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GAO

Report to the Honorable
Howard M. Metzenbaum
U.S. Senate

August 1988

HEALTH INSURANCE

A Profile of the Uninsured in Ohio and the Nation

GAO/HRD-88-83

GAO

United States
General Accounting Office
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Human Resources Division

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August 30, 1988

The Honorable Howard M. Metzenbaum
United States Senate

Dear Senator Metzenbaum:

This report is in response to your December 17, 1986, request that we provide data on the uninsured in the United States and Ohio. It contains our analysis of Bureau of the Census data, our identification of statistically useful characteristics for distinguishing between the insured and the uninsured, cost and coverage data from Ohio insurers, and information on state and local programs providing care to the uninsured.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from its issue date. At that time, we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

Lawrence H. Thompson

Lawrence H. Thompson
Assistant Comptroller General

Executive Summary

Purpose

Millions of Americans are without health insurance and may have difficulty obtaining and paying for health care. Considerable public debate has focused on how to provide health care for these uninsured persons. Solutions are difficult to devise, however, because the uninsured are not a homogeneous group. Their incomes, employment, and demographic characteristics vary widely, as do their health status and access to health care. This diversity, along with the costs of implementing initiatives to reduce the number of insured and the question of who should bear these costs, makes this a complex issue for policymakers.

In this report, requested by Senator Howard M. Metzenbaum, GAO seeks to give policymakers a better understanding of who the uninsured are, whether they can purchase insurance, and how they obtain medical care. For its study, GAO (1) developed statistics on changes in the uninsured population since 1982, (2) identified the characteristics of uninsured persons in Ohio and the nation, (3) developed information on insurance costs in Ohio, and (4) examined how programs in Ohio assist the uninsured with their health care needs.

Background

During 1985, of Americans under age 65, more than 172 million (82 percent) had private or federally sponsored health insurance. Another 37 million (18 percent) were uninsured. In Ohio, 86 percent of the population under age 65 had private or federally sponsored insurance. Many of Ohio's uninsured relied on state and local programs for their health care needs.

GAO used data compiled annually by the Bureau of the Census to identify characteristics of the uninsured and changes in the uninsured population since 1982. Also, GAO surveyed Ohio insurers to determine the costs of health insurance and its availability to individuals. To gain an understanding of how the uninsured obtain care, GAO examined the services and programs of five Ohio counties.

Results in Brief

Between 1982 and 1985, the number of uninsured persons in the United States increased by 13 percent, with most of the increase occurring between 1982 and 1983. Between 1983 and 1985, the level stabilized. Ohio experienced a similar trend, although the total increase over this period was 17 percent.

No single factor explains why some people are insured and others are not. Although persons in families with income below the poverty level

were almost three times more likely to be uninsured than persons above the poverty level, over one-third of all uninsured reside in families with income more than twice the poverty level.

Two primary barriers to obtaining insurance are its cost and an individual's health status. For families with incomes at the poverty level, insurance in parts of Ohio could cost nearly one-third of their incomes. In addition, coverage may be unavailable for families having a member with a serious health problem.

Although Medicaid provides insurance to the poorest of the poor, many low-income families remain uninsured. In Ohio, these persons frequently obtain care through a variety of federal, state, and locally subsidized and/or charity providers. But access to this care is not always uniformly available, and except for emergencies and hospital commitments under the Hill-Burton Act, there is no legal obligation to provide unreimbursed care. (See p. 45)

The personal characteristics, incomes, and access to health care of the uninsured vary significantly. This dissimilarity makes efforts to improve their access to care a complex undertaking that may require a combination of approaches. Because most approaches are costly, they also raise difficult questions concerning who should finance them.

Principal Findings

Numbers of Uninsured Increase; Access to Care an Issue

Among the factors contributing to the nearly 13-percent increase in the number of uninsured Americans between 1982 and 1985 were (1) the decrease in numbers of persons covered by employer/union-sponsored insurance; (2) the growth of employment in such industries as construction and retail trade that are less likely to offer health coverage; and (3) the increase in insurance costs, which has outpaced the growth in incomes.

Studies of the uninsured in the United States have raised concerns about access to health care. Even though their health status is worse on average, the uninsured use less care than persons having insurance, the studies show. For example, researchers have found the uninsured used 27 percent fewer ambulatory visits than persons with Medicaid and other insurance.

Characteristics of the Uninsured

Of the factors GAO analyzed, the most important for distinguishing between the insured and the uninsured were the ratio of a family's income to the poverty level, whether a person was employed full- or part-time or unemployed, and whether or not a person was married. (See p. 18.) As income increased, so did the proportion of persons with health insurance. In 1985, 72 percent of uninsured persons between ages 19-65 were employed, but most of the employed uninsured were part-time or part-year workers. About half of the employed uninsured were part-time or part-year workers who earned under $10,000 annually. Finally, the likelihood of being uninsured was significantly greater among the unmarried and separated than among those who were married.

The typical uninsured person was below age 25 (55 percent), white (64 percent), and had not advanced beyond a high school education (67 percent). A disproportionate percentage of uninsured were ages 19-24, nonwhite, and worked in agriculture, construction, retail trade, or one of several service industries. The probability of being uninsured also varied regionally. For example, in the West South Central area 23.8 percent were uninsured compared with 12.2 percent in the New England area. (See figure 2.6.)

Cost and Health Status: Barriers to Coverage

Cost is a serious obstacle to purchasing health insurance. The cost (in Cleveland) of a policy incorporating health coverages frequently provided by Ohio insurers amounted to as much as 31 percent of the poverty-level income. Of Ohio's uninsured families, 31 percent had incomes below the poverty level. (See p. 32.) Affordability has become a growing problem for both individuals and employers. While the premium costs of insurance nationwide grew by about 50 percent between 1980 and 1983, average earnings grew only 17 percent.

Health status is another obstacle that can preclude obtaining health insurance or greatly increase its costs, particularly if an individual is not insured under a group health plan. Most Ohio insurers require people applying for individual coverage to complete a health status questionnaire and may deny coverage if the applicant or a family member has existing medical problems. Such questionnaires either are not used or are very limited in applications for group policies. (See p. 36.)

Public Programs Help Bridge the Gap

Public programs reduce the gap in access to care between insured and uninsured. In Ohio in 1985, programs funded by federal, state, and local governments handled in excess of 2 million visits from low-income patients, at a cost exceeding $2 billion. However, the extent to which such programs meet the health care needs of the uninsured is not known. Access to publicly supported programs is not uniformly available to Ohio's uninsured. (See p. 42.)

No Simple Solutions

Although some uninsured can afford health insurance or have low-cost care available, many others cannot afford insurance and lack access to needed care. The underlying problems facing health insurance policymakers are how to improve this latter group's access to care and how to distribute equitably the increased costs of providing better access.

The answer may lie in a combination of approaches that would address (1) the problem faced by high-risk individuals who may be unable to obtain insurance, (2) problems faced by small employers and employers of part-time workers who may be asked to provide or subsidize employee health insurance, and (3) whether Medicaid can be expanded to cover more persons who are poor but not poor enough to qualify under current Medicaid eligibility criteria. These approaches offer no simple solutions because each has high costs in terms of increased budget outlays for the public sector or expenditures for the private sector.

Recommendations

This report contains no recommendations.

Agency Comments

GAO did not obtain comments on this report.

Contents

Tables

Figures

Abbreviations

AFDC	Aid to Families With Dependent Children
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
GAO	General Accounting Office
HHS	Department of Health and Human Services

Introduction

Since the Medicare and Medicaid programs were established in the mid-1960s, Americans' access to health care has broadened considerably. Nevertheless, a significant portion of the population still lacks health insurance and the resources to pay for needed care. Also, as a consequence of public and private efforts to contain health costs, providers may be more reluctant than before to provide uncompensated care to the uninsured, studies suggest.

Senator Howard M. Metzenbaum expressed concern that many citizens experience difficulties in obtaining and financing health insurance and in getting access to appropriate care. He asked us to provide information on (1) individuals without health insurance in Ohio and the nation, by analyzing demographic and other data, (2) health insurance coverages and costs in Ohio, and (3) state and local initiatives to assist the uninsured in Ohio with health care.

Background

The majority of Americans have health insurance, but many individuals do not. During 1985, more than 172 million individuals under age 65 (82 percent) had private health insurance or were covered by a federal government-sponsored program.[1] Thirty-seven million individuals (18 percent) were without health insurance for the entire year. In Ohio, of the population under age 65, 86 percent had either private or federally sponsored public health insurance and 14 percent were uninsured. Although the coverage rate in Ohio exceeded the national average, the state still had over 1.4 million persons without coverage. Insurance coverage for individuals in the nation and Ohio during 1982 and 1985 is shown in table 1.1.

[1] As about 99 percent of individuals 65 and older had Medicare or other private insurance, this age group was not included in our study. In addition, Census data did not allow us to distinguish between the underinsured (persons who might not have sufficient insurance to cover most medical emergencies) and the insured.

Table 1.1: Health Insurance Coverage of Individuals Under Age 65 in the United States and Ohio (1982 and 1985)

Numerals are in thousands

	United States				Ohio			
	1982		1985		1982		1985	
Type of insurance	**No.**	**Percent**	**No.**	**Percent**	**No.**	**Percent**	**No.**	**Percent**
Private:								
Employer- or union-provided	133,613	65.5	134,570	64.3	6,787	70.4	6,547	69.4
Individual-provided	16,123	7.9	15,370	7.3	733	7.6	587	6.2
Public (federal):								
Medicaid	13,490	6.6	14,250	6.8	690	7.2	713	7.6
Medicare	2,499	1.2	2,510	1.2	96	1.0	114	1.2
CHAMPUS,[a] Veterans Administration, Military Health[b]	5,454	2.7	5,820	2.8	141	1.5	115	1.2
Subtotal	**171,179**	**83.9**	**172,520**	**82.4**	**8,448**	**87.7**	**8,076**	**85.6**
No insurance coverage	32,671	16.0	36,900	17.6	1,187	12.3	1,358	14.4
Totals	**203,849[c]**	**100.0[c]**	**209,420**	**100.0**	**9,635[c]**	**100.0**	**9,434**	**100.0**

[a]The Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) is operated by the Department of Defense. The program provides reimbursement for covered medical care rendered in civilian facilities to wives and children of active military personnel, retired military personnel and their dependents, and dependents of deceased personnel.

[b]Armed Forces members and their dependents living in off-base housing or on base in military housing.

[c]Figures do not add due to rounding.

Source: Bureau of the Census. Current Population Survey (Washington, D.C.: Mar. 1983 and Mar. 1986).

In 1985, almost 72 percent of the U.S. population under age 65 and 76 percent of Ohio's population under 65 had private insurance coverage. Such coverage usually is acquired through group policies sponsored by an employer or a union. A smaller percentage of private policies is purchased directly by individuals.

Public programs also protect against financial losses from medical expenses and can improve individuals' access to care (see table 1.1). Collectively, these programs provide health care coverage to about 10.8 percent of the U.S. population under age 65 and to 10 percent of Ohio's population. Health care or assistance in paying for care also is available to many low-income individuals through state and local programs. Although these programs often receive federal support, the protection they provide varies even within states. Ohio health care programs available in selected counties are discussed in chapter 4.

The Problem of Not Having Health Insurance

In times of emergency,[2] most Americans are confident that they will receive needed care and that the costs will be covered by either the health care provider, insurance, or government-supported programs. However, without a demonstrated ability to pay for care, individuals' access to health care is restricted, increasing their vulnerability to the consequences of poor health. The uninsured use less health care than those with insurance, even though their health status is on average poorer, studies show. Lacking insurance, people often postpone obtaining care until their condition becomes more serious and requires more costly medical services. Researchers report other significant differences in the health care received by those with insurance as compared to those without insurance. For example, the uninsured

- are almost twice as likely to have no regular source of care than the publicly or privately insured,
- receive less preventive and primary care than the insured, and
- have 27 percent fewer ambulatory visits than the insured.

Conversely, the insured

- when in poor health see a physician more often than do the uninsured in poor health and
- receive 54 percent more ambulatory care from physicians than do the uninsured.

In 1987, we reported that there was a strong correlation between health insurance and access to prenatal care.[3] As part of that review, we interviewed 1,157 Medicaid-covered and uninsured women and evaluated questionnaire responses from physicians on prenatal care delivered to over 4,000 privately insured women. Pregnant Medicaid recipients and uninsured women began prenatal care later and made fewer visits to health care providers than women with private health insurance. Women without health insurance received the least care. Not knowing

[2]The Consolidated Omnibus Budget Reconciliation Act of 1985 (Public Law 99-272, Section 9121, approved April 7, 1986), requires hospitals with emergency departments to provide for appropriate medical screening and examinations without regard to an individual's insurance or ability to pay. If a hospital determines that the individual has an emergency medical condition or is in active labor, it must provide for (1) further examination and treatment as may be required to stabilize the condition or treatment of the labor or (2) in limited circumstances, transfer of the individual to another medical facility.

[3]Prenatal Care: Medicaid Recipients and Uninsured Women Obtain Insufficient Care (GAO/HRD-87-137, Sept. 30, 1987).

they were pregnant and lack of money to pay for the care were cited as the most important barriers to more frequent visits by the women.

Objectives, Scope, and Methodology

In accordance with Senator Metzenbaum's December 17, 1986, request, we sought to

- determine whether the uninsured population grew between 1982 and 1985;
- identify and compare the characteristics of uninsured persons in the nation and Ohio;
- develop information on health insurance costs in Ohio and assess whether uninsured Ohio families could afford a policy incorporating health coverages frequently provided by Ohio insurers; and
- obtain information on federal, state, and local programs in Ohio that assist the uninsured with their health care needs.

