Appendix D

Health Insurance in the United States: Who Is Covered, Who Is Not Covered, and What Coverage Provides

Introduction

Despite the progress made in improving access to health care in the years since 1965 (38,39,40), access continues to be a top-level concern of policymakers, researchers, and lawmakers. In the contemporary United States, gaining access to health services typically depends on individuals' ability to pay for those services. And the receipt of health services can be critical to maintaining and improving health (174). For a variety of reasons, some form of third party payment-either private insurance or public coverage-has come to be seen as necessary to cushion the financial impact of seeking health care services. This appendix presents an overview of sources of insurance coverage in the United States, and the insurance coverage status of the U.S. population. The appendix also discusses briefly the concept of underinsurance among those with some insurance.

Sources of Third Party Payment in the United States

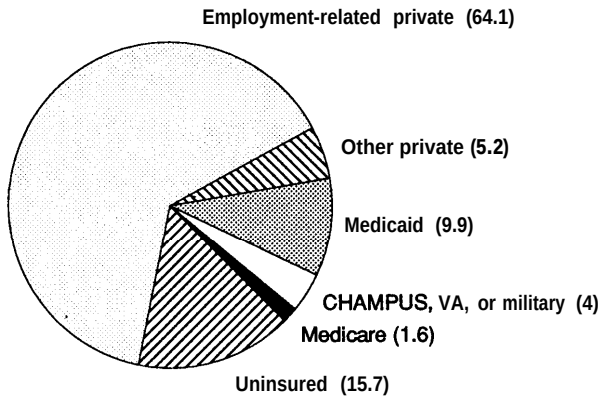
The United States has a mixed public-private system of financing health health (35). Theoretically, coverage for individual health care costs is available to virtually all Americans through one of four major routes: Medicare for the elderly[1] and disabled; Medicaid for low-income women and children (and some men) and those with certain disabilities; employer-subsidized coverage at the workplace; or self-purchased coverage for those ineligible for the previous three. Other sources of third-party payment, affecting far fewer Americans, include group health coverage available through voluntary organizations and the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) for dependents of active and retired members of the uniformed services. In 1990, an estimated 64 percent of noninstitutionalized U.S. citizens under age 65 had insurance coverage (or health care[2]) from employment-related private plans, 5.2 percent from other private insurance, 9.9 percent from Medicaid, 1.6 percent from Medicare, and 4.0 percent from CHAMPUS, the Department of Veterans Affairs, or the military (figure D-1) (157).

What Does Insurance Coverage Provide?

As a general matter, most Americans who participate in an employment-based group health plan have some coverage for a relatively wide range of hospital and medical services, particularly if the participating employee works for a medium or large employee[3] (168,169, 170) (tables D-1 and D-2). As noted in tables D-1 and D-2, the overwhelming majority of employment-based plans provide some benefits for inpatient and outpatient hospital care, physician-provided care, diagnostic x-ray and laboratory services, prescription drugs, private duty nursing, care in an extended care facility, and mental health, alcohol abuse, and drug abuse treatment. Very little of this coverage, however, is provided "in full," that is, without any limitations or cost-sharing requirements of employees or their dependents (e.g., table D-1; 169,170).

Regulations for the Medicaid program allow for a very generous package of benefits (table D-3). However, States can and do establish strict limits on the frequency and

Figure D-l-Sources of Health Insurance Coverage for Noninstitutionalized Americans Under Age 65,1990 (by percent)



SOURCE: Office of Technology Assessement, 1992, based on March 1991 Current Population Survey, U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60, No. 175, *Poverty in the United States: 1990* (Washington, DC: U.S. Government Printing Office, 1991).

[1] Medicare and othercoverages for the elderly are not included in this background paper.

2 Respondents to the Us. Department of Commerce, Bureau of the Census's March 1991 Current Population Survey (CPS) are asked 'ot only about coverage by government programs which help pay medical bills, but about those that "provide medical care." The only such programs mentioned specifically by the interviewer are programs of the "VA' (U.S. Department of Veterans Affairs) and the military. Civiliansand current armed forces members are surveyed for the CPS (158)

3 As defined b, the U.S. Department of Labor, Bureau of Labor Statistics, medium and large firms are establishments with 100 workers or mOre in all private nonfarm industries (168). Small firms are defined as those that employ fewer than 100 workers (169).

