data as benchmarks and of data available from various agencies as follows: births and deaths (Public Health Service), immigrants (Immigration and Naturalization Service), the Armed Forces (Department of Defense), net movement between Puerto Rico and the U.S. mainland (Puerto Rico Planning Board), and Federal employees abroad (Civil Service Commission and Department of Defense). State estimates are based on similar data and also on a variety of data series, including school statistics from State departments of education and parochial school systems.

National population projections indicate the approximate future level and characteristics of the population under given assumptions as to future fertility, mortality, and net immigration. The method used to develop projections involved preparation of projections of each of the components of population change (i.e., births, deaths, and net immigration) and the combination of these with July 1 estimates of the current population. Projections for States and metropolitan areas incorporate further assumptions about population redistribution through interarea migration.

Current estimates and projections are generally consistent with official decennial census figures and do not reflect the amount of estimated decennial census undernumeration.

For more information, see: U.S. Bureau of the Census, "Mobility of the population of the United States: March 1970 to March 1975," *Current Population Reports,* Series P-20, No. 285, Washington, U.S. Government Printing Office, 1975.

DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS

A. *Occupational Safety and Health*

The Bureau of Labor Statistics, in accordance with the Occupational Safety and Health Act of 1970, collects annual data on work-related injuries and illnesses in the United States and its territories.

Questionnaires are mailed to a sample of employers in the areas of agriculture, forestry and fisheries, oil and gas extraction, contract construction, manufacturing, transportation, public utilities, wholesale and retail trade, finance, insurance, real estate, and services. Self-employed individuals; railroad employers; employers covered by the Coal Mine Health and Safety Act and the Metallic and Nonmetallic Mine Safety Acts; and Federal, State, and local governmental units are excluded from the survey.

In the 1973 survey, questionnaires were mailed to a sample of 228,000 units from a total universe of 5 million workplaces. Of these, 20,000 were not included in the final count because they were not in operation, were not within the scope of the survey, were included at another location, were sent duplicate forms, or were not mailable. Second mailings and telephone calls to nonrespondents resulted in replies from over 88 percent, or 183,000 of the 208,000 in-scope units.

The injury and illness data for all reporting units in each industry-employment-size group were expanded by the inverse of the probability of selection, and adjusted to account for change in the actual employment level in each industry and for nonresponse to obtain the estimates.

For more information, see: Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Injuries and Illnesses in the United States, by Industry, 1973,* Bulletin 1874, 1975; or write to U.S. Department of Labor Statistics, Washington, D.C. 20212.

B. *Consumer Price Index*

The Consumer Price Index (CPI) is a measure of average changes in prices of goods and services usually bought by urban wage earners and clerical workers. It is based on prices of about 400 items selected to represent the movement of prices of all goods and services purchased by wage earners and clerical workers. Prices for these items are obtained in urban portions of 39 major statistical areas and 17 smaller cities chosen to represent all urban places in the United States. They are collected from about 18,000 establishments—grocery and department stores, hospitals, filling stations, and other types of stores and service establishments.

Prices of food, fuels, and a few other items are obtained every month in all 56 locations. Prices of most other commodities and services are collected every month in the five largest areas and every 3 months in other areas. Prices of most goods and services are obtained by personal visits of the Bureau's trained representatives. Mail questionnaires are used to obtain local transit fares, public utility rates, newspaper prices, fuel prices, and certain other items.

In calculating the index, price changes for the various items in each location are averaged together with weights which represent their importance in the spending of all wage earners and clerical workers. Local data are then combined to obtain a U.S. city average. Separate indexes are also published for 23 areas.

The index measures price changes from a designated reference date—1967—which equals 100.0. An increase of 22 percent, for example,

is shown as 122.0. This change also can be expressed in dollars as follows: the price of a base period "market basket" of goods and services bought by urban wage earners and clerical workers has risen from $10 in 1967 to $12.20.

For more information, see: Bureau of Labor Statistics, *Consumer Price Index,* Detailed Report, Nov. 1976; or write to: U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C. 20212.

ENVIRONMENTAL PROTECTION AGENCY

A. *National Aerometric Surveillance Network*

The Environmental Protection Agency (EPA), through extensive monitoring of activities conducted by Federal, State, and local air pollution control agencies, collects data on the five pollutants for which National Ambient Air Quality Standards have been set. These pollution control stations submit data quarterly to EPA's National Aerometric Data Bank. There are about 3,400 total stations reporting, but much of the data are underreported, so the pollution estimates are low.

For more information, see: *Monitoring and Air Quality Trends Report, 1974,* EPA-450/1-76-001, Research Triangle Park, N.C., Feb. 1976; or write to: Air Pollution Technical Information Center, Environmental Protection Agency, Research Triangle Park, N.C. 27711.

CONSUMER PRODUCT SAFETY COMMISSION

A. *National Electronic Injury Surveillance System*

The National Electronic Injury Surveillance System (NEISS) collects data from a probability sample of 119 hospital emergency rooms selected by the Consumer Product Safety Commission (CPSC) from over 5,000 such facilities in the United States. Trained workers abstract data from the emergency room records of all patients seen each day whose injuries involve consumer products. The information is transmitted daily to CPSC. In the July 1, 1973, to June 30, 1974, period, NEISS collected and stored surveillance data on over 300,000 cases.

Although NEISS collects data on all consumer products, CPSC publications do not include data for certain products such as motor vehicles, food, drugs, firearms, and other products which are under the jurisdiction of other Federal agencies.

For further information on NEISS, see: U.S. Consumer Product Safety Commission, *Annual Report, Fiscal Year 1976,* Washington, U.S. Government Printing Office, Oct. 1976; or call the toll free Consumer Hotline at 800-638-2666.