To determine the growth in the number of uninsured and the characteristics of uninsured individuals, we analyzed the Bureau of the Census's Current Population Survey data for 1982 through 1985.[4] This database, updated annually, was the most comprehensive available. We developed frequency distributions of the data to identify characteristics of insured and uninsured individuals, concentrating on such variables as age, education, gender, race, marital status, family income, and ratio of family income to the poverty level. Most frequency distributions identify characteristics of persons between 19 and 65. In a few cases, such as for age and racial/ethnic populations, the frequencies include persons under 19.

Census data also were used to identify the employment status (full-time, part-time, etc.) of individuals without health insurance. We identified major industries in which the individuals worked and the geographical regions and states in which the uninsured lived (see app. II). Our analysis of uninsured characteristics was supplemented with data available from other research. The bibliography at the back of this report lists the studies and reports we reviewed.

[4]For a description of the survey, see app. I. Although Census data are accepted and widely used by researchers who analyze characteristics of uninsured persons, the data may not be completely reliable. One researcher (M. Susan Marquis, "Consumers' Knowledge About Their Health Insurance Coverage," Health Care Financing Review, Vol. 5, No. 1, Fall 1983, pp. 65-79) found that, of families who reported they were uninsured, about one-third actually had insurance. We did not perform a reliability assessment of the Census data.

We performed a discriminant analysis to identify the characteristics most statistically useful for distinguishing between individuals with health care coverage and those without. We analyzed 10 characteristics: (1) age, (2) employment status, (3) major industry in which the person was employed, (4) major occupation in which the person was employed, (5) marital status, (6) personal income, (7) race, (8) ratio of family income to poverty level, (9) region of U.S. residence, and (10) sex. Appendix III describes this analysis.

To determine the cost of health insurance in Ohio, we discussed with insurance company representatives the types of policies and coverages normally provided by Ohio insurers. After developing a "composite model" health insurance policy (see app. IV) that contained coverage frequently provided by employer-sponsored plans, we sent it to the 15 insurance companies having at least 1 percent of the Ohio market. These companies accounted for over 80 percent of the accident and health insurance premiums in Ohio. The companies estimated for us the model policy's cost for a family of four living in Cleveland if the policy were purchased (1) on an individual basis, (2) through a group of fewer than 50 employees, and (3) by a group of 50 or more employees. The insurers also provided information on how insurance cost is affected by age and health status. To indicate how affordable insurance is for individuals currently without insurance, we compared the lowest cost nongroup insurance premium with the family incomes of the uninsured in Ohio.

To obtain information on federal, state, and local programs in Ohio that provide medical care to uninsured individuals, we met with officials from (1) the Ohio Department of Health, (2) the Ohio Department of Human Services, (3) the county department of human services in five Ohio counties, and (4) seven regional health agencies. In addition, we contacted officials from state and regional hospital associations, hospitals, and health clinics. A list of the organizations contacted in Ohio appears in appendix V.

We conducted our review during the period November 1986-September 1987, in accordance with generally accepted government auditing standards.

Growth and Characteristics of the Uninsured in the United States and Ohio

The percentage of Americans without health insurance increased considerably between 1982 and 1983 but has stabilized in recent years. In 1985, 17.6 percent of the U.S. population under age 65 (37 million persons) were without health insurance—a 10-percent increase from the proportion uninsured during 1982. Of Ohio's population, 14.4 percent were uninsured in 1985 compared with 12.3 percent in 1982—a 17-percent increase. During this period, the proportion of uninsured in Ohio remained 18-30 percent below the national rate.

Most of the increase in the percentage of uninsured can be traced to a significant drop between 1982 and 1985 in the proportion of persons with private health insurance, particularly employer/union-sponsored insurance (see table 1.1). Our examination of Census data and related literature indicates this phenomenon may be associated with employment shifts to industries dominated by small business and having high levels of uninsured. Other explanations we considered, such as increased part-time employment and shifts to low-paying jobs, proved inconclusive. A factor that does help explain the decrease in private insurance—its increasing cost—is discussed in chapter 3.

Although no single feature distinguishes the insured from the uninsured, several personal and employment characteristics are useful in describing the United States and Ohio uninsured, for example:

- In 1985, over 38 percent of persons with family incomes below the federal poverty level were uninsured compared with 14 percent in families with incomes above the poverty level. In Ohio, the figures were 31 and 11 percent, respectively.
- Thirty-six percent (35 percent in Ohio) are under age 19.
- A disproportionately high percentage are aged 19-24, nonwhite, and unmarried or separated, and have less than a college education.
- More than two-thirds of those aged 19-65 are employed—albeit mostly in low-paying, part-time work.
- Those who work full-time frequently are employed by small firms or are self-employed.
- Three industries—construction, retail trade, and professional and related services—account for 50 percent of all uninsured workers in both the United States and Ohio.
- Over 11 percent of persons employed nationwide by the insurance and real estate industry and 15 percent of health services' employees lack health insurance.

The probability of being uninsured varies significantly depending upon where a person lives. Uninsured rates ranged from 23.8 percent in the West South Central region (Arkansas, Louisiana, Oklahoma, and Texas) to 12.2 percent in New England.

Although Medicaid covers health care for many low-income families, no state provides Medicaid coverage to all families with incomes below the federal poverty level. In fact, state income eligibility levels differ considerably from state to state and are, on average, 50 percent below the federal poverty level. In Ohio, Medicaid income eligibility is only 54 percent of the amount permitted by the federal poverty guidelines. Medicaid net income eligibility standards by state are shown in appendix VII.

Proportion of Uninsured Stabilizes in Recent Years

While their numbers have increased recently, the percentage of uninsured has generally stabilized. From 1982 to 1985, the number of uninsured persons increased by nearly 13 percent, according to Census data. Virtually the entire increase in uninsured occurred during 1982-83, as table 2.1 shows. Between 1983 and 1985, however, the proportion of uninsured in the United States appears to have stabilized at 17-18 percent. Thus, it appears that the increase in numbers of uninsured for 1983-85 reflects the increase in the general population.

Table 2.1: Uninsured Under Age 65 in the United States and Ohio (1982-85)

Numbers in thousands

	United States		Ohio	
Year	No.	Percent uninsured	No.	Percent uninsured
1982	32,671	16.0	1,187	12.3
1983	35,200	17.1	1,332	14.0
1984	36,790	17.8	1,165	12.4
1985	36,900	17.6	1,358	14.4

Although the amount of estimated growth varies, other studies also report increases in both numbers and percentages of uninsured since 1982.[1]

[1]The Employee Benefit Research Institute, a nonprofit public policy research organization, concluded in May 1987 that the number of persons in the United States without public or private health insurance grew by nearly 15 percent between 1982 and 1985. More recently, a preliminary Institute estimate showed between 1985 and 1986 that the number of uninsured changed only slightly. A 1986 Robert Wood Johnson Foundation survey on health care access found that the proportion of uninsured rose by about 3 percent between 1982 and 1986—from 8.7 to 9.0 percent (including persons over 65). When the elderly population was excluded, the uninsured were about 10.2 percent in 1986.

Statistical Importance of 10 Characteristics in Distinguishing the Insured From the Uninsured

We analyzed 10 characteristics of persons aged 19-65, with and without health insurance, to learn which were the most important for distinguishing the insured from the uninsured. Of the 10 work-related, demographic, and geographic characteristics (see table 2.2), the ratio of family income to the poverty level was the most significant. Also, being unmarried and having part-time employment status had significant positive correlations with being uninsured. Our methodology in performing this statistical analysis is described in appendix III.

Table 2.2: Characteristics That Distinguish Insured From Uninsured

Rank[a]	Characteristic
Most important	Ratio of family income to poverty level
	Marital status
	Employment status
Others	Sex
	Personal income
	Residence, by region
	Major industry where employed
	Age
	Major occupation
	Race

[a]A more detailed description of the statistical values associated with each characteristic is contained in app III.

Source: GAO discriminant function analysis based on data from Current Population Survey (Washington, D.C.: Bureau of the Census, Mar. 1986).

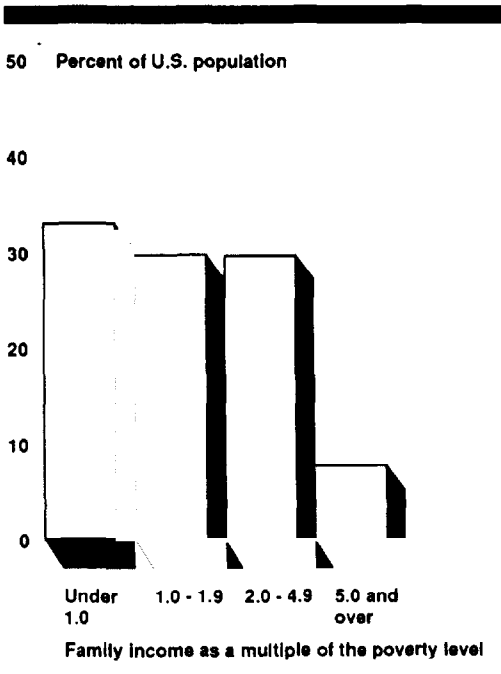
Other analyses of Census data showed that the percentage of uninsured persons increased as income decreased. Even this characteristic, however, did not consistently separate the insured from the uninsured (see figure 2.1).

As was the case with the national data, in Ohio the most important characteristics were (in order) (1) ratio of family income to poverty level, (2) marital status, and (3) employment status.

Work-Related Characteristics Often Identify Uninsured

Income and employment status are closely related to being uninsured, as indicated by our tabulations of Census data and our statistical analysis. Also, according to some studies there is a consistent relationship between employer size and type of industry and the probability that the employer will offer health insurance to employees.

Figure 2.1: Uninsured by Family Income Level (1985)



Note: Includes only persons under age 65.

Source: Bureau of the Census, Current Population Survey (Washington, D.C., Mar. 1986).

Family Income an Important Indicator of Insurance Status

A clear relationship between income and health insurance is shown by our tabulations of Census data. As income increases, so does the percentage of persons with health insurance (see table 2.3). Of persons in the United States living in families with income below the federal poverty level, 38 percent were uninsured (31 percent in Ohio). This compares with less than 10 percent (8.2 percent in Ohio) of those in families with income of at least twice the poverty level.

Table 2.3: Relationship of Family Income to Health Insurance for Individuals Under Age 65 (1985)

	United States		Ohio	
Ratio of family income to poverty level	**Percent of population**	**Percent uninsured**	**Percent of population**	**Percent uninsured**
Under 1.0	15.1	38.5	14.1	31.5
1.0-1.99	18.5	28.3	16.8	25.6
2.0 and over	66.3	9.9	69.1	8.2

Although income is not the only criterion used to establish Medicaid eligibility, significant differences between Medicaid income requirements and the federal poverty level help explain the large number of uninsured persons with incomes below the poverty level. In 1986, qualifying income for Medicaid ranged from 15.5 percent of the federal poverty standard in Alabama to 91.2 percent in Utah[2] (see app. VII). In each of the 10 states with the highest rates of uninsured (see app. VI) persons whose income exceeded 50 percent of the federal poverty level were not eligible for Medicaid.

Although those with low incomes are more likely to be without health insurance, lack of coverage is not restricted to the low income population. Over one-third of all uninsured are in families with income at least twice the poverty level (see fig. 2.1). In addition, as discussed in chapter 3, 11 percent of persons purchasing their own insurance were in families with income below the poverty level.

Employment Status Also Significant

Employer and union plans are the major source of health insurance in the United States with over 64 percent of the U.S. population insured through employment. From 1982 through 1985, the percentage of uninsured who were employed full-time/full-year increased 24 percent, while the percent of part-time/part-year[3] uninsured was relatively unchanged (see table 2.4). Census data show that 72 percent of uninsured persons between ages 19-65 were employed, although the majority of the employed uninsured were either part-time or part-year workers.

Table 2.4: Employment Status of the Uninsured, Aged 19-65 (1982 And 1985)

	Distribution (percent)			
	United States		Ohio	
Employment status	**1982**	**1985**	**1982**	**1985**
Full-time/full-year	22.7	28.2	17.6	24.3
Part-time and/or part-year	44.5	44.1	44.5	45.7
Unemployed or not in work force	32.8	27.7	37.8	29.9

[2]Medicaid literature documents pervasive inequities—where similar people in similar circumstances but in different states are treated unequally in terms of both Medicaid eligibility and level of benefits. Medicaid: Interstate Variations in Benefits and Expenditures (GAO/HRD-87-67BR, May 4, 1987).

[3]According to the Bureau of the Census' Technical Documentation for the Current Population Survey, part-time workers include persons who worked less than 35 hours per week in a majority of the weeks worked during the year. Persons who worked full-time for less than 50 weeks are considered part-year workers by Census.

Although the unemployed and those not in the labor force often rely on state programs for health care, several studies indicate that part-time employees may not qualify for these programs because of their earnings. At the same time, because their earnings are low, many of these workers may not be able to afford health insurance. Most (64.5 percent) of the uninsured employed had wages or self-employment income of less than $10,000 a year (see table 2.5). About half of all uninsured employed were part-time or part-year workers who earned less than $10,000.