Table D-l—Percent of Full-Time Participants[a] in Medium and Large Firms[b] by Coverage for Selected Categories of Health Care Benefits, 1989

Category of medical care	Total[a]	Benefit provided					Benefit not provided[c]
		All	Covered in full	Subject to internal limits only[d]	Subject to overall limits only[e]	Subject to internal and overall limits	
Hospital room and board	100%	98%	19%	4%	42%	34%	2%
Hospitalization-miscellaneous services[f]	100	98	19	4	42	34	2
Extended care facility[g]	100	80	7	20	14	40	20
Home health Care[g]	100	75	20	9	17	28	25
Inpatient surgery	100	98	33	1	56	9	2
Outpatient surgery[h]	100	98	38	[i]	51	9	2
Physician visits-in-hospital	100	98	23	1	58	17	2
Physician visits-office	100	97	9	11	71	6	3
Diagnostic x-ray and laboratory	100	98	28	[i]	58	12	2
Prescription drugs-nonhospital	100	95	3	29	60	3	5
Private duty nursing	100	86	16	1	62	8	14
Mental health care	100	97	1	21	1	75	3
In-hospital	100	96	3	20	7	66	4
Outpatient	100	92	1	21	2	68	8
Vision	100	35	5	28	1	2	65
Alcohol abuse treatment	100	97	1	16	19	60	3
Drug abuse treatment	100	96	1	15	20	60	4
Hospice	100	42	9	7	13	13	58

NOTE: Because of rounding, sums of individual items may not equal totals.

[a] It is important to note that: 1) not all full-time employees participate in plans offered by employers, and 2) the U.S. Department of Labor's Bureau of Labor Statistics (BLS) distinguishes among medical care, dental care, and vision care. According to BLS, medical care benefits were provided to 92 percent of employees in medium and large firms, 69 percent of full-time employees in small firms, and 93 percent of full-time employees in State and local governments. Workers are considered participants only if they elected a certain plan. This table applies to cost-containment provisions affecting medical care benefits only.

[b] Medium and large firms are establishments with 100 workers or more in all private nonfarm industries, excluding (in the 1989 survey) firms in Alaska and Hawaii. According to BLS, its survey of these firms provides representative data on 32.4 million full-time employees. Data for the survey were collected by visits of BLS field economists to sampled establishments. Documents describing medical and dental care benefits are collected by BLS and analyzed in Washington, DC.

[c] For all but vision care, percents include employees who elected to waive participation in their employer's medical program but who enrolled in dental and/or vision plans.

[d] Internal limits apply to individual categories of care (e.g., separate limits or benefits for hospitalization). Limits may be set in terms of dollar ceilings on benefits, a requirement that the participant pay a percentage of costs (coinsurance), or a requirement that the participant pay a specific amount (deductible or copayment) before reimbursement begins or services are rendered.

[e] Overall limits are expressed only in terms of total benefits payable under the plan, rather than for individual categories of care. Limits are set as deductibles, coinsurance percentages, and overall dollar limits on plan benefits.

[f] Services provided during a hospital confinement.

[g] Some plans provide this care only to a patient who was previously hospitalized and is recovering without need of the extensive care provided by a general hospital.

[h] Charges incurred in the outpatient department of a hospital and outside of the hospital.

[i] Less than 0.5 percent.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in Medium and Large Firms, 7989,* Bulletin 2363 (Washington, DC: U.S. Government Printing Office, June 1990).

number of covered services regardless of whether they are mandatory or optional benefits (154).

Specific services may also be subject to restrictions on coverage (tables D-1, D-2 and D-3). For example, one-quarter or fewer of large-employer-based non-HMO (health maintenance organization) plans in 1989 covered organ transplants (26 percent) well-baby care (22 percent), immunization and inoculation (14 percent), routine physical examinations (14 percent), hearing care (12 percent), or orthoptics (exercises to improve the function of the eye muscles) (3 percent) (table D-2).