AMERICAN HOSPITAL ASSOCIATION

A. *Annual Survey of Hospitals*

Data from this survey are based on questionnaires sent to all hospitals in the United States and its associated areas which have been accepted for registration by the American Hospital Association (AHA). In 1975 questionnaires were mailed to 7,231 registered hospitals, comprising 96 percent of all hospitals. Of these, 7,156 hospitals were located in the 50 States and the District of Columbia and 75 in the U.S. associated areas. Overall, 6,646 hospitals reported data, a response rate of 91.9 percent. For nonreporting hospitals and for the survey questionnaires of reporting hospitals on which some information was missing, estimates were made for all data except those on bassinets and facilities. The estimates of the missing data were based on data furnished by reporting hospitals that were similar to the hospitals whose data were not reported in terms of bed-size category, type of control, major type of service provided, and type of stay.

For more information on the AHA Annual Survey of Hospitals, see: *Hospital Statistics, 1976 Edition, Data from the American Hospital Association 1975 Annual Survey;* or write to: American Hospital Association, 840 North Lake Shore Drive, Chicago, Ill. 60611.

APPENDIX II

Glossary of Terms

SOCIAL AND DEMOGRAPHIC TERMS

Age. — Age is usually determined as of last birthday.

Age adjustment.—Age adjustment is the application of the age-specific rates of a population of interest to a standard population distributed by age (often the total U.S. population in 1940). Age adjustment eliminates the differences in observed rates due to age differences in population composition and is usually done when comparing two or more populations. Age adjustment is perhaps most useful for comparing the death rates of different populations since death rates vary greatly with age.

Color and race.—For statistical reporting purposes, data systems used by the Federal Government classify individuals into two or more color or racial groups (e.g., white, black, American Indian, and Oriental). When no race other than white is shown in a table (i.e., white and all other), the classification is considered to be by color; when two or more races are shown (e.g., white, black, and other), the classification is considered to be by race.

The classification of color and race may be based upon self-reported data or upon observation by an interviewer. In the National Vital Registration System a newborn infant is classified, for statistical purposes, to the race of the parents. If the parents are of different races and one is white, the child is assigned the other parent's race; if neither is white, the child is assigned the father's race.

Currently employed.—In both the Health Interview Survey and Bureau of Labor Statistics data, currently employed persons are those who report that they either work at or have a job or business. Current employment includes paid work as an employee of someone else, self-employment in a business, farming, or professional practice, and unpaid work in a family business or farm. (The Bureau of Labor Statistics specifies 15 hours a week or more of unpaid work in a family business or farm.) Persons temporarily absent from a job or business because of temporary illness, vacation, strike, personal reasons, or bad weather are considered currently employed.

In the Health Interview Survey, free-lance workers also are considered currently employed if they have a definite arrangement with one employer or more to work for pay according to a weekly or monthly schedule, either full time or part time.

Excluded from the currently employed population are persons who have no definite employment schedule but work only when their services are needed. Also excluded from the currently employed population are: (1) persons receiving revenue from an enterprise but not participating in its operation, (2) persons doing housework or charity work for which they receive no pay, (3) seasonal workers during the portion of the year they are not working, and (4) persons on layoff or looking for work.

Family income.—For purposes of the Health Interview Survey, all persons within a household related to each other by blood, marriage, or adoption constitute a family. Family income

is the total of all income received by members of a family in the previous 12 months, including wages, salaries, rents from property, interest, dividends, profits and fees from their own business, pensions, and help from relatives.

Marital status.—The population is divided through self-reporting into the categories married and not married. *Married* includes all married persons not separated from their spouses. *Not married* includes those who are single (never married), separated, divorced, or widowed.

Population.—U.S. Bureau of the Census collects and publishes data on several different types of population in the United States (i.e., the 50 States and the District of Columbia): total, resident, civilian, and civilian noninstitutionalized population. Different surveys require and use different populations based on their objectives.

Total population is the population of the United States including all members of the Armed Forces living in foreign countries. Other Americans abroad (i.e., civilian Federal employees, dependents of Federal employees, etc.) are not included.

Resident population is the population living in the United States. This includes members of the Armed Forces stationed in the United States and their families, as well as foreigners working or studying here; it excludes foreign military, naval, and diplomatic personnel and their families located here and residing in embassies or similar quarters as well as Americans living abroad.

Civilian population is the resident population excluding members of the Armed Forces. Families of members of the Armed Forces are included, however.

Civilian noninstitutionalized population is the civilian population not residing in institutions. Institutions include prisons, reformatories, jails, and detention homes; homes for retired members of the Armed Forces; homes for orphans or the aged; asylums or hospitals for the insane, incurable, and tubercular; and nursing homes and convalescent homes.

Poverty level.—For the National Survey of Family Growth the poverty level threshold values are based on those shown in the Bureau of the Census publication *Current Population Reports,* Series P-60, No. 98 (January 1975). For the Health and Nutrition Examination Survey, the poverty level threshold values are based on those shown in the Bureau of the Census publication *Current Population Reports,* Series P-60, No. 86 (December 1972). These various threshold values are based on a poverty level index, defined by the Social Security Administration in 1964, which considers the costs of necessary nutrition for families based on such factors as family size and composition, age and sex of the family head, and farm or nonfarm residence.