Table 2.5: Income Levels of Uninsured Workers, Aged 19-65 (1985)

	Uninsured workers (percent)		
Personal income	**Full-time/ full-year**	**Part-time and/ or part-year**	**Total**
$1-9,999	15.4	49.1	**64.5**
10,000-19,999	15.4	9.0	**24.4**
20,000-29,999	4.7	1.8	**6.5**
30,000-39,999	1.9	.6	**2.5**
40,000 and over	1.7	.4	**2.1**
Totals	**39.1**	**60.9**	**100.0**

Other tabulations of Census data confirmed the strong correlation between the number of uninsured and part-time employment. For example, only 9 percent of full-time/full-year workers were without health insurance, compared with 25 percent of the part-time and part-year workers, as table 2.6 shows. One explanation may be that part-time or part-year employees frequently work too few hours or lack the employment tenure necessary to obtain employer-provided insurance.

Table 2.6: Relationship of Employment Status to Insurance for Individuals Aged 19-65 (1985)

	Distribution (percent)			
	United States		Ohio	
Employment status	**Insured**	**Uninsured**	**Insured**	**Uninsured**
Full-time/full-year	90.6	9.4	93.2	6.8
Part-time and/or part-year	75.3	24.7	78.3	21.7
Unemployed	58.6	41.4	59.7	40.3
Not in the workforce	78.4	21.5	82.6	17.4

Larger Firms More Likely to Offer Insurance

As firm size increases, the availability of employer or union-sponsored health insurance also increases, a recent study by the Small Business Administration concluded. Other studies reach similar conclusions. A Department of Labor study showed that almost all (95 percent) full-

time, permanent employees in firms with 100 or more workers are covered by health insurance. In contrast, according to a September 1985 National Federation of Independent Business survey, only 65 percent of small-sized, member employers offered insurance to at least some full-time workers, and these provided fewer benefits than did large firms. This was true even though the proportion offering employee health insurance rose between 1978 and 1985. When asked by the National Federation, firms that did not offer health insurance gave the following reasons:

- Employees were covered under another policy.
- Premiums were too high.
- Firm was insufficiently profitable.
- Employee turnover was too great.
- Firm could not qualify for a group policy.

The Small Business Administration attributed the low insurance coverage in small firms in part to such work force characteristics as a higher percentage of elderly and Medicare- and Medicaid-covered individuals. Also, small firms make extensive use of part-time or temporary employment and hire more young workers, other studies show.

Uninsured Rates High in Six Industries

Although many new jobs were created in the United States during the 1980s, much of this growth was in industries such as construction, retail trade, and services, which are dominated by small businesses and have high percentages of uninsured workers (see table 2.7). This may help explain why the percentage of full-time, uninsured workers has increased since 1982.

Of 14 major industries, 6 had uninsured rates in 1985 greater than 23 percent, Census data show. Together, these six accounted for 37 percent of all workers and 62 percent of all uninsured workers. The industries were

- agriculture, forestry, and fisheries;
- construction;
- retail trade;
- business and repair services;
- personal services including private households; and
- entertainment and recreation.

Although estimates of Ohio's uninsured rates by industry had wide statistical variability, they generally followed national trends.

Table 2.7: Employment Growth by Industry (1982-85) **and Proportion of Uninsured Workers** (1985)

Industry	Uninsured in industry (1985) (percent)	Employment (millions) 1982	Employment (millions) 1985	Employment growth (percent)
Public administration	4.9	4.90	5.39	10
Manufacturing (durable)	6.9	13.26	13.32	0
Finance, insurance, and real estate	8.3	6.30	7.17	14
Mining	8.4	1.24	1.11	−10
Transportation, communication, and other public utilities	9.8	7.30	7.97	9
Professional and related services[a]	9.9	22.01	23.02	5
Wholesale trade	10.9	4.49	4.53	1
Manufacturing (nondurable)	11.0	9.05	8.98	−1
Retail trade[a]	23.4	16.90	18.32	8
Business and repair services	23.4	5.22	6.57	26
Entertainment and recreation	25.6	1.26	1.36	8
Construction[a]	26.8	6.90	7.82	13
Personal services, including private households	29.6	3.94	4.40	12
Agriculture, forestry, and fisheries	34.6	3.41	3.24	−5

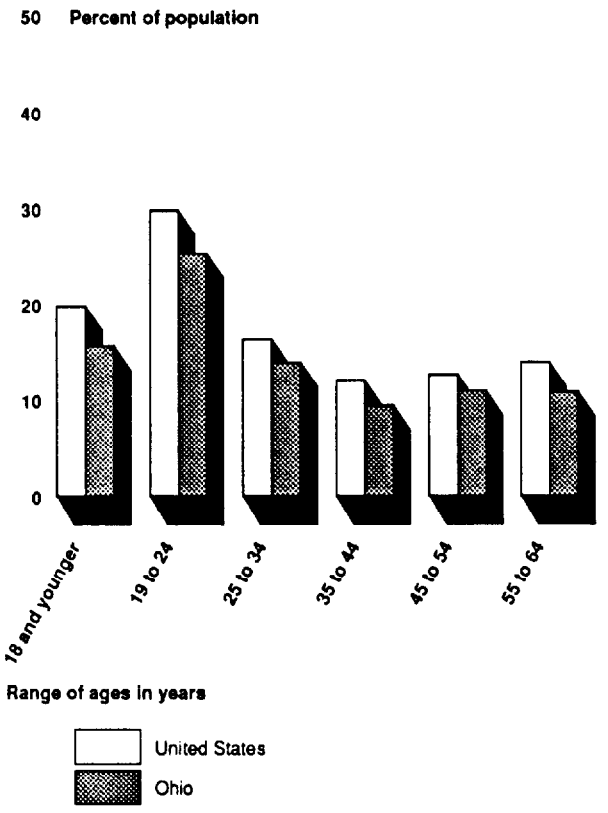
[a]These three industries employ over 50 percent of all uninsured workers in the United States.

Demographic Characteristics of the Uninsured

Most uninsured people in 1985 were below the age of 25 (55 percent), white (64 percent), unmarried or separated (58 percent), and had not advanced beyond a high school education (67 percent). Several categories of the population were disproportionately uninsured. For example:

- Persons aged 19-24 comprised about 11 percent of the U.S. and Ohio populations, yet this group made up 19 percent (19.7 percent in Ohio) of all uninsured.
- 15 percent of whites were uninsured compared with 24 percent of blacks and 32 percent of Hispanics. In Ohio, whites made up about 86 percent of all uninsured, and about 14 percent of the whites were uninsured compared with 18 percent of blacks and Hispanics.
- Only 11 percent of married persons in the United States were uninsured; 28 percent of persons aged 19-65 and never married were uninsured. In Ohio, 8 percent of married persons were uninsured; while 25 percent of persons never married were uninsured. Our discriminant analysis also

Figure 2.2: Uninsured by Age (1985)



Source: Bureau of the Census, Current Population Survey (Washington, D.C., Mar. 1986).

showed that, of the 10 characteristics examined, marital status was the second most important predictor of insured status.

Youth, Nonwhites More Likely to Be Uninsured, but Gender Not a Factor

Persons in the 19-24 age group are most likely to be without health insurance in the United States. During 1985, almost 30 percent of this group had no insurance compared with 12-16 percent among groups between ages 25 and 64. The same pattern was displayed in Ohio. The insurance status of persons under age 65 by age group is shown in figure 2.2. Because virtually all persons 65 and over are insured, we excluded them from our analysis.

Several explanations for the disproportionately high percentage of 19-24 year-olds who are uninsured are suggested by Census and other data:

- Because this group is just entering the job market, they may be ineligible for coverage offered by employers or working in industries that do not offer health insurance. About 53 percent of workers in this age group were in the six industries with the highest rate of uninsured, Census data show.
- As income levels for this age group generally are below incomes for older workers, they may be unable to purchase insurance. In fact, 81 percent of the uninsured in the 19-24 age group earned less than $10,000 in 1985, according to the Census data.
- Being generally in better health than older groups, youth may believe they do not need insurance.
- Health coverage that may have been available through a parent's plan may have been dropped recently. Insurers frequently drop dependent coverage at age 19 (or age 22, if dependent is a student).
- Limited assets and fewer family responsibilities may contribute to this group's accepting more risk than older groups.

A high proportion (19.8 percent) of children are uninsured. According to a recent study, 20 percent of uninsured children live with a parent who has employer-sponsored insurance.[4] One possible explanation for why children are uninsured is that a large number of families either cannot afford dependents' health insurance or their employed members work for firms that do not offer dependent coverage.

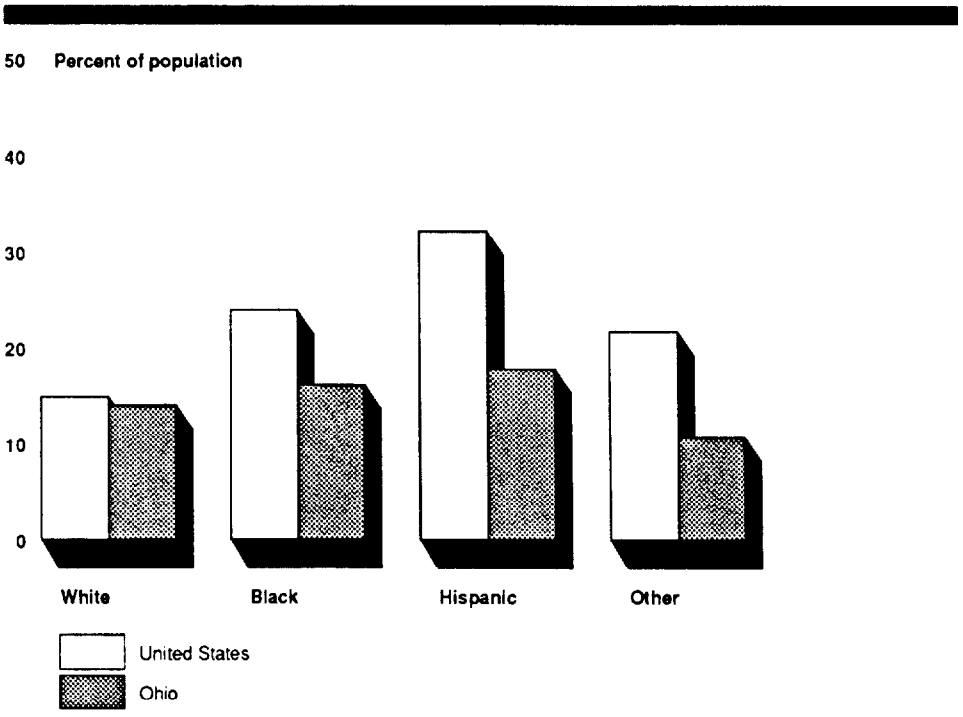
Race and ethnicity influence the probability of being uninsured in the United States. The percentage of Hispanics and blacks who are uninsured (see fig. 2.3) is higher than the percentage of whites, even though 64 percent of all uninsured are white (see fig. 2.4). In Ohio, the disparity between the races is relatively minor. Both nationwide and in Ohio, the uninsured are evenly split among men and women, Census data show.

Married More Likely to Have Insurance

The likelihood of being uninsured is greater among the unmarried than among those who are married. Nationwide, married persons comprised 63 percent of the aged 19-65 population in 1985, but only 11 percent were uninsured. Never-married persons in this age range comprised 23

[4]Employee Benefit Research Institute, A Profile of the Non-Elderly Population Without Health Insurance, May 1987.

Figure 2.3: Uninsured by Race or Ethnic Origin (1985)



Note: Includes only persons under age 65.

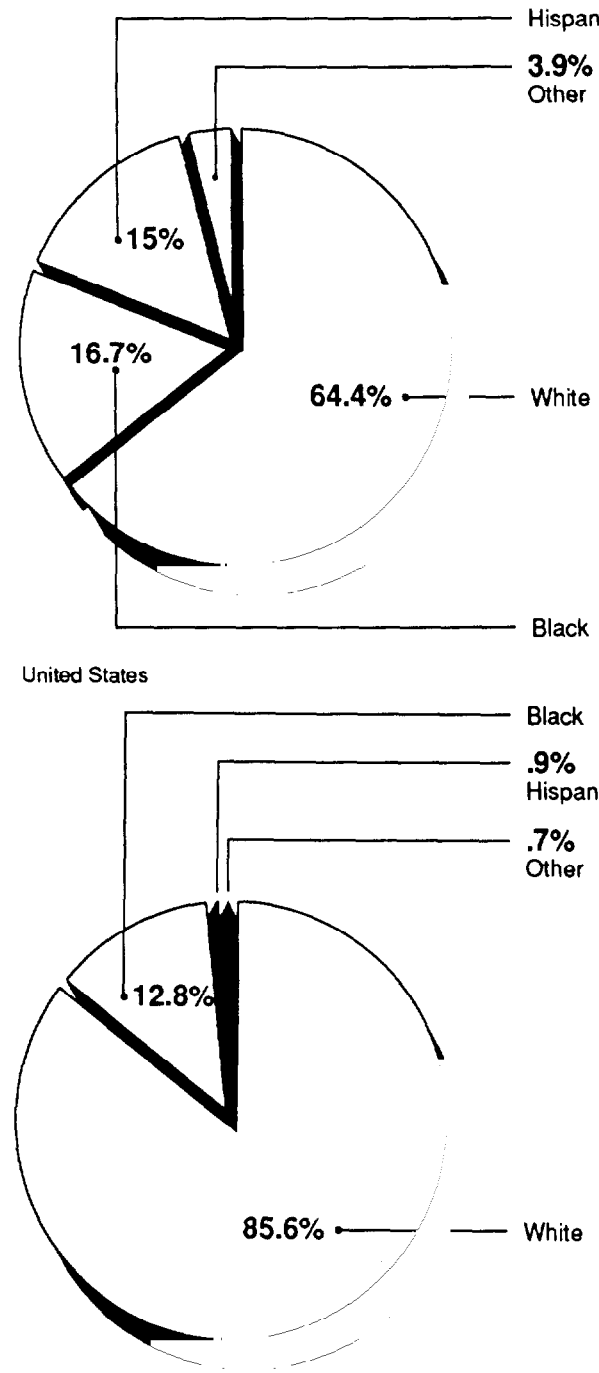
Source: Bureau of the Census, Current Population Survey (Washington, D.C., Mar. 1986).

percent of the U.S. population; 28 percent of these individuals were uninsured. Ohio data were consistent with U.S. figures, as figure 2.5 illustrates.