With the exception of the National Medical Care Expenditure Survey of 1977 (NMCES) and the National Medical Expenditure Survey of 1987 (NMES), household surveys do not query individuals about the nature of the insurance coverage they have (e.g., services covered, coinsurance provisions, preexisting conditions clauses). The Agency for Health Care Policy and Research in the U.S. Department of Health and Human Service's Public Health Service has not yet analyzed its 1987 NMES data by nature of insurance coverage.

Who Are "The Uninsured"?

Estimates of the number of individuals in the United States who lack health insurance coverage differ. Each March, the U.S. Department of Commerce, through the Bureau of the Census' Current Population Survey (CPS), asks individuals in a sample of U.S. households about their health care coverage, including their health insurance status. However, CPS's March supplements have question wording problems that make it difficult to

Table D-2—Percent of Full-Time Participants[a] by Type of Plan and Coverage for Selected Special Medical Care Benefits[b], by Type of Employer and Type of Plan, 1989 and 1990

Type of employer and benefit item	All plans combined	Type of plan: Health maintenance organization	Type of plan: Non-health maintenance organization
Medium and large firms, 1989			
Hearing care[d]	26%	93%	12%
Orthoptics[e]	3	—[e]	4
Routine physical examinations	28	97	14
Organ transplant	26	23	26
Well-baby care	34	95	22
Immunization and inoculation	28	98	14
Small firms, 1990[f]			
Hearing care[d]	16%	92%	4%
Orthoptics[e]	1	—[k]	1
Routine physical examinations	26	98	15
Organ transplant	28	13	31
Well-baby care	32	97	22
Immunization and inoculation	23	96	12
Preventive dental care[g]	2	9	—[e]
Vision examinations only[h]	12	71	3
State and local governments, 1990[i]			
Hearing care[d]	27%	84%	11%
Orthoptic[j]	1		1
Routine physical examinations	36	97[e]	19
Organ transplant	32	20	36
Well-baby care	39	96	23
Immunization and inoculation	33	95	16
Preventive dental care[k]	2	10	—[e]
Vision examinations only[g]	19	73	4

[a]It is important to note that: 1) not all full-time employees participate in plans offered by employers, and 2) the U.S. Department of Labor's Bureau of Labor Statistics (BLS) distinguishes among medical care, dental care, and vision care. According to BLS, medical care benefits were provided to 92 percent of employees in medium and large firms, 69 percent of full-time employees in small firms, and 93 percent of full-time employees in State and local governments. Workers are considered participants only if they elected a plan.
[b]Plans providing services or payments for services rendered in the hospital or by a physician. Excludes plans that provided only dental vision, or Prescription drug coverage.
[c]Medium and large firms are establishments with 100 workers or more in all private nonfarm industries, excluding (in the 1989 survey) firms in Alaska and Hawaii. According to BLS, its survey of these firms provides representative data on 32.4 million full-time employees.
[d]Plan provides, as a minimum, coverage for hearing examination expenses.
[e]Less than 0.5 percent.
[f]Small firms are defined as those private nonfarm firms with fewer than 100 workers. According to BLS, its survey of these firms provided representative data on 40.8 million full-and part-time employees. Data shown in this table are for full-time employees only. According to BLS, insurance benefits-sickness and accident insurance, long-term disability insurance, medical care, dental care, and life insurance-were available to one-tenth or fewer part-time workers. No further details were provided on benefits available to part-time workers in BLS's report.
[g]Includes plans that only provide examinations and x-rays.
[h]Includes plans that provide only examinations.
[i]According to BLS, these data represent about 13 million full-time employees in all State and local governments in the 50 States and the District Of Columbia. Detailed data for 1.6 million part-time employees were not provided.
[j]Exercises to improve the function of the eye muscles.
[k]Where applicable, dash indicates no employees in this Category.