GEOGRAPHIC TERMS

Division and region.—The 50 States and the District of Columbia have been grouped for statistical purposes by the Bureau of the Census into nine divisions within four regions. The groupings are the following:

NORTHEAST
- New England
  - Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
- Middle Atlantic
  - New York, New Jersey, Pennsylvania

NORTH CENTRAL
- East North Central
  - Michigan, Wisconsin, Ohio, Indiana, Illinois
- West North Central
  - Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas

SOUTH
- South Atlantic
  - Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida
- East South Central
  - Kentucky, Tennessee, Alabama, Mississippi
- West South Central
  - Arkansas, Louisiana, Oklahoma, Texas

WEST
- Mountain
  - Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
- Pacific
  - Washington, Oregon, California, Alaska, Hawaii

Federal administrative region.—There are 10 regions set up throughout the United States by the Federal Government for standardized administrative purposes across departments and agencies.

Location of residence, hospitals, etc.—Counties are classified in a Department of Agriculture system. Metropolitan counties are classified according to the size of the metropolitan area of which they are a part. Nonmetropolitan counties are classified by their number of urban residents and proximity to a metropolitan area.

The county classifications are as follows:

I. *Within SMSA.*—metropolitan counties (see "Standard Metropolitan Statistical Areas.")
   1. *Large SMSA* refers to a county within an SMSA of at least 1 million population.
      A. *Core* refers to counties containing the primary central city of an SMSA.
      B. *Fringe* refers to suburban counties of an SMSA.
   2. *Medium SMSA* refers to a county within an SMSA of 250,000 to 999,999 population.
   3. *Other SMSA* refers to a county within an SMSA of less than 250,000 population.

II. *Outside SMSA.*—nonmetropolitan counties
   1. *Adjacent to SMSA* refers to a county contiguous to an SMSA.
      A. *Urbanized* refers to a county contiguous to an SMSA and having an aggregate urban population of at least 20,000.
      B. *Less urbanized* refers to a county contiguous to an SMSA and having an aggregate urban population of 2,500 to 19,999.
      C. *Thinly populated* refers to a county contiguous to an SMSA and having no urban population.
   2. *Not adjacent* to SMSA refers to a county not contiguous to an SMSA.
      A. *Urbanized* refers to a county not contiguous to an SMSA and having an aggregate urban population of at least 20,000.
      B. *Less urbanized* refers to a county not contiguous to an SMSA and having an aggregate urban population of 2,500 to 19,999.
      C. *Thinly populated* refers to a county not contiguous to an SMSA and having no urban population.

Registration.—The annual collection of mortality statistics began in 1900 with 10 States and

the District of Columbia. The collection of birth statistics began in 1915, also with 10 States and the District of Columbia. Admission to the national birth or death vital registration area required at least 90-percent registration completeness. These registration areas have been complete since 1933.

The birth- and death-registration areas currently include all States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. However, in statistical tabulations, "United States" refers only to the 50 States and the District of Columbia.

Standard metropolitan statistical area (SMSA).—This is a concept developed for use in statistical reporting and analysis. Except in the New England States, an SMSA is a county or a group of contiguous counties containing at least one city of 50,000 inhabitants or more or "twin cities" with a combined population of at least 50,000. In addition, contiguous counties are included in an SMSA if they are essentially metropolitan in character (based on criteria of labor force characteristics and population density) and are socially and economically integrated with the central city or cities.

In New England, towns and cities rather than counties are the geographic components of the SMSA. The National Center for Health Statistics (NCHS) does not use this classification for vital statistics purposes because NCHS data are not coded to identify all towns. Instead, it uses the metropolitan State economic area (MSEA), which is made up of county units.

HEALTH STATUS AND DETERMINANTS

Fertility

Contraceptive use.—In studies of family planning, individuals are classified according to their use or nonuse of contraception. Nonusers are women who are currently pregnant, postpartum, or sterile for reasons other than limitation of family size and those not using contraception for other reasons. Users are classified according to the specific method they use: sterilization, the birth control pill, intrauterine device (IUD), diaphragm, condom, etc.

Family planning.—Family planning includes a range of fertility regulation methods to help individuals or couples avoid unwanted births or bring about wanted births. Avoiding unwanted births includes producing a change in the number of children born, regulating the intervals between pregnancies, and controlling the timing of births in relation to the age of parents.

Legal abortion.—Each State has its own regulations as to what constitutes a legal abortion and who may perform one.

Live birth.—A live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which after such separation breathes or shows any other evidence of life such as heartbeat, umbilical cord pulsation, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered live born.

Morbidity and Mortality

Cause of death.—For the purpose of national mortality statistics, every death is attributed to one underlying cause as reported on the death certificate. For data years 1968 to the present, the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States,* was used for coding. Earlier data used the then current revision of the *International Classification of Diseases.*

Condition.—A health condition is a departure from a state of physical or mental well-being. Conditions, except impairments, are coded according to the *International Classification of Diseases, Adapted for Use in the United States.*

Based on duration, there are two categories of conditions: acute and chronic. In the Health Interview Survey, an *acute condition* is any condition which has lasted less than 3 months and which has involved either a physician visit or restricted activity while a *chronic condition* is (1) any condition lasting 3 months or more or (2) certain conditions classified as chronic regardless of their time of onset. The National Nursing Home Survey uses a specific list of chronic conditions in collecting information about each resident.

Incidence.—Incidence is the number of cases of disease, infection, or some other event having onset during a prescribed period of time and is often expressed as a rate (e.g., the incidence of measles per 1,000 children aged 5-15). Incidence is a measure of morbidity or other events that occur within a specified period of time.

Infant mortality.—Infant mortality is the death of live-born children who have not reached their first birthday and is usually expressed as a rate (i.e., the number of infant deaths per 1,000 live births).