Little research is available on this marital status/uninsured phenomenon; however, possible explanations include:

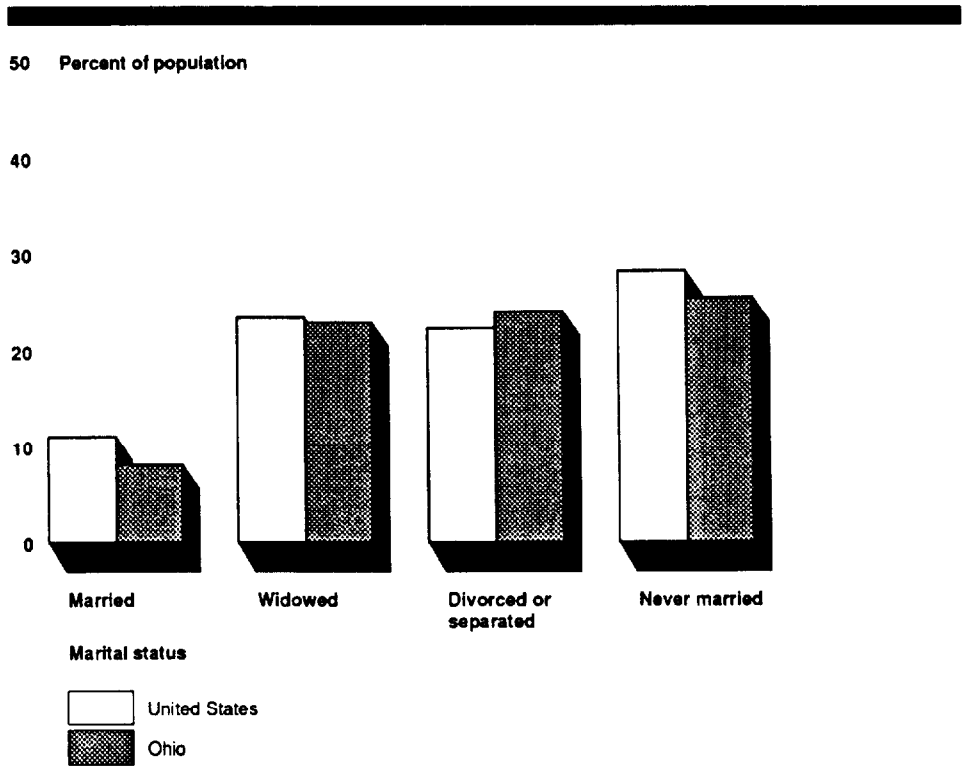
- Married status increases the probability of being insured because it provides an avenue of health coverage not available to single individuals—namely, coverage under a spouse's health plan.
- Married individuals are generally older than single persons, more likely to have families, and less likely to be working in lower-paying jobs. The availability of health insurance may be a more important factor when married individuals seek employment and the jobs they hold are more likely to offer health insurance.

Figure 2.4: Racial/Ethnic Makeup of the Uninsured (1985)



Note: Includes only persons under age 65.

Figure 2.5: Uninsured by Marital Status (1985)



Note: Includes only persons between ages 19 and 65.

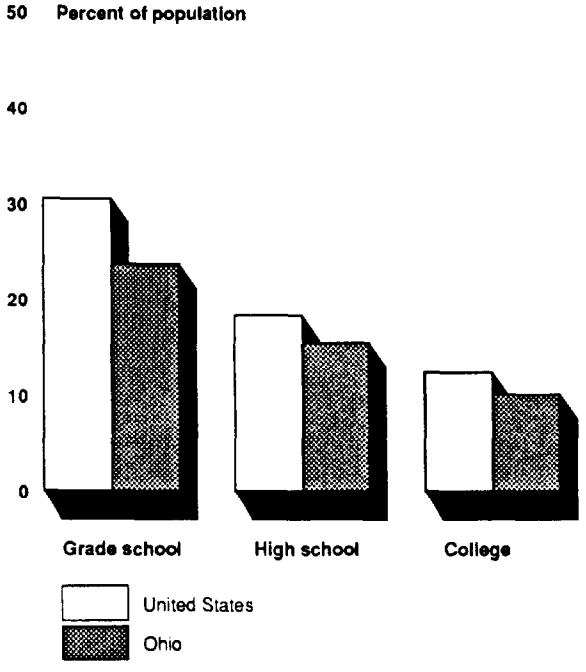
Source: Bureau of the Census, Current Population Survey (Washington, D.C., Mar. 1986).

Education Also Increases Likelihood of Being Insured

The likelihood of being uninsured decreases as a person's educational achievement increases, as figure 2.6 shows. For example, of those whose education ended with grade school, about 31 percent were uninsured in 1985 compared with 12 percent of those who had completed 1 or more years of college.

Although few studies have examined how education relates to insurance, education and income are positively correlated (as education increases, income also increases), which may partially account for the relationship. Income, as was pointed out in the beginning of this chapter, is the primary predictor of health insurance.

Figure 2.6: Uninsured by Education Level (1985)



Note: Includes only persons between the ages of 19 and 65.

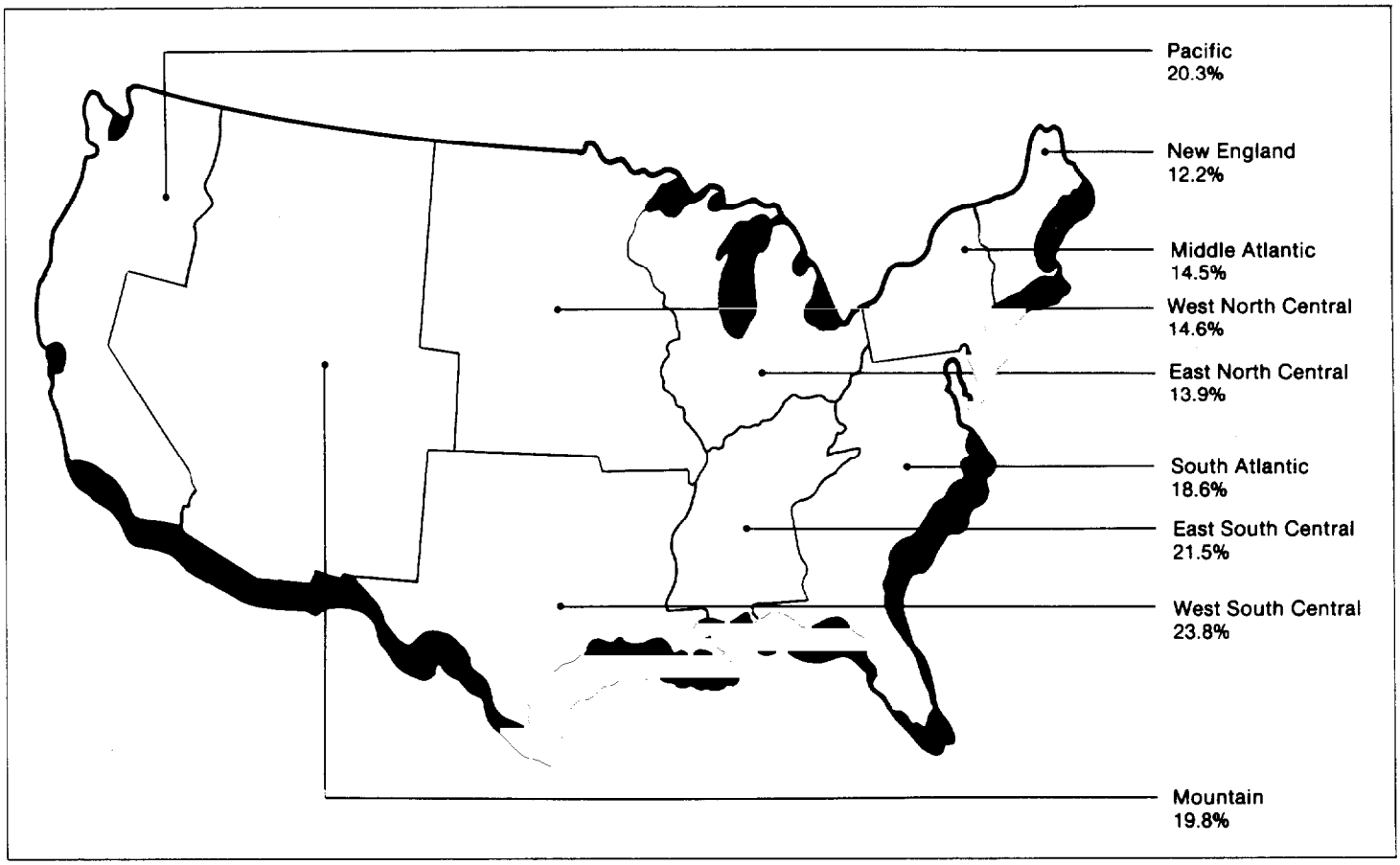
Source: Bureau of the Census, Current Population Survey (Washington, D.C., Mar. 1986).

Regional Variations in Health Insurance

The percentage of persons who are uninsured varies significantly by location. In 1985, more than 20 percent of the populations in three regions (Pacific, West South Central, and East South Central) were uninsured (see fig. 2.7). In four regions (New England, Middle Atlantic, East North Central, and West North Central), less than 15 percent of the populations were uninsured. In the remaining two regions (Mountain and South Atlantic), 19.8 and 18.6 percent, respectively, of their populations were without insurance. The number and percentage of uninsured persons in each state by region are shown in appendix II. The top 10 states in percentage of state's population that is uninsured and number of uninsured appear in appendix VI. Ohio's uninsured rate in 1985 was 14.4 percent of its total population. Although better than the national average, this was somewhat poorer than the average rate (13.9 percent) among other states in Ohio's East North Central region.[5] We also noted that:

[5]Other states in the East North Central region are Illinois, Indiana, Michigan, and Wisconsin.

Figure 2.7: Uninsured by Region (1985)



Note: Includes only persons under age 65.

Source: Bureau of the Census, Current Population Survey (Washington, D.C., Mar. 1986).

- For California (in the Pacific region), 21.6 percent of its population was uninsured, and for Texas (in the West South Central region), 23.6 percent. Combined, these two states comprised 23.4 percent of the uninsured population in the nation. In addition, of the 10 states with the highest percentage of their population uninsured, 6 were located in the East South Central, West South Central, or Pacific regions.[6]
- With respect to full- and part-time workers, the West South Central and Pacific regions had significantly higher percentages of uninsured than did New England (see table 2.8).
- Although the percentage of uninsured workers varied from industry to industry, the relative concentration of a particular industry in a region

[6]The states are Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, and Texas.

did not always explain why regional uninsured rates were higher or lower. Rather, uninsured rates within an industry can vary with the industry's location. For example, the construction industry had high uninsured rates in the East South Central (32.5 percent), West South Central (35.5) percent, and Pacific (28 percent) regions. In contrast, 22.9 percent of construction industry workers in the New England region were without health insurance.

Table 2.8: Employed Uninsured, Aged 19-65, by Region (1985)

Region	Percent uninsured employed	
	Full-time/ full-year	Part-time and/ or part-year
East North Central	7.1	21.1
East South Central	10.9	28.1
Middle Atlantic	7.7	20.6
Mountain	10.9	27.3
New England	6.5	18.8
Pacific	12.4	27.6
South Atlantic	9.8	26.6
West North Central	7.6	21.2
West South Central	12.5	30.4
U.S. average	**9.4**	**24.7**

Cost and Health Status: Barriers in Obtaining Health Insurance

During 1985 in Ohio, over 1.3 million people under age 65 were without health insurance. Although there are many reasons these individuals lacked insurance, our analysis indicates that cost was a serious obstacle to its purchase. For a family of four, the average yearly premium would range from $2,800 to $5,200 (depending on the age of the head of household) for a nongroup policy we developed that incorporated health coverages frequently provided by Ohio insurers (see app.IV). Although less extensive coverage and less expensive policies are available, this is a high price for many of Ohio's uninsured. It is possibly unaffordable for most of the 31 percent of uninsured Ohio families whose income was below the 1985 federal poverty level of $10,989 (for a family of four).

Several characteristics of the uninsured elevate the importance of cost in this group's insurance purchase decisions. Most obvious is that income levels of the uninsured generally are considerably lower than those of the insured. Also, as pointed out in chapter 1, most insured (65 percent nationally and 69 percent in Ohio) obtain health insurance through employer- or union-sponsored group plans. Purchased through a large group, the average annual premium for the policy we developed ranged from $300-$708 less than comparable nongroup plans. But group plans might not be available to many uninsured because, as indicated in chapter 2, they frequently work in part-time or low-paying full-time jobs, where employer-provided insurance is not available.