SOURCES: Medium and large firms: U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in Medium and Large Firms, 1989,* Bulletin 2363 (Washington, DC: Government Printing Office, June 1990); Small firms: U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in Small Private Establishments, 7990,* Bulletin 2388 (Washington, DC: Government Printing Office, June 1990); State and local governments: U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in State and Local Governments,* 1990 (Washington, DC: U.S. Government Printing Office, 1991).

estimate the number of insured vs. uninsured individuals. The CPS question is, ". . during [year], was anyone in this household covered by a health insurance plan?" Theoretically, if respondents answer without recall error, respondents who report not being covered by either private or public sources should have been uninsured for the entire year (84). But for a variety of reasons, CPS estimates are believed to overestimate the number of people who are uninsured for an entire year, and underestimate the number of people who are uninsured ***at any particular point in time &r&g the year (84,133).***

According to the CPS, 34.4 million nonelderly U.S. citizens, equivalent to 15.7 percent of noninstitutionalized Americans under age 65, were estimated to lack health insurance during 1990 (157).

In support of estimates from the CPS, but providing additional estimates of the number of individuals who

Table D-3—Mandatory and Optional Services Covered Under Medicaid

Mandatory services
- Inpatient hospital services
- Outpatient hospital services
- Physician's services
- Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) services for individuals under age 21
- Diagnostic and treatment services for renditions uncovered during the course of an EPSDT screen
- Under EPSDT, periodic medical and dental screenings, including health education and anticipatory guidance
- Family planning services and supplies
- Laboratory and x-ray procedures
- Skilled nursing facility and home health care services for individuals age 21 and older
- Rural health clinic services
- Services of certified nurse-midwives, pediatric and family nurse practitioners even if practicing independently[a]
- Community health centers, migrant health centers, and health care for the homeless programs receiving funds under sections 329, 330, or 340 of the Public Health Service Act

Optional services
- Case management
- Additional home health services
- Dental services
- Services of other licensed practitioners, including psychologists, chiropractors, optometrists, and podiatrists
- Clinic services
- Other diagnostic, screening, preventive, and rehabilitative services
- Prescription drugs
- Intermediate care facility services, including intermediate care facility services for the mentally retarded
- Home and community-based services for mentally retarded individuals
- Eyeglasses, prosthetic devices, dentures, and orthopedic shoes
- Home and skilled nursing facility care for children
- Private duty nursing
- Inpatient psychiatric care for individuals under age 21
- Physical, occupational, and speech, hearing, and language disorder therapies
- Home care for elderly who would otherwise be institutionalized
- Other medical or remedial care recognized under State law, including personal care in the home, transportation, and emergency services, skilled nursing facilities for individuals under age 21, Christian Science nurses and sanitariums, hospice care services, respiratory care services

[a]To the extent that they are authorized to practice under State law.

SOURCES: U.S. Congress, Office of Technology Assessment, *Evaluation of the Oregon Medicaid Proposal, 1992,* based on provisions of Omnibus Budget Reconciliation Act of 1989 and Omnibus Budget Reconciliation Act of 1990; U.S. Department of Health and Human Services, Health Care Financing Administration, Division of Intergovernmental Affairs, *Medicaid Services State by State,* HCFA Pub. No. 02155-92 (Washington, DC: U.S. Government Printing Office, October 1991).

may be uninsured, the U.S. Department of Health and Human Service's NMES found that approximately 48 million Americans, or 20 percent of the population under age 65, lacked health insurance for all or part of 1987, with between 34 and 36 million uninsured on any given day and 24.5 million uninsured throughout the year (123,125).

Why Do Individuals Lack Health Insurance?

It is often overlooked that, with some exceptions, such as Medicare hospital coverage (Medicare Part A), health insurance in the United States is:

> a private, voluntary matter. . .The demand for insurance, like the demand for any product or service, depends on consumers' ***ability and willingness*** **to pay for it (56).**

Fuchs points out that what is typically known as "employer-provided' health insurance is a misnomer:

> Employers do not bear the cost of health insurance; workers do, in the form of lower wages or forgone nonhealth benefits (56).

Individual patients, then, do have a role as consumers in the purchase of health insurance, even if it is "provided' by employers.