International Classification of Diseases, Adapted for Use in the United States (ICDA).—The ICDA is a disease classification based on the *Eighth Revision International Classification of Diseases* (ICD), which is designed for the classification of morbidity and mortality information for statistical purposes. Both the ICD and the ICDA are arranged in 17 main sections. Most of the diseases are arranged according to their principal anatomical site, with special sections for infective and parasitic diseases; neoplasms; endocrine, metabolic, and nutritional diseases; mental diseases; complications of pregnancy and childbirth; certain diseases peculiar to the perinatal period; and ill-defined conditions. Separate sections provide a classification of injuries according to the external cause giving rise to the injury, usually used for cause-of-death categories, and a classification according to the nature of injury (such as puncture, open wound, or burn), usually used for morbidity categories.

The ICDA gives greater detail and specificity than is provided by the ICD. Complete correspondence between these two classifications has been maintained at the three-digit level, but new fourth-digit subdivisions have been created in various parts of the ICDA.

The ICD was first used in 1900 and has been revised about every 10 years since then.

Life expectancy.—Life expectancy is the average number of years remaining to a person at a particular age and is based on a given set of age-specific death rates. Life expectancy may be determined by race, sex, or other characteristics using age-specific death rates for the population with that characteristic.

Limitation of activity.—Each person identified by the Health Interview Survey as having a chronic condition is classified according to the extent to which his activities are limited as follows:

(1) Persons unable to carry on major activity for their group.
(2) Persons limited in the amount or kind of major activity performed.
(3) Persons not limited in major activity but otherwise limited.
(4) Persons not limited in activity.

Major activity is the principal activity of a person or of his age-sex group. Thus for ages 1-5 it refers to ordinary play with other children and for ages 6-16 to school attendance, while for 17 years and over it may refer to a job, housework, or school attendance.

Notifiable disease.—A notifiable disease is one which health providers are required, usually by law, to report to Federal, State, or local public health officials when diagnosed. Notifiable diseases are those of public interest by reason of their infectiousness, severity, or frequency.

Prevalence.—Prevalence is the number of cases of a disease, infected persons, or persons with some other attribute present at a particular time. It is often expressed as a rate (e.g., the prevalence of diabetes per 1,000 persons).

Disability

Days of care.—In the Hospital Discharge Survey, this refers to the total number of patient days accumulated at the time of discharge by patients discharged from short-stay hospitals during a year, counting all days from and including the date of admission to but not including the date of discharge.

In the Health Interview Survey, this refers to the total number of days for all hospital episodes occurring in the 12-month period prior to the week of interview.

Disability.—Disability is any temporary or long-term reduction of a person's activity as a result of an acute or chronic condition. It is often measured in terms of the number of days that a person's activity has been reduced.

Disability day.—The Health Interview Survey identifies several types of days on which a person's usual activity is reduced because of illness or injury (reported for the 2-week period preceding the week of the interview). These short-term disability days are classified and defined as follows:

A *bed-disability day* is a day on which a person stays in bed for more than half of the daylight hours (or normal waking hours) because of a specific illness or injury.

A *restricted-activity day* is one on which a person cuts down on his usual activities for the whole of that day because of an illness or an injury. Bed-disability days, school-loss days, and work-loss days are also restricted-activity days.

A *school-loss day* is a day on which a child did not attend school because of a specific illness or injury. For purposes of this survey school-loss days are determined only for children aged 6-16.

A *work-loss day* is a day on which a person did not work at his job or business for at least half of his normal workday because of a specific illness or injury. The number of work-loss days is determined only for persons 17 years of age and over who report that at any time during the 2-week period covered by the interview they either worked at or had a job or business.

Lost workday.—The Bureau of Labor Statistics counts as lost workdays all days on which, due to some illness or injury, an employee who would otherwise have worked could not, was assigned to a temporary or less than full-time job, or did not perform all duties normally assigned to him. The day on which the injury

occurs is not included. These days are reported by employers and therefore differ from the number of work-loss days reported by employees (as discussed above).

Patient days.—American Hospital Association defines patient days as the number of adult and pediatric days of care rendered during a reporting period. Newborn days of care are excluded.

Adjusted patient days (inpatient day equivalents) include inpatient days plus an estimate of the volume of outpatient days, expressed in units equivalent in terms of level of effort to inpatient days. This equivalent is derived by multiplying the number of outpatient visits by the ratio of outpatient revenues received per outpatient visit to inpatient revenues per inpatient day.

Determinants of Health

Drug of abuse.—The Drug Abuse Warning Network defines drug of abuse as any drug used in a way unrelated to acceptable medical or cultural practice. Alcohol is not included unless it is reported in combination with another drug.

Drug abuse episode.—Any visit to a hospital, contact with crisis center personnel, or death reported by a medical examiner due to abuse of any drug except alcohol used alone is considered a drug abuse episode by the Drug Abuse Warning Network.

Drug mention.—The Drug Abuse Warning Network includes any drug of abuse which played a part in causing an abuser to seek treatment or other help. There is only one episode for each mention; however, one episode may have more than one drug mention.

Particulate matter.—Particulate matter is defined as particles of solid or liquid matter in the air, including both nontoxic materials (soot, dust, and dirt) and toxic materials (lead, asbestos, suspended sulfates and nitrates, etc.).

Pollutant.—A pollutant is any substance that renders the atmosphere or water foul or noxious to health.

Product-related injury.—The National Electronic Injury Surveillance System counts as a product-related injury any injury reported in a hospital emergency room as being associated with a consumer product.

UTILIZATION AND RESOURCES

Ambulatory Care

Dental visit.—The Health Interview Survey counts visits to a dentist's office for treatment or advice, including services by a technician or hygienist acting under the dentist's supervision, as dental visits. Services provided to hospital inpatients are not included.