Another important factor affecting the availability of health insurance is the health status of the individual and the family. Health insurance may be unavailable to individuals who, at the time of application, have existing health problems or a family history of serious or chronic illness. This is more of a problem for persons ineligible for employer-sponsored plans because, unlike most policies sponsored by employers, policies offered to individuals require applicants to complete health status questionnaires. From the questionnaire responses, insurers make case-by-case decisions on whether to insure and the cost of the insurance.

Deciding to Purchase Health Insurance

Whether an individual purchases health insurance may be influenced by economic and health factors and personal considerations. Among the economic factors are income, employment status, and insurance cost, while health factors may include overall well-being and any special health conditions that make the individual a high or poor risk. Often, the

decision to purchase health insurance is influenced by personal considerations—marital status, what an individual or family considers essential, how they prioritize the expenditure of disposable income, and the availability of alternative sources of health care.

The importance of each of these factors in health insurance decision-making varies from person to person—even when the characteristics of those making the decisions appear to be identical. This explains why two families with similar health, income, expenses, and insurance costs might reach different decisions about purchasing insurance. Because the purchase of health insurance is a personal choice, it is not possible to weigh the characteristics of persons with and without insurance and say conclusively that a person could or could not afford it. To assess affordability, we contrast the economic conditions of the uninsured with insurance costs in this chapter. Also, we examine the role of health status in the availability of insurance.

Cost of Health Insurance for Individuals

The cost of health insurance and a family's economic situation are the primary elements in assessing health insurance affordability. With respect to these elements, our analysis highlighted the following:

- Insurance premiums are closely tied to health care costs. Both have risen dramatically since 1974, far outpacing the growth of the economy or the national inflation rate, despite intense efforts to curb health care costs.
- From one company to another, insurance costs vary significantly. For example, one company's nongroup policy cost $3,900 annually, while a second company provided identical coverage for $1,824—53 percent less. Similar differences were noted with group policies.
- The price of insurance offered to groups was 10-13 percent lower than that offered to individuals. Families eligible for group insurance would pay, on average, $3,278 compared with $3,730 for the same coverage under an individual policy. This difference could increase significantly where employer contributions help offset the cost of a family's group policy.
- Insurance premiums vary significantly from one location to another. For example, a Cleveland family would pay 16-24 percent more for health insurance than families in several other Ohio cities.
- About 31 percent of Ohio's uninsured population had family incomes below the federal poverty level. Premiums for this group comprised from 17 to 31 percent of family income. Although this appeared to be a

serious obstacle to purchasing insurance, 11 percent of persons purchasing their own insurance were in families with income below the poverty level. This may indicate that some low-income families attach greater importance to health insurance than others or that low-cost insurance policies are available with less coverage or higher coinsurance.

Growth in Health Insurance Cost

Between 1974 and 1984, employers' health care costs rose nearly 280 percent, according to the Employee Benefit Research Institute. Similarly, insurance premiums increased about 50 percent from 1980 to 1983, the Health Insurance Association of America reported (see table 3.1), while average earnings grew only by 17 percent. Additionally, as the Association and other health insurance experts point out, out-of-pocket expenses to the insured have risen through increased deductibles and coinsurance.

Table 3.1: Health Insurance Premium Trends

Year	Persons covered (thousands)	Health insurance premiums (millions)	Premiums per covered person
1980	189,000	$43,666	$231.04
1981	188,340	48,998	260.16
1982	191,069	58,341	305.34
1983	192,216	66,165	344.22

Premium Costs Vary Significantly

In one city—Cleveland—the premium cost for the policy we developed incorporating health coverage frequently provided by Ohio insurers varied considerably between insurers and, to a lesser extent, between group and individual policies (see table 3.2). We based annual premium costs for the policy on estimates from 12 insurance companies, each of which wrote at least 1 percent of the accident and health insurance business in Ohio. Collectively, the companies we queried account for over 80 percent of the total insurance premiums written in the state.

Table 3.2: Annual Insurance Premium Costs for a Family of Four in Cleveland
(1985 Dollars)

Age (head of household)[a]	Policy purchased by an individual			Policy purchased through a large group (50 or more participants)[b]		
	Low	High	Average	Low	High	Average
Under 30	$1,824	$3,900	$2,832	$1,584	$4,104	$2,484
30 to 39	1,992	4,008	2,976	1,992	4,104	2,676
40 to 49	2,520	4,596	3,372	2,460	4,104	3,000
50 to 59	3,120	5,964	4,260	2,880	5,244	3,732
60 to 64	3,372	7,188	5,208	3,204	6,732	4,500

[a]We did not obtain premium costs for policies covering one person. Insurance actuaries of a major insurer estimate that a family policy generally costs 225 percent more than a policy for an individual.

[b]One company defined its large group as 10 or more persons. Although we did not include the cost of small groups (fewer than 50 employees) in our analysis, such premium costs normally were less than individual costs and more than large group costs.

For a family of four with a head of household under 30 years of age, the annual premium was $1,824-$3,900 for an individual policy and $1,584-$4,104 for a group-affiliated policy, our data showed. Obviously, prudent shopping can significantly reduce health insurance cost. Although the average group policy was 10-13 percent less than the individual policy, there was little difference between the least costly individual and group premiums. Possibly the "high" premiums varied much more because some companies sell primarily to groups and, while they will provide individual policies, do so only at a substantial premium.

Family Income of Uninsured Compared With Model Policy Costs

That premiums can play a significant role in health insurance decision-making is indicated by an examination of insurance costs in relation to family income. The ratio of family income to poverty levels[1] for the uninsured is compared with the cost of the model policy in table 3.3. For the 31 percent of uninsured Ohio families whose income was below the poverty level, a nongroup health policy represents at least 17-31 percent of family income. But, because virtually all families in this category and in the 1-2 times poverty category had incomes below the highest point in the category, the table overstates income and understates the percent of income represented by health insurance.

[1]Federal poverty guidelines express a minimum level of income necessary to live in accordance with American consumption patterns. The minimum level increases as the number of dependents increases. The specific contribution of medical costs to the poverty index cannot be determined. The only specific cost included is food cost, which is one-third of the federal poverty guideline.

Table 3.3: Health Insurance Cost Compared With Family Income of Ohio's Uninsured (1985 Dollars)

Age group	Family income of the uninsured (percent of total in age group)		Insurance premium	Insurance premiums as a percent of income	
	Below poverty	1-2 times poverty		At poverty threshold (10,989)	At poverty threshold ($21,978)
Under 30	32.5	28.8	$1,824	17	8
30 to 39	20.2	35.7	1,992	18	9
40 to 49	34.5	29.8	2,520	23	11
50 to 59	23.1	28.8	3,120	28	14
60 to 64	40.9	32.6	3,372	31	15

Effect of Location on Insurance Costs

Health insurance premiums vary considerably from one location to another, particularly between rural and urban areas. This results from such factors as higher costs in urban areas of living in general and medical costs in particular. Major differences also are evident among large urban areas. In Ohio, for example, premiums in Cleveland and Toledo averaged 16-24 percent more than in Columbus, Cincinnati, Akron, and Dayton.

Although our analysis of premium costs generally was limited to Ohio, information on costs outside of Ohio indicates that cost variation was even more dramatic when one area of the country was contrasted with another. A comparison of Cleveland with eight metropolitan areas outside of Ohio showed that premium costs in five areas were higher by up to 72 percent, and in three areas lower by as much as 17 percent.

Cost of Insurance to Employers

For many in the United States, health insurance is made available and affordable by employer contributions to policy costs. In fact, most insured obtain health insurance through employer- or union-sponsored plans. However, even though employers are the principal providers of health insurance in the United States, 72 percent of uninsured persons between 19 and 65 are employed. Firms not offering health insurance cite its high cost as a major reason.

Nearly all full-time permanent workers in medium and large firms were covered by employer-sponsored health insurance, according to a 1986 Bureau of Labor Statistics' survey of employee benefits. Although employer contributions varied, the proportion of employees whose health insurance premiums were wholly financed by their employer

declined sharply. Fifty-four percent of employees had individual coverage that was wholly employer-financed in 1986, down from 61 percent the previous year, the survey showed. For 35 percent of employees, the full cost of dependent coverage was provided, a 7-percent drop from 1985. Where information was available, it showed that employees of medium or large firms paid $156-$492 a year towards their individual and family coverage, respectively.[2]

A number of employer characteristics influence an employer's decision to provide employee health insurance. Just as an individual weighs economic, health, and personal factors, an employer considers such factors as its wage or salary levels, profit margin, how its current benefit packages compare with those of competitors, and the premium cost to the employer. Again we used premium costs for our model policy to provide a perspective on how insurance costs can affect decisions to purchase health insurance—this time, decisions by employers. An employer providing full-coverage in 1985 for a 40-year old, head of a household of four, would have incurred premium costs ranging from $2,460 to $4,104 (see table 3.2). Although the actual financial effect on an employer must be adjusted for administrative costs and taxes, this yearly premium equals a weekly cost of $47.31-$78.92 per employee, or $1.18-$1.97 per employee hour. For employers of minimum wage individuals ($3.35/hour in 1985), this cost equates to a 36-59-percent wage increase.

Health Problems Can Deter Purchase of Insurance

Existing health problems may restrict an individual's access to insurance or result in higher premium costs, particularly for persons seeking nongroup policies. Because medical costs are much less predictable for individuals then for large groups, insurance companies try to minimize the increased risk on individual policies by asking extensive questions pertaining to health status.

Whether an insurance company will sell a nongroup policy depends on the health status of the individual (and his/her dependents) as determined by questionnaire responses. A company may (1) deny coverage, (2) increase the premium cost, or (3) require a preexisting medical condition limitation. For example, a company may raise the premium or deny coverage if diabetes or alcohol-related illness is identified on the health questionnaire. This method of minimizing insurance risks helps

[2]U.S. Department of Labor, Bureau of Labor Statistics, Employee Benefits in Medium and Large Firms in 1986, June 1987.

predict policy costs but also restricts access to coverage. Various medical conditions that Ohio insurance companies frequently consider in deciding whether coverage will be provided are listed in appendix VIII. Four insurance companies that do business in Ohio deny 5-32 percent[3] of applications because of a preexisting condition, according to information they provided. Although we are unable to project our data to all of Ohio, it is clear that preexisting medical conditions preclude purchase of insurance by some individuals who can afford it.

Generally, a questionnaire is not used for large-group applicants. When used, it is limited because the insurance company spreads its risk over the entire group. Of 13 companies that gave us information:

- Seven do not seek information on the health status of members in large groups, but do request it for individual policies.
- Two that request health status for individual policies do not ask specific questions related to a disease for group applicants, but try to determine if pregnancy exists or group applicants are currently ill or receiving continuous health care.
- Two request health status information on everyone they insure.
- Two request no medical information.

Consequently, it is easier for someone with a preexisting medical condition to obtain health insurance through a group—although the choice of insurance company also can be important.

[3]Several companies we spoke with provided us with an estimate. Because these data are not projectable, caution should be used in interpreting them.

Provision of Care to Ohio Uninsured by Public Programs

Health insurance protects individuals and families from high medical costs. It also gives added assurance that medical care will be available, as some providers are reluctant to perform services when collection of fees is uncertain. For the uninsured, medical care is often available from publicly subsidized programs, but the extent to which these programs meet their health care needs is not known.

That public programs are reducing the gap in access to care between insured and uninsured is indicated by studies examining trends in health care. Several states have established health insurance programs for low-income individuals or for high-risk individuals unable to obtain private coverage. In Ohio, state and local programs support in excess of 2 million health care visits annually from low-income patients. But access to program services is not uniformly available to Ohio's uninsured population. Access differs because (1) local programs do not offer identical services, and (2) eligibility criteria differ.

Ohio programs in which state and local governments participated in 1985 and 1986 and that either financed or provided health care for uninsured and other, primarily low-income individuals are identified in table 4.1. Most of these programs received considerable federal support.

Table 4.1: Publicly Subsidized Health Care Programs in Ohio (1985-86)

Program	Primary source of funds	Public funding (millions, est.) 1985	Public funding (millions, est.) 1986	Visits by patients including insured individuals (est.) 1985	Visits by patients including insured individuals (est.) 1986
Community health centers	Federal	$14.6	$16.4	128,000	139,000
Child and Family Health Services	Federal/state	4.3	4.3	450,000	450,000
Block and categorical grants, Ohio Department of Health	Federal	195.3	202.8	[a]	[a]
General Relief-Medical	State/local	141.8	144.9	1,982,000	1,895,000
City and county department of health clinics	Local	128.3[b]	[a]	900,000	[a]
Free Medical Clinic of Greater Cleveland	Donations/federal-state	0.9	0.9	42,000	45,000
Hospitals	Federal/state	[a]	[a]	[a]	[a]

[a]Not available.

[b]Includes patient and insurance payments.

In addition to these programs, Medicaid, a federal/state health insurance program, covers medical services for very low-income people unable to pay for their own care. In fact, Medicaid reimbursements helped support several programs listed in table 4.1. In 1985, the federal

government provided $1.03 billion and the state $742 million to support Ohio's Medicaid program. Roughly one-third of Ohio's population with income under the federal poverty level is eligible for Medicaid, while another one-third has other types of health insurance. Presumably, many of the remaining third rely on programs such as those listed in table 4.1 for health care services. In fact, a recent GAO report[1] noted that the availability of free or low-cost care in some communities could explain why few uninsured women cited lack of money as a primary barrier to prenatal care.

Federally Supported Programs Provide Care

Several programs that are supported primarily by federal funds provide health care to Ohio's uninsured population. Community health centers, Child and Family Health Services, and several block and categorical grant programs generally support health care services to low-income persons, although those judged able to pay also can obtain care for a fee based on a sliding scale (see p. 41).