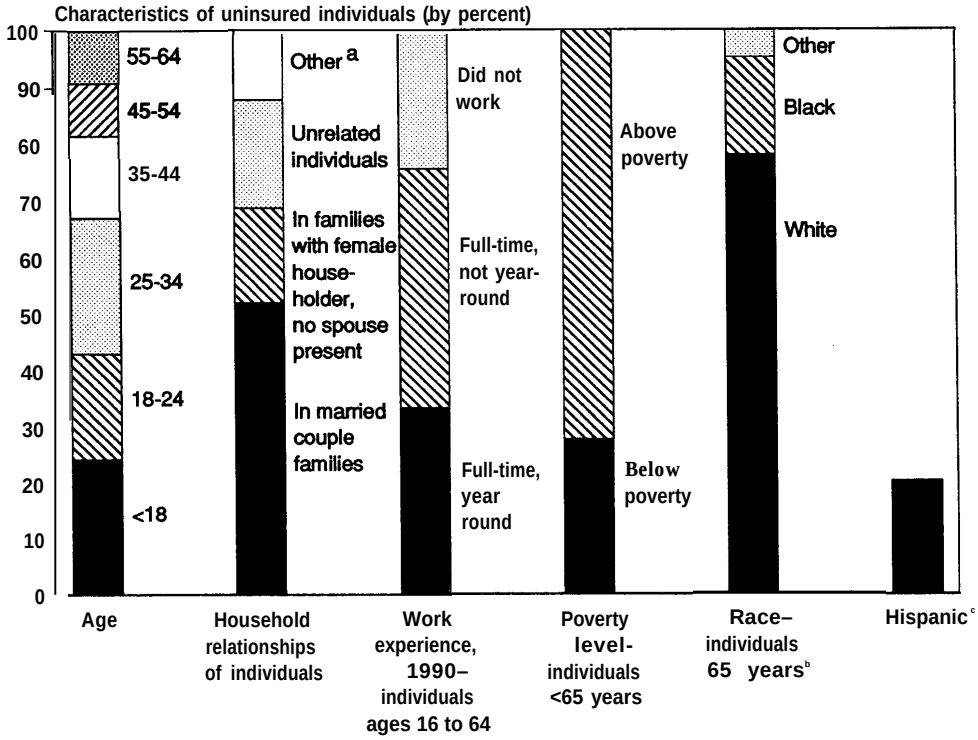
It is unclear how much income an individual or family should be expected to devote to purchasing health insurance coverage as opposed to other goods and services, but most analyses seem to suggest that many individuals appear to lack insurance because they cannot afford it rather than because they are unwilling to buy it (45,84,142,157,159). Some data are available to compare the health status of uninsured individuals with insured persons, but there is little information that identifies those individuals who are either insured or uninsured ***because they are*** sick or disabled. Demographic and health status characteristics of the uninsured population are discussed below.

Demographic Characteristics of Uninsured People

As suggested in figure D-2a **and D-2b,** uninsured people comprise a heterogeneous group. Individuals of any age, work experience, poverty level, race, ethnicity, years of education, in any household configuration, of either gender, and living in any type of residential area (e.g., urban vs. rural) or region can lack health insurance. For example, in 1990, more than half of uninsured individuals lived in married couple families; almost one-third of uninsured individuals of working age worked full-time, year-round; more than two-thirds of uninsured individuals lived in families with incomes above the Federal poverty level; almost 30 percent were college-educated; and almost 80 percent were white (figure D-2a and D-2b).

Some attributes are, however, more likely to be found in uninsured people than among insured individuals. These attributes include: employment in a small firm; self-employment; residence in a nonrnetropolitan area; living on one's own without children; living in a single-parent family with children; being of Hispanic

Figure D-2a—Uninsured Individuals' Ages, Poverty Levels, Work Experience, Family Living Situation, Race, Ethnicit y, Gender, Years of Education, Residence, and Region



[a] Includes persons living in unrelated subfamilies and in other types of families (e.g., in families with male householder, no spouse present).
[b] Includes individuals of Hispanic origin.
[c] Persons of Hispanic origin can be of any race.