Family planning visit.—The National Survey of Family Growth asked currently married women aged 15-44 about visits to a physician or other trained person (i.e., nurse, midwife, public health worker, medical social worker, or other person trained to instruct or assist in family planning) at which methods of family planning were discussed.

Physician visit.—The Health Interview Survey counts as a physician visit a visit in person or by telephone for the purpose of examination, diagnosis, treatment, or advice. The service may be provided directly by the physician or by a nurse or other person acting under the physician's supervision. Contacts involving services provided on a mass basis are not included, nor are contacts for hospital inpatients. A separate visit is counted for each person about whom the physician's advice is sought.

Seriousness of problem.—In the National Ambulatory Medical Care Survey the physician indicates for each patient visit the seriousness of the problem, condition, or symptom which the patient says caused the visit. Seriousness refers to the physician's clinical judgment as to the extent the patient would be impaired if no care were given. It is expressed as very serious, serious, slightly serious, and not serious.

Inpatient Care

Average length of stay.—Average length of stay is the total number of hospital days accumulated at the time of discharge by patients discharged during the year divided by the number of patients discharged.

Bed.—Most health resource inventories and surveys define a patient bed as one set up and staffed for use by patients.

Bed size.—This is the number of beds reported by an institution. An *average bed size* is computed for a group of hospitals by dividing the total number of beds for that group by the number of hospitals.

Certification status.—The Master Facility Inventory and National Nursing Home Survey classify nursing homes according to their eligibility for participation in the Medicare and Medicaid programs.

Medicare is defined as the medical assistance provided in Title XVIII of the Social Security Act.

Medicaid is defined as the medical assistance provided in Title XIX of the Social Security Act.

Skilled nursing home (SNH) is a home certified as a skilled nursing home under Medicaid. Requirements for SNH certification are stated in Title XIX of the Social Security Act.

Intermediate care facility (ICF) is a home certified as an intermediate care facility under Medicaid. Requirements for ICF certification are stated in Title XIX of the Social Security Act.

Not certified refers to facilities which are not certified as providers of care by either Medicare or Medicaid.

Days of care.—See Days of care under "Disability Measures."

Hospital.—The definitions by specialty and ownership used for hospitals are those of the American Hospital Association (AHA). A hospital is an institution whose primary function is to provide diagnostic and therapeutic patient services for a variety of medical conditions. It must meet several AHA registration criteria, including having at least six inpatient beds, an organized physician staff, and continuous nursing services under the supervision of registered nurses. Hospitals are classified by length of stay, type of service, and type of ownership.

Federal hospitals are operated by the Federal Government and include Veterans Administration hospitals. All other hospitals are *non-Federal hospitals.*

General hospitals are facilities with an organized medical staff that provide permanent nursing services and both surgical and nonsurgical diagnoses and treatment of patients with any of a variety of medical conditions.

Government hospitals are those operated by Federal, State, or local governments.

Long-stay hospitals are those in which the average length of stay is 30 days or more.

Psychiatric hospitals are those providing any of the following: psychiatric care, care for the mentally retarded, or treatment for alcoholism and other chemical dependency. See also "Psychiatric Care."

Short-stay hospitals, for both the Master Facility Inventory and the Hospital Discharge Survey, are those in which the average length of stay is less than 30 days. In the Hospital Discharge Survey, Federal hospitals and hospital units of institutions are not included. In the Health Interview Survey, however, any hospital can be included which provides one of the following services: general; maternity; eye, ear, nose, and throat; children's; and osteopathic.

Specialty hospitals include those providing any of these services: obstetrics and gynecology; eye, ear, nose, and throat; rehabilitation; orthopedic; chronic disease; children's; and other special services.

Hospital day.—For persons admitted as inpatients to a hospital, the Health Interview Survey counts as a hospital day each night spent in the hospital. Thus, for example, a person who enters the hospital on Monday afternoon and leaves on Wednesday afternoon is considered to have had 2 hospital days.

Hospital discharge.—The Health Interview Survey defines a hospital discharge as the completion of any continuous period of stay of 1 or more nights in a hospital as an inpatient, except the period of stay of a well newborn infant.

In the Hospital Discharge Survey, a hospital discharge is the formal release of an inpatient by a hospital. It excludes hospital newborns and infants admitted to the inpatient service on the calendar day of birth.

Hospital episode.—The Health Interview Survey considers any continuous period of stay of 1 or more nights in a hospital as an inpatient, except the period of stay of a well newborn infant, to be a hospital episode.

Nursing home.—The minimum standards and regulations for nursing homes vary between States, so no uniform definition is possible. Nursing homes are classified according to the level of care they provide: nursing care, personal care, and domiciliary care.

The Master Facility Inventory and National Nursing Home Survey include only facilities licensed by the State in which they are located. These data systems use the following classification:

Nursing care homes meet the following criteria: they employ one or more full-time registered or licensed practical nurses and provide nursing care to at least half the residents. Nursing care is the provision of any of the following services: application of dressings or bandages, bowel and bladder training, catheterization, enema, full bed bath, hypodermic injection, intravenous injection, irrigation, nasal feeding, oxygen therapy, and temperature-pulse-respiration or blood pressure measurement.

Personal care homes meet the following criteria: they provide supervision over medication and treatments or provide three or more personal care services (help with bathing, correspondence, shopping, dressing, eating, and walking or getting about). If some of the residents receive nursing care, it is a *personal care home with nursing;* if none receive nursing care, it is a *personal care home without nursing.*

Domiciliary care homes provide one or two personal care services along with room and board.