Community Health Centers

Community health centers provide primary and supplemental health services and refer individuals to other doctors and to hospitals when necessary. Primary care includes physician, diagnostic laboratory and radiologic, emergency medical, and preventive dental services. Supplemental care includes vision, mental health, ambulatory surgical, dental, health education, home health, and hospital services. The centers are financed in part through the federal government's Primary Care Block Grant, which provided Ohio with about $14.6 million in fiscal year 1985. Other sources of funds include insurance reimbursements for services to patients covered by Medicare, Medicaid, General Relief-Medical (see p. 42), and private insurance, and payments by self-paying patients.

Community health centers are located in areas the federal government has designated "medically underserved." In January 1987, 14 Ohio counties and selected areas in 38 other counties were so designated. Thirty-nine community health centers were located in 21 of the counties.[2] The numbers of low-income individuals served by the centers have been increasing, according to the Ohio Department of Health, from about 128,000 patient visits in 1985 to some 139,000 in 1986.

[1]Prenatal Care: Medicaid Recipients and Uninsured Women Obtain Insufficient Care (GAO/HRD-87-137, Sept. 30, 1987).

[2]Of the 21 counties, 13 had one center, 4 had two, 1 had three, 1 had four, 1 had five, and 1 had six.

At four community health centers we visited in three counties (Cuyahoga, Hamilton, and Lucas), a sliding scale of fees, based on federal poverty guidelines, was used to charge for services provided. For example, at one center the fee ranged from zero for families of four with incomes below $11,000 to 100 percent of the actual service cost for families of four with incomes greater than $22,000. Two centers also charged a minimum fee, which could be waived under special circumstances.

At one center, 39.5 percent of the patients had Medicaid coverage, 10 percent had Medicare, 14 percent were covered by Ohio's General Relief-Medical program, and another 3.5 percent had private insurance, according to the director. The remaining 33 percent were without insurance. A second center reported a similar situation—about 10 percent of patients had General Relief-Medical, while 31 percent were without health insurance.

Child and Family Health Services Program

Since April 1984, Ohio's Child and Family Health Services Program has supported comprehensive primary health care for women and children. In addition, the program promotes public health and preventive health for children and their families, particularly families having low incomes or those experiencing unemployment. One important way the program achieves its objectives is through such clinical services as perinatal health services; infant, child, and adolescent health services, including speech and hearing care; and family planning and reproductive health services. Care is provided through hospitals, Department of Health clinics, and community health centers under contract with Ohio's Department of Health. From April 1984 to December 1986, the program received about $7.6 million in federal Maternal and Child Health Block Grant funds and $4.3 million in state funds. Other sources of funds include insurance reimbursements and patient payments. The program has no financial eligibility requirements. Child and Family Health Services are available at over 100 locations in 74 of Ohio's 88 counties. Program officials estimate 450,000 patient visits are handled each year.

We visited five counties that provided services under the Child and Family Health Services Program. Services are administered by a hospital in one county, county department of health clinics in two counties, and four different organizations in each of the remaining two counties. In each county, program services are provided by the administering organization and/or contracted for with other health providers who perform services the administering organization cannot provide.

Each program requires patients without insurance to pay for services according to a sliding scale. If family income is below the federal poverty guideline, the service is free. As family income exceeds the poverty guideline, fees increase to a point where some families are asked to pay 100 percent of the standard charge for the services they receive. Federal and state funding for the program in the five counties we visited is shown in table 4.2.

Table 4.2: Child and Family Health Services Program Funding in Five Ohio Counties (1984-86)

	Public funding (thousands)[a]		
County	**Federal**	**State**	**Total**
Cuyahoga	$675.0	$2,462.5	$3,137.5
Franklin	2,150.1	0	2,150.1
Hamilton	53.4	765.0	818.4
Lucas	471.9	0	471.9
Montgomery	1,658.0	0	1,658.0
Totals	**$5,008.4**	**$3,227.5**	**$8,235.9**

[a]Other funds, such as self-pay monies, may be received by these programs.

Other Federally Funded Programs

Another $200 million in federal funds are received annually by Ohio's Department of Health through other grants and programs. Although not specifically targeted to provide health care for the uninsured, these funds provide a variety of health benefits to many Ohio residents, including the uninsured. The health services they support are described in appendix IX.

State and Locally Financed Programs

Ohio's state and local governments are the principal financial supporters of two programs that provide extensive health services to the low-income and uninsured—(1) the General Relief-Medical program and (2) city and county health department clinics. In both 1985 and 1986, the General Relief-Medical program reimbursed health care providers for almost 2 million patient visits. Its primary beneficiaries are the uninsured; in fact, program benefits are directed to low-income individuals not eligible for Medicaid. The program covers the same types of services as Medicaid and is available in every county in Ohio, although program funding and services covered vary from one county to another. Services from city and county health department clinics also are available to many of Ohio's uninsured. Nearly all of Ohio's 156 local health departments either operate a clinic or contract for health care services.

Ohio's General Relief-Medical Program

Between 1985 and 1986, General Relief-Medical program funding increased by over $3 million, from $141.8 to $144.9 million. During this same period, however, patient visits reimbursed by the program declined from 1.98 million to 1.89 million (see table 4.1). The average cost per visit supported by the General Relief-Medical program in the five counties we visited varied in 1986 from about $72 to $151.

Table 4.3: General Relief-Medical Program Patient Visits and Costs in Five Ohio Counties (Fiscal Year 1986)

County	Patient visits	Payments	Average cost per visit
Cuyahoga	552,719	$50,456,291	$91.29
Franklin	112,316	16,976,337	151.15
Hamilton	146,751	10,508,767	71.61
Lucas	112,334	7,789,087	69.34
Montgomery	72,637	6,927,305	95.37
Totals	**996,757**	**$92,657,787**	**$92.96**
Totals for all 88 Ohio counties	**1,894,957**	**$144,866,879**	**$76.45**

The Ohio Department of Human Services sets income and asset eligibility criteria and specifies what medical services must be covered under the General Relief-Medical program. On a day-to-day basis, the program is administered by county departments of human services with funds provided by the state and local governments. The county departments determine whether applicants meet eligibility criteria, monitor continuing eligibility for the program, and pay providers for medical services. In most counties, individuals eligible for General Relief-Medical are issued a medical card similar to that given Medicaid recipients.

While Ohio requires that each county cover certain mandatory medical services, counties may opt to cover additional services (see table 4.4). Because the counties determine the extent of coverage under the mandatory service categories, the level of assistance provided varies throughout the state. For example, although the state requires coverage of hospital stays, individuals can receive up to 30 days of inpatient hospital care in 27 Ohio counties, 10-14 days in 17 counties, and 3-7 days in 36 counties.

Table 4.4: Services Covered Under Ohio's General Relief-Medical Program and Medicaid

Services	No. of counties with coverage	
	Same as Medicaid	Less than Medicaid
Mandatory:		
Dental	32	56
Hospital visits	76	12
Inpatient services	27	61
Outpatient	56	32
Physician visits	71	17
Optional:		
Ambulance	40	48
Health care center	[a]	a
Home health	63	25
Laboratory	47	41
Medical supplies	[a]	[a]
Pharmacy	44	44
Vision	29	59

[a]Data unavailable.

Counties select reimbursement levels for the specific services they provide but may not exceed Medicaid-allowed reimbursement levels. Counties may not change the Medicaid-allowed reimbursement levels for inpatient and outpatient care. The counties may, however, control inpatient and outpatient payments by limiting services covered.

City and County Department of Health Clinics

For many of Ohio's uninsured, medical treatment is available at city and county department of health clinics. Nearly all of Ohio's 156 city and/or county departments of health either operate a clinic or contract with providers of care for health services. These clinics offer services similar to those provided by community health centers and, like the centers, primarily serve individuals from the surrounding area. The clinics provided care for about 900,000 patient visits in 1985. The five departments of health that we visited accounted for about one-third of these visits (see table 4.5).

Table 4.5: Number of Clinics and Patient Visits at Five City and County Departments of Health (1985)

Department of health	No. of clinics	Patient visits (estimated)
City of Cleveland Department of Health and Human Services	3	85,000
The Columbus Department of Health	6	41,000
City of Cincinnati Department of Health	6	95,000
Toledo-Lucas County Department of Health	2	13,000
Montgomery County Combined General Health District	8	65,000

Most funding for the city and county department of health clinics comes from local taxes and fees for services. In 1985, funding totaled $128.3 million: $92.6 million in local funds (including insurance reimbursements), $20.9 million in state funds (including some federal funds received by the Ohio Department of Health), $11.7 million received directly from federal contracts or grants, and $3.1 million from various other sources.

Individuals who have neither private nor public health insurance are required to pay for the services they receive on a sliding scale based on their income. Results from a 1985 study examining the reimbursements for services provided by clinics in Cleveland during 1984 indicate that many of the patients served were without health insurance. At one clinic, 60 percent of the patients were uninsured and subject to the sliding scale of fees, the study showed. Another 31.5 percent had Medicaid coverage, 7.4 percent had other public insurance, 0.7 percent had Medicare coverage, and 0.4 percent had private insurance. Of patients subject to the sliding scale fee, about 58 percent paid all or some of their bill. Among those who made some sliding-scale payment, most (66 percent) paid only 10 percent of the amount owed.

Two other departments of health had similar information on patients using their services. The Columbus Department of Health reported in 1985 that 60 percent of the patient visits to its six clinics were subject to the sliding scale fee. Hamilton County reported that 31-51 percent of its patients were subject to the sliding scale fee at its clinics. Other patients visiting these clinics provided reimbursement through public or private health insurance.

Care Also Provided by Ohio Hospitals and a Free Clinic

Most Ohio hospitals have no obligation under federal law to provide unreimbursed care except in emergencies. Nonetheless, a number of the state's hospitals and a private free clinic in Cleveland do provide care to individuals without health insurance. Fifty-nine hospitals have outstanding Hill-Burton obligations,[3] under which they agree to provide a reasonable volume of uncompensated services to persons unable to pay. Also, in 1983, 140 of Ohio's 205 nonpsychiatric hospitals provided an estimated $262 million (3.9 percent of their gross revenue) in uncompensated care, according to the Ohio Hospital Association.

The private Free Medical Clinic of Greater Cleveland, an ambulatory health care center, treats short-term medical, dental, and psychological problems. It has no fees or eligibility requirements for use of its services. We did not determine if other clinics provide care to the uninsured elsewhere in Ohio.

Hospitals Provide Uncompensated Care

Some Ohio hospitals provide a significant amount of uncompensated care to individuals without health insurance. Although there is no agreed-upon definition, free or uncompensated care is widely used to refer to charity care, bad debts, and care provided under the Hill-Burton Act.

Of 10 hospitals (2 in each of five Ohio counties) we visited to determine the amount and types of care they provided to the uninsured, all attempted to limit uncompensated care. They did so by (1) encouraging individuals to apply for public assistance and (2) applying copayment amounts based on a sliding scale fee. At each hospital, staff would help uninsured individuals with limited assets and income complete an application for public assistance. (We selected these 10 hospitals because the Ohio Hospital Association and other health officials reported that each provided considerable uncompensated care.)

Three of the five counties we visited—Cuyahoga, Hamilton, and Montgomery—levy special taxes to help institutions defray such general operating costs as uncompensated care. In Cuyahoga county, about $20-$24 million annually in tax funds are provided to the Cleveland

[3]Obligations under the Hill-Burton Act were created between 1946 and 1976, when federal funds were provided to build and modernize public and not-for-profit hospitals and other health care facilities. In return for federal support, facilities agreed to provide, for 20 years, a reasonable volume of uncompensated services to persons unable to pay. Because the 20-year period has expired in many cases, Ohio has only 59 hospitals with outstanding Hill-Burton obligations; 23 of these are scheduled to fulfill their obligations by 1990.

Metropolitan General/Highland View Hospital, the only hospital in the county receiving the special tax monies.

In Hamilton County, a "health and hospitalization tax" generates approximately $25 million annually. This special tax supplements general operating funds at two Ohio hospitals. About $20 million goes to the University of Cincinnati Medical Center and $5 million to the Children's Hospital Medical Center.

The two hospitals we visited in Montgomery County and the county's other four hospitals shared special tax monies totaling about $5 million in 1986. The tax monies can be used to defray two-thirds of free care provided to low-income individuals, while the hospital must incur one-third of the cost. Individuals benefiting from these monies must have applied for and been denied Medicaid or General Relief-Medical. Such individuals may be charged a copayment amount, based on their financial resources and income, for hospital services.

The remaining two counties had no special tax; however, hospitals in these counties provided significant amounts of uncompensated care. Officials from two Franklin County hospitals told us that in 1985 their hospitals provided $5.9 million (about 5 percent of gross revenue) and $4.6 million, respectively, in uncompensated care. (The second hospital did not provide information on the percent of uncompensated care to gross revenue.) In Lucas County, uncompensated care amounted to about 5 or 6 percent of gross revenue, officials at two hospitals told us.

Care Provided by Free Clinic of Greater Cleveland

The Free Medical Clinic of Greater Cleveland provides care for short-term acute medical, dental, and psychological problems to people living in the greater Cleveland area. There are no charges for services and no eligibility requirements. During 1986, treatment was provided to about 30,000 patients who made about 45,000 visits to the clinic. The clinic's 1986 budget was about $900,000, with 50 percent coming from private sources and 50 percent from federal, state, and local government sources.