Occupancy rate.—The occupancy rate is the average number of patients per day in a hospital divided by the number of hospital beds.

Patient.—The Hospital Discharge Survey considers a patient to be a person who has been formally admitted to the inpatient service of a short-stay hospital for observation, care, diagnosis, or treatment.

Resident.—In the National Nursing Home Survey a resident is a person who has been formally admitted to but not discharged from an establishment.

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Psychiatric Care[a]

Halfway house.—A halfway house is a health service mode that prepares a previously hospitalized patient for return to his home and community through the provision of transitional living quarters and assistance in activities of daily living.

Halfway-house services provided at a mental health facility may be open to anyone in need of these services or may be restricted to persons currently or previously enrolled in one of the other services of the mental health facility.

Mental disorder.—A mental disorder is any of several disorders listed in the *Diagnostic and Statistical Manual of Mental Disorders-DSM-II,* published by the American Psychiatric Association.

Mental health facility.—A mental health facility is an administratively distinct governmental, public, or private agency or institution whose primary concern is the provision of direct mental health services to the mentally ill or emotionally disturbed. Facilities include public and private psychiatric hospitals, psychiatric services in general hospitals, residential treatment centers for emotionally disturbed children, outpatient psychiatric clinics, federally funded comprehensive community mental health centers (CMHC's), and other facilities.

Psychiatric hospitals are hospitals in which the primary concern is to provide inpatient care and treatment for the mentally ill. Psychiatric inpatient units of Veterans Administration general hospitals are grouped with psychiatric hospitals because of their similarity in size and operation.

General hospitals providing psychiatric services are hospitals that knowingly and routinely admit patients to a separate psychiatric service modality for the purpose of diagnosing and treating psychiatric illness.

Residential treatment centers for emotionally disturbed children are residential institutions primarily serving emotionally disturbed children and providing treatment services, usually under the supervision of a psychiatrist.

Freestanding outpatient psychiatric clinics are administratively distinct facilities whose primary purpose is to provide nonresidential psychiatric health service and in which a psychiatrist assumes medical responsibility for all patients and/or directs the mental health program.

Federally funded community mental health centers are legal entities through which comprehensive mental health services are provided to a delineated catchment area. This mental health delivery system may be implemented by a single facility (with or without subunits) or by a group of affiliated facilities which make available at least the following essential mental health services: inpatient, partial, outpatient, emergency care, and consultation and education. Further, one of the component facilities of a federally funded CMHC is the ultimate recipient of Federal funds under Public Law 88-164 (construction), and/or Public Law 89-105 (staffing), or amendments thereto.

Mental retardation admission.—These are admissions to State mental retardation institutions of all patients regardless of whether they have a record of previous care in either a public or private institution.

Net releases.—Net releases are a measure of releases alive from public institutions in the State system to the community or to other inpatient facilities outside the State system. Releases from State institutions for which the patient did not return to the institution within the time period covered are estimated. Net releases are computed by taking the number of residents at the beginning of a time period plus admissions during the year (including returns from leave and excluding transfers within the State system) and subtracting the number of residents at the end of the time period and any deaths in the institution during the year.

Psychiatric episodes.—Psychiatric episodes are counted as the number of residents in inpatient facilities at the beginning of the year plus the total additions to these facilities during the year, including new admissions, readmissions, and returns from leave. An individual can be counted more than once.

[a] The definitions for psychiatric care are those used by the National Institute of Mental Health.

Manpower

Full-time equivalent employee (FTE).—The Master Facility Inventory uses an estimate of full-time employees that counts two part-time employees (employees working less than 35 hours a week) as one full-time employee. The National Nursing Home Survey uses an estimate of full-time employees that counts 35 hours of part-time employees' work per week as equivalent to one full-time employee.

Physician (M.D., D.O.).—A physician is a professional qualified by law and training to practice medicine. Physicians are classified by the American Medical Association and others through self-reporting according to specialty, place of practice, and other criteria.

An *active physician or dentist* is one who is currently practicing, regardless of the number of hours worked per week.

A *Federal physician or dentist* is one who is employed by the Federal Government; a *non-Federal* or *civilian physician or dentist* is not.

A physician or dentist in *general practice* or family practice is considered to have no specialty. A *specialty* is any specific branch of medicine (or dentistry) that a professional may concentrate in.

A *licensed physician or dentist* is one who is authorized to practice in a State. Every State (and the District of Columbia) requires that physicians and dentists be licensed there in order to practice in that State.

An *office-based physician* has a practice based in a private office; a *hospital-based physician* has a practice based in one or more hospitals.

Health Economics

Consumer Price Index (CPI).—The CPI is an economic index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. It is a measure of the changes in average prices of the goods and services purchased by urban wage earners and by clerical workers and their families. The medical care component of the CPI shows trends in medical care charges based on specific indicators of hospital, medical, dental, and drug prices. The medical care component characteristically rises faster than the overall CPI, as do some other service components of the index. However, since the CPI is a measure of charges, which are not always related to costs, it may fail to accurately reflect changes in medical care costs.

Economic Stabilization Program (ESP).—This Federal program was established to control wages and prices. On August 15, 1971, all wages and prices were frozen for a period of 90 days. During that period a system of wage and price controls, administered through a cost-of-living council, was implemented. Controls continued, with periodic changes in the flexibility and intensity with which they were enforced until their legislative authority ultimately expired in April 1974. Wages and prices in the health care industry were controlled through a specialized series of regulations. The 32½ months during which the controls were in effect is the only period in which medical care price increases have slowed markedly since the enactment of Medicare and Medicaid; during that period increases in medical care prices were limited to 4.3 percent per year.

Gross national product (GNP).—This is the most comprehensive measure of a nation's total output of goods and services. In the United States, the GNP represents the dollar value in current prices of all goods and services produced for sale plus the estimated value of certain imputed outputs, (i.e., goods and services that are neither bought nor sold). The GNP may be calculated by adding either all expenditures on currently produced goods and services or all incomes earned in producing these goods and services. Calculated from the expenditure side, it is the sum of (1) consumption expenditures by both individuals and nonprofit organizations, plus certain imputed values; (2) business investment in equipment, inventories, and new construction (residential as well as business construction is counted); (3) Federal, State, and local government purchases of goods and services; and (4) the sale of goods and services abroad minus purchases from abroad. From the income side, the GNP is the sum of all wages and interest plus the profits before taxes and depreciation earned in the current production of goods and services.

Medicaid (Title XIX).—This program is federally aided but State operated and administered. It provides medical benefits for certain

low-income persons in need of health and medical care. The program, authorized by Title XIX of the Social Security Act, is basically for the poor. It does not cover all of the poor, however, but only persons in one of the categories eligible for coverage under the welfare cash payment programs—the aged, the blind, the disabled, and members of families with dependent children in which one parent is absent, incapacitated, or unemployed. Under certain circumstances, States may provide Medicaid coverage for children under 21 years who are not categorically eligible. Subject to broad Federal guidelines, States determine the benefits covered, program eligibility, rates of payment for providers, and methods of administering the program.

Medicare (Title XVIII).—This is a nationwide health insurance program for people 65 years and over, persons eligible for social security disability payments for over 2 years, and certain workers and their dependents who need kidney transplantation or dialysis. Health insurance protection is available to insured persons without regard to income. Monies from payroll taxes and premiums from beneficiaries are deposited in special trust funds for use in meeting the expenses incurred by the insured population. The program was enacted July 30, 1965, as Title XVIII, *Health Insurance for the Aged*, of the Social Security Act, and became effective on July 1, 1966. It consists of two separate but coordinated programs: hospital insurance (Part A) and supplementary medical insurance (Part B).

National health expenditures.—Each year the Office of Research and Statistics, Social Security Administration, prepares estimates of the value of all health services and supplies and health-related research and construction activities consumed (or produced) in the United States during the previous year. Detailed estimates are available by source of expenditure (e.g., consumer out-of-pocket, private health insurance, and government programs) and by type of expenditure (e.g., hospitals, physicians, drugs). Estimates are available for fiscal years from 1929 through 1976 and for calendar years from 1929 through 1975. Data are compiled from a variety of sources covering expenditures for government programs and payments to providers by consumers, insurance companies, and others.

Health services and supplies expenditures are outlays for goods and services relating directly to patient care, plus expenses for prepayment and administration of health insurance programs and government public health activities. This category is equivalent to total national health expenditures minus expenditures for research and construction.

Private expenditures are outlays for services provided or paid for by nongovernmental sources—consumers, insurance companies, private industry, and philanthropic organizations.

Public expenditures are outlays for services paid for or provided by Federal, State, and local government agencies or expenditures required by governmental action (such as workmen's compensation insurance payments).

Nursing facility costs.—The National Nursing Home Survey definition of the costs of running a nursing home has as its major components fixed costs, labor costs, operating costs, and miscellaneous costs.

Fixed costs include equipment, building and land rentals, insurance, taxes, licenses, interest, financing and depreciation charges, and amortization of leasehold improvements.

Labor costs include wages and fringe benefits for staff members and contract employees.

Operating costs include expenses for food, drugs, supplies, equipment, laundry, linen, utilities, buildings and grounds maintenance, and contractual arrangements for laboratory, professional, and household services.

Miscellaneous costs include dues, subscriptions, travel, advertising, and other expenses.

Patient days.—See Patient days under "Disability Measures."

Personal health care expenditures.—These are outlays for the provision of health care to individuals. The expenditures in this category are total national health expenditures minus amounts devoted to research and medical facilities construction, expenses for prepayment and administration, and government public health activities.

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(Numbers refer to tables in this report. Daggers indicate additional data in the 1975 annual report; see note at end of Guide.)

I. HEALTH STATUS	Time trend	Geographic area	Age	Sex	Color or race	Income	Other variables
A. Population							
United States	1 †	†	2 †	2 †	2 †	†	†
Components of change	3, 5 †	4, 5			3		
Population projections	6, 7 †		7 †		†		
B. Natality							
Births: general	3, 5, 8, 11, 12	5, 15 †	11, 12 †	†	3, 8, 11, 12 †	†	†
Births: unmarried women	13, 14		13, 14		13, 14		
Contraceptive use	10	†	9, 10 †	†	10 †	9 †	
C. Mortality							
Deaths: general	3, 5, 17, 18	5, 18, 23–25 †	16, 17, 18, 23–25 †	16, 17, 23–25 †	3, 16, 17, 23–25 †		†
Deaths: infant, fetal, perinatal	20, 22 †	21 †	†	†	22 †	†	†
Deaths: cause of death	26–30 †		26–30 †	28–30	26–30		
Life expectancy	19	†	19 †	19 †	19 †		
D. Determinants of Health							
(1) Personal Health Habits							
Cigarette smoking	33, 36 †	†	33, 34, 36–38 †	33–38 †		35 †	37 †
Alcohol consumption		39 †	39, 42	39, 41, 42	39, 41	41, 42	39–42 †
Obesity and control of weight			43–46 †	43–46 †	†	†	
Physical exercise			47	47			
(2) Medical Care							
Preventive care		†	†	†	†	†	
Prenatal care	48		49		48, 49 †		†
Immunization	50–53	50–53	50–53		50–53		

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(Numbers refer to tables in this report. Daggers indicate additional data in the 1975 annual report; see note at end of Guide.)