Most clinic users are from surrounding neighborhoods. Usually, the clientele are unemployed or low-income, employed individuals who do not qualify for public assistance. Although individuals visiting the clinic are told the services will be free, they are asked to take an envelope for a possible future donation to the clinic.

While the clinic has approximately 40 full- and part-time paid staff, it relies heavily on volunteers. Over 400 individuals volunteer their time on a regular basis to help the clinic's paid staff.

Concluding Observations

Health insurance generally provides added assurance that health care will be available when needed and, depending on the extent of coverage, that care will be affordable. For millions of uninsured persons, federal, state, and local government programs have enhanced access to health care. Yet studies show that the uninsured continue to use less care than the insured. Concerning these uninsured Americans, there is a major federal policy debate—should the federal government do more to improve their access to health care? Could such improvements be provided equitably and within the confines of our current medical care delivery system?

While 37 million Americans are uninsured, some may be able to afford insurance or, as in parts of Ohio, may have low-cost care available. The underlying problem facing policymakers is to identify and provide health care access for individuals who cannot afford insurance and have no health care alternatives. This group is susceptible to adverse health consequences and is in need of assistance.

Several remedies[1] for problems associated with the uninsured have been suggested. While these remedies generally would enhance access to health care for large numbers of people, they would be costly. For example, expanding Medicaid to provide insurance for some of those not currently eligible could greatly increase federal and state costs. Similarly, requiring employers to provide insurance would significantly affect the financial situations of many employers and, in turn, result in adjustments, such as product price increases, reduced wage and salary growth rates, and changes in hiring practices (for example, fewer part-time employees). Policymakers who look to employer-related strategies as a vehicle for expanding insurance among workers must weigh the consequences of the adjustments businesses will have to make.

A myriad of reasons, circumstances, and interrelationships are associated with or contribute to being uninsured. Within this maze are obvious explanations why groups of individuals are uninsured. In some cases, insurance simply is unaffordable, in others individuals' health status preclude their purchasing insurance or they have adequate alternatives for medical care. For many uninsured, however, there is no clear explanation. Families with seemingly identical financial and health situations may reach different decisions about health insurance purchases.

[1] A detailed discussion of several options to improve access to health care will be contained in a forthcoming GAO report: Health Insurance: An Overview of the Employed Uninsured (GAO/HRD-88-82). Another GAO report discusses one approach for helping the high-risk uninsured. See Health Insurance: Risk Pools for the Medically Uninsurable (GAO/HRD-88-66BR, Apr. 13, 1988).

Because the uninsured are heterogeneous, there may not be one clearly identifiable, fair way to make health care available to all of them.

Current Population Survey

The Bureau of the Census' Current Population Survey is the source of official government statistics on employment and unemployment. Currently, about 56,500 households are interviewed each month. Households are scientifically selected on the basis of area of residence to represent the nation as a whole, individual states, and other specified areas. The universe is the civilian noninstitutional population of the United States and male members of the Armed Forces living with their families in civilian housing units or on a military base. A probability sample is used in selecting housing units. Each household is interviewed once a month for 4 consecutive months during a 1-year period, and again for the corresponding time period a year later. This technique enables Census to obtain month-to-month and year-to-year comparisons at reasonable cost.

Also known as the Annual Demographic File, the Current Population Survey provides monthly labor force data, including supplemental data on work experience, income, noncash benefits, and migration. Comprehensive information is collected on the employment status, occupation, and industry in which individuals work. Additional data is available on the number of weeks and hours per week individuals worked and the individuals' total income.

Although the main purpose of the survey is to collect data on the employment situation, an important secondary purpose is to gather information on the demographic status of the population. This includes age, sex, race, marital status, educational attainment, and family structure. The resultant figures serve to update similar information collected once every 10 years through the decennial census. Government policymakers and legislators use the data as important indicators of our nation's economic situation and to plan and evaluate many government programs.

In addition, the Current Population Survey provides current estimates of the economic status and activities of the U.S. population. Because it is not possible to develop one or two overall figures (such as the number of unemployed) that would adequately describe the whole complex of labor market phenomena, the survey is designed to provide a large amount of detailed and supplementary data. Such data are made available to users of labor market information to meet a variety of needs.

The survey provides the only data available on the distribution of workers by number of hours worked (as distinguished from aggregate or average hours for an industry). This permits separate analyses of part-

time workers, workers on overtime, etc. Also, the survey is the only comprehensive, current source of information on the occupation of workers and the industries in which they work. Not only is information available for persons currently in the labor force, but also for those outside the labor force. Thus, the characteristics of the latter—married women with or without young children, disabled persons, students, older retired workers, etc.—can be determined.

Uninsured Population by Region and State (1985)

Region/state	No. of uninsured (hundreds)[a]	Uninsured as a percent of State population	Uninsured as a percent of U.S. population
East North Central:			
Illinois	15,376	14.6	4.2
Indiana	8,364	17.5	2.3
Michigan	10,053	12.4	2.7
Ohio	13,575	14.4	3.7
Wisconsin	4,168	10.1	1.1
East South Central:			
Alabama	7,292	20.6	2.0
Kentucky	7,098	22.0	1.9
Mississippi	5,261	23.3	1.4
Tennessee	855	21.0	2.3
Middle Atlantic:			
New Jersey	8,250	12.4	2.2
New York	25,272	16.3	6.8
Pennsylvania	12,937	13.1	3.5
Mountain:			
Arizona	6,217	21.6	1.7
Colorado	5,562	19.1	1.5
Idaho	1,988	22.3	0.5
Montana	1,422	18.8	0.4
Nevada	1,814	20.6	0.5
New Mexico	3,029	23.0	0.8
Utah	2,176	14.2	0.6
Wyoming	860	18.5	0.2
New England:			
Connecticut	2,628	9.7	0.7
Maine	1,193	12.3	0.3
Massachusetts	6,696	13.0	1.8
New Hampshire	1,095	12.5	0.3
Rhode Island	1,034	12.9	0.3
Vermont	714	15.2	0.2
Pacific:			
Alaska	807	16.3	0.2
California	51,613	21.6	14.0
Hawaii	1,018	11.0	0.3
Oregon	4,156	17.4	1.1
Washington	6,620	16.8	1.8

(continued)

Region/state	No. of uninsured (hundreds)[a]	Uninsured as a percent of State population	Uninsured as a percent of U.S. population
South Atlantic:			
Delaware	982	17.8	0.3
District of Columbia	1,188	22.4	0.3
Florida	22,825	23.8	6.2
Georgia	9,585	18.3	2.6
Maryland	5,705	15.1	1.5
North Carolina	9,001	16.8	2.4
South Carolina	4,085	14.4	1.1
Virginia	7,746	15.7	2.1
West Virginia	2,987	18.7	0.8
West North Central:			
Iowa	3,453	14.3	0.9
Kansas	2,845	13.8	0.8
Minnesota	4,283	11.8	1.2
Missouri	7,406	16.9	2.0
Nebraska	2,114	15.2	0.6
North Dakota	805	13.2	0.2
South Dakota	1,147	19.1	0.3
West South Central:			
Arkansas	4,996	24.5	1.4
Louisiana	8,836	22.8	2.4
Oklahoma	7,419	25.2	2.0
Texas	34,731	23.6	9.4

[a]Excludes ages 65 and over.

Discriminant Function Analysis

The purpose of discriminant function analysis is to distinguish statistically between two or more groups. For our study, we attempted to distinguish between two groups of individuals in the United States aged 19-65: (1) those with health care coverage and (2) those without.

We selected 10 variables that measure characteristics in which the two groups were expected to differ. These variables were: (1) the ratio of family income to the poverty level, (2) marital status, (3) employment status, (4) sex, (5) personal income, (6) region of the United States in which the individual lived, (7) major industry in which the person was employed the longest during the last year, (8) age, (9) major occupation in which the person was employed the longest during the last year, and (10) race. Our mathematical objective was to combine these variables so that the two groups were forced to be as statistically distinct as possible.

We conducted the mathematical procedure so as to seek out the variable that alone best distinguished the two groups from each other. As a second step, we looked for the second variable that, when taken in combination with the first, best explained the difference between the two groups. This process was continued until no additional significant variables remained to be added. We defined a significant variable as one that had an F statistical value equal to or greater than 1.0.[1] The variables tested, the computed F-value for each variable, and the percentage of the variance between the two groups explained by the variables that have entered the analysis at that step are shown in table III.1.

Our analysis accounted for only 15 percent of the variance among the two groups. But the 10 variables allowed us to correctly predict 75 percent of the time who was insured and who was uninsured, and each variable was significant for the U.S. population. By far the most significant variable was the ratio of family income to the poverty level. This variable represented about two-thirds (10 of 15 percent) of the variance identified among the two groups in our analysis.

When we studied only the Ohio population, the 10 variables allowed us to correctly predict, 72 percent of the time, the insured and the uninsured; only five variables were significant. Their order of significance is presented in table III.1. Ratio of family income to poverty level in Ohio, as in the nation, was the most significant variable, representing more

[1]The F test enabled us to test for the significance of the difference between two or more sample means. For further discussion of the F test, see Morris Hamburg, Statistical Analysis for Decision Making, 1st ed., pp. 437-453.

than half (7.8 of 14.4 percent) of the variance among the two groups in our analysis. However, this variable was not as significant in explaining the difference between the two groups in Ohio as it was for the nation.

Table III.1: Importance of 10 Characteristics in Identifying Uninsured Persons (U.S. and Ohio Populations)

Order of importance	Characteristic	F-value	Percent of variance explained(R^2)	Accumulated percent of variance explained
U.S. population:				
1	Ratio of family income to poverty level	8,250.89	10.082	10.082
2	Marital status	5,354.94	2.673	12.705
3	Employment status	3,961.94	1.201	13.906
4	Sex	3,098.80	0.511	14.417
5	Personal income	2,616.98	0.681	15.098
6	Region	2,248.23	0.394	15.492
7	Industry	1,935.37	0.057	15.549
8	Age	1,697.66	0.033	15.582
9	Occupation	1,512.23	0.028	15.610
10	Race	1,361.40	0.004	15.614
Ohio population:[a]				
1	Ratio of family income to poverty level	255.198	7.872	7.872
2	Marital status	196.770	3.774	11.646
3	Employment status	153.108	1.691	13.337
4	Sex	119.327	0.455	13.792
5	Personal income	100.212	0.591	14.383

[a]Only 5 characteristics were statistically significant.

GAO's Composite Model Health Insurance Policy

To obtain an average health insurance cost in Cleveland, we asked 15 insurance companies to provide premiums they would charge for a GAO-developed health insurance policy. We developed the policy from our review of pertinent literature and discussions with Ohio insurance officials. It contained coverage similar to that normally provided by employers and conformed with Ohio state insurance laws.

Data Required

We sought the current annual premium for a health insurance policy for a family of four purchased either under a group plan or individually and based on age categories of under 30, 30-39, 40-49, 50-59, and 60-64. In developing the rate, the insurers were asked to assume that the husband and wife were the same age, were residents of Cleveland, and had no preexisting medical conditions.

Coverage Provisions

The policy contained the following coverage provisions:

General Policy Conditions (Major Medical Benefits)

- Individual deductible—$250 per calendar year per person
- Family deductible—two individuals meeting the deductible
- Coinsurance—80 percent of the first $2,000, then nothing for the remainder of the calendar year
- Lifetime maximum—$1 million per person
- Lifetime inpatient nervous/mental maximum—$10,000

Inpatient Care

- General hospital—120 days of semiprivate room and board per calendar year
- Specialty hospital—60 days per calendar year
- Alcoholism—45 days per calendar year
- Mental disorders—60 days per calendar year
- Skilled nursing benefits—60 days per calendar year
- Full maternity benefits
- Operating and recovery room usage
- Diagnostic X-rays, radiation therapy, laboratory services, EKGs, and EEGs
- Medical and surgical supplies, dressings, and casts
- Anesthesia, oxygen, and physiotherapy
- Drugs
- Ambulance
- Dental (for impacted teeth or repair due to an accident)

Outpatient Care

- Accidental injury within 72 hours of occurrence (initial visit)
- Medical emergencies for sudden and serious illness
- Diagnostic X-rays, radiation therapy, laboratory services, EKGs, and EEGs
- Chemotherapy service for malignancies
- Physical and occupational therapy—combined 30 visits per year
- Preadmission testing before inpatient surgery
- Home health care—up to 75 visits per calendar year
- Mental disorders—$550 per year per payment
- Kidney dialysis
- Nurse-midwife and supervising physician

Medical/Surgical[1]

- Surgery and fractures
- Maternity and newborn care
- In hospital—attending medical care and consultation
- Emergency medical care at hospital—initial visit within 72 hours of an accident
- Diagnostic X-ray, radiation therapy, radioisotope studies and therapy, ultrasound studies, and approved imaging procedures
- Special services including lab procedures, physical and occupational therapy, appliances, and miscellaneous procedures up to an annual maximum of $1,000
- Periodic physical exams
- Services of licensed psychologist, osteopath, optometrist, chiropractor, or podiatrist
- Drugs (using a drug card with a $5 deductible per prescription)

[1]Payments based on usual or customary charge.