I. HEALTH STATUS (continued)	Time trend	Geographic area	Age	Sex	Color or race	Income	Other variables
Usual place of care			54, 57	54, 57	54, 57	54, 57	
Barriers to care			55, 56	55, 56	55, 56	55, 56	
(3) Environment							
Air pollution	32						32
Weather							58
Other factors	†		31				59, 60
E. Measures of Health							
Self-assessment of health		†	61 †	61 †	†	61 †	
Restricted-activity days	66	†	66, 68 †	68, 69 †	†	68 †	69
Bed-disability days	67	†	67, 68 †	68, 69 †	†	68 †	69
Work-loss days		†	68 †	68, 69 †	†	68 †	62, 69
Disease: selected chronic conditions		†	63, 64 †	64 †	†	64 †	63 †
Disease: selected acute conditions		†	†	†			
Disease: influenza and other upper respiratory conditions	65–67		65–67				
Disease: notifiable	76						
Disease: venereal	72–75	†	72, 73	72, 73			
Disease: tuberculosis	†	71	71	71	71		
Disease: dental	†	†	†	†	†	†	
Diseases for which immunization is available	70						
Height and weight			78, 79	78, 79			
Birth weight		†	77	†	77 †	†	
Nutrition			†	†	†	†	

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(Numbers refer to tables in this report. Daggers indicate additional data in the 1975 annual report; see note at end of Guide.)

II. UTILIZATION OF HEALTH CARE	Time trend	Geographic area	Age	Sex	Color or race	Income	Condition and diagnosis	Other variables
A. Ambulatory Care								
Physician	†	81–87 †	80–87 †	80–87 †	80–87 †	87 †	83, 84	81, 82, 85, 86 †
Hospital outpatient clinic	88		88	88		88		
Hospital emergency room	89		89, 91, 92	89, 91, 92	92	89	90–93	
Dentist	†	94	94 †	94	94	94 †	†	†
Outpatient psychiatric	†	†	95 †	†	†		95 †	†
Family planning			96, 97	96	97			97
Abortion services	98, 99	98, 99 †	98 †		98			98, 100
B. Short-Stay Hospital Care								
Discharges or episodes	†	105 †	101, 104, 105 †	101, 105 †	105 †	104, 105 †	101 †	†
Days of care		†	102, 104 †	102		104 †	102	
Length of stay	†	†	103, 104 †	103	†	104 †	103	
C. Long-Term Care								
Nursing homes	110 †	†	106–108 †	106–108 †	†		107, 108, 110 †	†
Psychiatric inpatient	110 †	†	109 †	†	†		109, 110 †	†
Mental retardation facilities	111							

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(Numbers refer to tables in this report. Daggers indicate additional data in the 1975 annual report; see note at end of Guide.)

III. HEALTH RESOURCES	Time trend	Geographic area	Type of practice	Specialty	Other variables
A. Manpower					
Persons active in health field					112 †
Physicians: total	113, 114 †	†	114		†
Physicians: total active			115	115	
Physicians: active, non-Federal	118	116, 118 †	†	116	
Physicians: active, non-Federal, office-based		117, 122		117	
Dentists	120 †	119, 120 †		†	†
Nurses: registered and practical	†	†	†		†
Other practitioners	†	121 †			†

III. HEALTH RESOURCES (continued)	Time trend	Geographic area	Beds	Patients and residents	Employees	Specialty	Ownership	Services provided
B. Facilities								
Inpatient: total	123		123	123 †	123	123		
Hospitals: total	†		125 †	†	†	124, 125 †	124, 125	†
Hospitals: non-Federal	†	126–128, 130	126–128		130 †	126, 128		129
Long-term care: nursing homes	131	133, 134 †	131–134	132, 133	132, 133 †			
Long-term care: other	131	134 †	131, 134 †	†	†			
Mental health facilities	†			†		135, 136 †		135, 136
Other facilities	†	†	†	†		†		†

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(Numbers refer to tables in this report. Daggers indicate additional data in the 1975 annual report; see note at end of Guide.)

IV. HEALTH CARE COSTS AND FINANCING	Time trend	Geographic area	Age	Income	Type of expenditure	Source of funds or payment	Specialty	Other variables
National health expenditures	137–142 †				138, 141, 142	139, 140		†
Public program expenditures (including Medicare and Medicaid)	145	145, 146 †	151 †	†	144, 146 †	144, 151 †		144, 151 †
Personal health care expenditures	143, 149, 150, 159	†	147–151 †	†	147, 148, 152, 159	143, 147–152, 159 †		151
Private health insurance coverage	160 †	155, 156 †	153–158 †	154, 155, 157, 158 †	153, 160	†		157, 158 †
Consumer Price Index: medical care component	162–164	164			162–164			
Prescription drugs: prices	161							
Hospitals: costs and expenses	165–167 †	†						166, 167
Nursing homes: selected financial characteristics	†	168 †	†			†		169 †
Physicians: fees, incomes, and expenses	170–172 †	173 †					170–173 †	†
Dentists: incomes		175 †					174	†
Economic cost of illness	177							176, 177
Health research and development expenditures	179, 180					179, 180		178

NOTE: Additional data on the specified subject are presented in the 1975 annual report (National Center for Health Statistics: Health, United States, 1975, DHEW Pub. No. (HRA) 76-1232. Health Resources Administration. Washington. U.S. Government Printing Office, 1976

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