Organizations Contacted in Ohio

State Departments

- Ohio Department of Health
- Ohio Department of Human Services
- Ohio Department of Insurance

State- and Regional-Level Associations and Organizations

- Ohio Hospital Association
- Ohio Health System Agency (HSA)
- I Central Ohio River Valley Association
- II Miami Valley
- IV Northwest Ohio Health Planning, Inc.
- V Scioto Valley
- VI Ohio Hills
- IX Health Systems Agency of North Central Ohio
- X Health System Agency of Eastern Ohio

Local-Level Organizations

Cuyahoga County

- Department of Human Services
- Greater Cleveland Hospital Association
- Cleveland Metropolitan General Hospital
- University Hospital of Cleveland
- Cleveland Department of Health
- Community Health Centers
- Cleveland Free Clinic
- Federation of Community Planning

Franklin County

- Department of Human Services
- Columbus Health Department
- Central Ohio Hospital Association
- Mount Carmel Health Hospital
- Doctor's Hospital

Hamilton County

- Department of Human Services
- Greater Cincinnati Department of Health
- Cincinnati Health Network (Community Health Centers)
- St. Francis/St. George Hospital
- University Hospital of Cincinnati

Lucas County

- Department of Human Services
- Toledo-Lucas County Health Department
- Community Health Centers
- Toledo-Lucas Council of Human Services
- Toledo Hospital Association
- Riverside Hospital
- St. Vincent Medical Center (Hospital)

Montgomery County

- Department of Human Services
- Combined Health District (Dayton/Montgomery County)
- Greater Dayton Area Hospital Association
- Miami Valley Hospital
- St. Elizabeth Medical Center (Hospital)

Insurance Companies

- Aetna Life & Casualty
- Central Reserve Life of North America Insurance Company
- Community Mutual Insurance Company
- Connecticut General Life Insurance Company
- Continental Assurance Company
- Credit Life Insurance Company
- Health Care Mutual Association
- Metropolitan Life Insurance Company
- Mutual of Northern Ohio
- Mutual of Omaha Insurance
- Nationwide Life Insurance Company
- New York Life Insurance Company
- Ohio State Life Insurance Company
- Prudential Insurance Company of America
- The Travellers Insurance Company

States With Highest Numbers and Rates of Uninsured Under Age 65 (1985)

	Highest rates of uninsured			
	Uninsured		Insured	
State	No.	Percent	No.	Percent
Oklahoma	741,853	25.2	2,202,961	74.8
Arkansas	499,637	24.5	1,538,074	75.5
Florida	2,282,527	23.8	7,294,646	76.2
Texas	3,473,106	23.6	11,233,709	76.4
Mississippi	526,087	23.3	1,735,080	76.7
New Mexico	302,913	23.0	1,013,330	77.0
Louisiana	883,644	22.8	2,995,109	77.2
District of Columbia	118,782	22.4	411,885	77.6
Idaho	198,792	22.3	692,775	77.7
Kentucky	709,842	22.0	2,510,166	78.0

	Highest numbers of uninsured		
	Uninsured		Percent of
State	No.	Percent	U.S. uninsured
California	5,161,276	21.6	14.0
Texas	3,473,106	23.6	9.4
New York	2,527,172	16.3	6.8
Florida	2,282,527	23.8	6.2
Illinois	1,537,563	14.6	4.2
Ohio	1,357,460	14.4	3.7
Pennsylvania	1,293,653	13.1	3.5
Michigan	1,003,462	12.4	2.7
Georgia	958,489	18.3	2.6
North Carolina	900,141	16.8	2.4
	20,494,849		55.5

Maximum Income for Medicaid Eligibility Based on Annual Income (As of Dec. 1986)

State	AFDC income standard[a] (family of three)	Percent of federal poverty level[b]	State	AFDC income standard[a] (family of three)	Percent of federal poverty level[b]
Alabama	$1,416	15.5	Montana	$3,984	43.7
Alaska	8,880	77.9	Nebraska	4,200	46.1
Arkansas	2,304	25.3	Nevada	3,420	37.5
California	7,404	81.2	New Hampshire	4,668	51.2
Colorado	5,052	55.4	New Jersey	4,848	53.2
Connecticut	6,060	66.4	New Mexico	3,096	33.9
Delaware	3,720	40.8	New York	5,964	65.4
District of Columbia	4,200	46.1	North Carolina	2,952	32.4
Florida	3,024	33.2	North Dakota	4,452	48.8
Georgia	3,072	33.7	Ohio	3,624	39.7
Hawaii	5,616	54.0	Oklahoma	3,720	40.8
Idaho	3,648	40.0	Oregon	4,764	52.2
Illinois	4,092	44.9	Pennsylvania	4,380	48.0
Indiana	3,072	33.7	Rhode Island	5,292	58.0
Iowa	4,572	50.1	South Carolina	4,560	50.0
Kansas	4,524	49.6	South Dakota	4,392	48.2
Kentucky	2,364	25.9	Tennessee	1,860	20.4
Louisiana	2,280	25.0	Texas	2,208	24.2
Maine	6,432	70.5	Utah	8,316	91.2
Maryland	4,140	45.4	Vermont	6,372	69.9
Massachusetts	5,712	62.6	Virginia	3,492	38.3
Michigan	5,388	59.1	Washington	5,904	64.7
Minnesota	6,384	70.0	West Virginia	2,988	32.8
Mississippi	4,416	48.4	Wisconsin	6,528	71.6
Missouri	3,348	36.7	Wyoming	4,320	47.4

[a]Under AFDC, each state establishes a need standard and a payment standard, which may be the same or less than the need standard. Determination of eligibility for AFDC and resulting Medicaid benefits is computed by subtracting from the family's gross annual income a $30-a-month disregard ($360) and one-third of the family's monthly income, for a maximum of 4 months. Some states may also subtract from the income an amount to cover such items as child care or work allowance. The resulting net income is then compared to the income criteria shown above (payment standard for a family of three) to determine eligibility.

[b]The federal poverty level for a family of three is $9,120, except for Alaska ($11,400) and Hawaii ($10,400).

Diseases and Conditions Listed in the Health Questionnaire Applications of Most Ohio Insurance Companies

- Advised to seek medical attention/surgery
- AIDS
- Alcoholism, drug, or chemical dependency
- Any chronic disease
- Arthritis or disease of the bones, joints, or muscles
- Asthma, emphysema, or tuberculosis
- Back or spinal disease or disorder
- Blood disorders
- Cancer, leukemia, or melanoma
- Chest discomfort
- Colitis or spastic colon
- Complications of pregnancy
- Confined to hospital or other medical facility, now or in past
- Consulted or treated by physician
- Diabetes
- Epilepsy or seizure disorder
- Esophagus, stomach, duodenum intestines, rectum, gallbladder, or liver or pancreas disorder
- Heart disease or disorder or stroke
- Hernia or hemorrhoids
- High blood pressure
- Kidney, bladder, prostate, or other genitourinary organs
- Mental or emotional disease or disorder
- Neurological disease or disorder
- Prescription drugs or other treatment regimen
- Rheumatic fever
- Rheumatism
- Tumor

Federal Grants and Programs Available to Ohio's Uninsured (Fiscal Year 1986)

Federal grant program	Used in Ohio for	Funding (FY 86) (thousands)
Block grants:		
Maternal and Child Health	Perinatal child health, family planning, genetics/sickle cell, and communication and sensory disorder programs. Medical, social, educational, and hearing and vision screening services.	$4,000
	Dental programs - Fluoride mouth rinse project, special education students, community water fluoridation, etc.	1,800
	Bureau for Children with Medical Handicaps Program - Administration of the Program.	4,000
Preventive Health	Local disease prevention grants -Support of local agencies in implementing programs aimed at disease prevention.	1,980
	Health promotion programs - Health education, e.g., decreasing such risk factors as smoking, poor dietary habits, drug and alcohol abuse, stress, and lack of exercise.	927
	Hypertension control - Screening of individuals in several cities for high blood pressure.	523
	Health incentives programs - Training programs in such areas as AIDS, rape prevention, day care, infection prevention, and fluoridation.	765
Alcohol and Drug	Alcoholism prevention programs - Local alcoholism prevention and treatment programs.	712
	Alcoholism treatment - Intervention, outpatient treatment and outreach, rehabilitation, emergency services, detoxification, and inpatient treatment.	2,127
Categorical grants	Family planning.	3,260
	Sexually transmitted disease programs.	1,680
	Black Lung program.	473
	Immunizations.	347
	AIDS testing.	188
	Tuberculosis control.	107
	Other funds for training, coordination, and education programs in such areas as child maltreatment, refugee health, data systems, primary care, and risk reduction.	[a]
	Women, Infants, and Children - Services to pregnant women and infants, including supplemental foods.	65[b]

[a]Various amounts—totals unavailable.

[b]For fiscal year 1985.

Bibliography

Aday, Lu Ann, and Ronald M. Anderson. "The National Profile of Access to Medical Care: Where do We Stand?" American Journal of Public Health, Vol. 74, No. 12, Dec. 1984.

American Hospital Association. Cost and Compassion: Recommendations for Avoiding a Crisis in Care for the Medically Indigent. The Report of the Special Committee on Care for the Indigent. Chicago: American Hospital Association, 1986.

Bass, Kristin, and Helen Darling. Addressing Problems Of Uncovered Individuals and Uncompensated Care. Washington, D.C.: The Government Research Corporation, Apr. 14, 1986.

Bazzoli, Gloria J. "Health Care for the Indigent: Overview of Critical Issues," HSR: Health Services Research, 21:3, Aug. 1986.

Blendon, Robert J., Drew E. Altman, and Saul M. Kilstein. "Health Insurance for the Unemployed and Uninsured," National Journal, May 28, 1983.

Boston Foundation, The. Boston At Risk. A Primary Health Care Seminar Report. Boston, MA: Sept. 1985.

Catholic Health Association, The. No Room in the Marketplace: Health Care of the Poor. Final Report of the Task Force on Health Care of the Poor, St. Louis, MO: The Catholic Health Association of the U.S., Apr. 1986.

Chollet, Deborah J. (Employee Benefit Research Institute, Washington, D.C.). The Erosion of Health Insurance Coverage Among the Nonelderly Population. Statement before the U.S. House of Representatives, Committee on Small Business. May 6, 1987.

Chollet, Deborah J. Uninsured in the United States: The Nonelderly Population Without Health Insurance. Washington, D.C.: Employee Benefit Research Institute, Mar. 1987.

Dallek, Geraldine. "Health Care for America's Poor: Separate and Unequal," Clearinghouse Review, Special Issue, Vol. 20, No. 4, Summer 1986.

Davis, Karen, and Diane Rowland. "Uninsured and Underserved: Inequities in Health Care in the United States," Milbank Memorial Fund Quarterly/Health and Society, Vol. 61, No. 2, 1983.

Davis, Karen, et al. "Access to Health Care for the Poor: Does the Gap Remain?" Annual Review of Public Health, Vol. 2, 1981.

Desonia, Randolph A., and Kathleen M. King. State Programs of Assistance for the Medically Indigent. Washington, D.C.: Intergovernmental Health Policy Project, George Washington University, Nov. 1985.

Employee Benefit Research Institute. "Employer Provided Health Benefits: Legislative Initiatives," EBRI Issue Brief, No. 62, Jan. 1987.

Employee Benefit Research Institute. "Financing Indigent Health Care," EBRI Issue Brief, No. 44, July 1985.

Freeman, Howard E., et al. "Americans Report on Their Access to Health Care," Health Affairs, Spring 1987.

Iglehart, John K. "Federal Policies and the Poor," Health Policy Report, The New England Journal of Medicine, Sept. 23, 1983.

Iglehart, John K. "Medical Care Of The Poor - A Growing Problem," Health Policy Report, The New England Journal of Medicine, Vol. 313, No. 1, July 1985.

Kasper, Judith A., et al. "Who Are The Uninsured?", National Health Care Expenditure Study, Data Preview. Hyattsville, MD: National Center for Health Care Services, 1981.

Leon, Mitchell. Access to Health Care in the United States: Results of a 1986 Survey. Special Report Number Two. Princeton, NJ: The Robert Wood Johnson Foundation, 1987.

Lewin, Marion Ein and Lawrence S. Lewin. "Health Care for the Uninsured," Business and Health, Sept. 1984.

Miller, Amata Sr. "The Economic Realities of Universal Access to Health Care," in: Kelly, Margaret, John Sr., ed. Justice and Health Care. St. Louis, MO: Catholic Health Association of the U.S., 1985.

Mulstein, Suzanne. "The Uninsured and the Financing of Uncompen-

sated Care: Scope, Costs, and Policy Options," Inquiry, Vol. XXI, Fall 1984.

National Health Law Program. "Health Care for the Poor in 1986," Clearinghouse Review, Vol. 20, No. 9, Jan. 1987.

Ohsfeldt, Robert L. "Uncompensated Medical Services Provided by Physicians and Hospitals," Medical Care, Vol. 23, No. 12, Dec. 1985.

Scioto Valley Health Systems Agency. "Health Horizons: Focus On Indigent Care." Columbus, OH: May 1986.

Sulvetta, Margaret B., and Katherine Swartz. The Uninsured and Uncompensated Care. Washington, D.C.: National Health Policy Forum, George Washington University, June 1986.

U.S. Congressional Budget Office. Profile of Health Care Coverage: The Haves and Have-Nots. Washington, D.C.: Government Printing Office, Mar. 1979.

Wilensky, Gail R., et al. The Uninsured And Their Use Of Health Services. (National Center for Health Services Research, Hyattsville, MD). Presented at the 141st Annual Meeting of the American Statistical Association, Aug. 10-14, 1981.

Wilensky, Gail R., and Marc L. Berk. "The Poor, Sick, Uninsured, and the Role of Medicaid," in: Hospitals and the Uninsured Poor: Measuring and Paying for Uncompensated Care. New York: United Hospital Fund, 1985.

Wilensky, Gail R. "Viable Strategies For Dealing With The Uninsured," Health Affairs, Spring 1987.

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