SOURCES: Data on age, poverty level, work experience, household relationships, race, and gender: U.S. Department of Commerce, Bureau of the Census, *Poverty in the United States: 1990*, Current Population Reports, Series P-60, No. 175 (Washington, DC: U.S. Government Printing Office, 1991). Data on education, region, and residence: U.S. Department of Commerce, Bureau of the Census, unpublished 1990 data on health care coverage, from the March 1991 Current Population Survey, November 1991.

origin; having no more than a high school education; being male; and being a young adult ages 21 to 24 (142,157). Some, but not all, of these factors have been found to be correlated with income levels, and, in a multivariate analysis of 1987 U.S. Bureau of the Census CPS data for OTA, Kronick found family **income was the** most important determinant of health insurance status for all age groups under age 65 (84).[4] More recent data from the CPS suggest that almost 30 percent of individuals in families with incomes below the Federal poverty level[5] lacked both private and public coverage during 1990 (157). The Federal poverty level was $13,359 for a family of four in 1990 (157).[6] Similarly, among employed people, as worker earnings decrease, the likelihood of being uninsured increases (45).

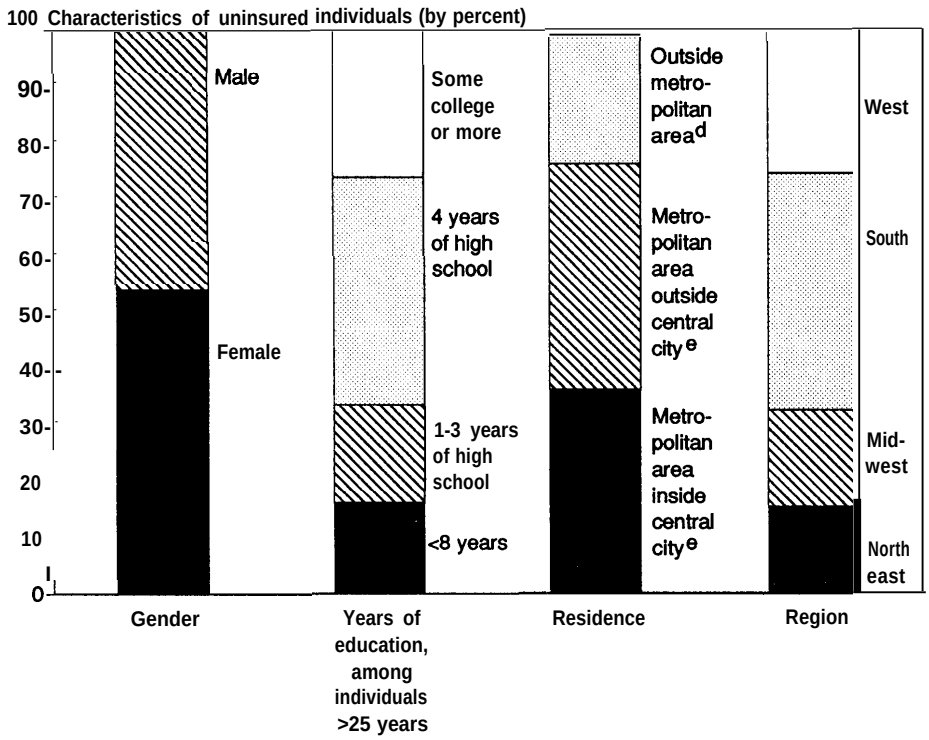
As points of comparison with these income figures, the U.S. Department of Labor, Bureau of Labor Statistics,

4 Oth, factors examined in Kronick's multivariate analysis, which focused on the health insurance status of adolescents ages 10 to 18, included race and ethnicity, region, residence (e.g., central city, other metropolitan statistical area), gender, parents' work status, size of parents' employer, industry of parents' employer, parents' education, and parents' marital status (84). Although Kronick's analysis focused on the health insurance status of adolescents, he found that, to a large extent, the insurance status of an adolescent depends on the insurance status of his or her parent(s) (84).

5 The Federal poverty level was originally calculated to be about 3 times the cost of food included in the "economy food p@" the least costly Of four nutritionally adequate food plans designed by the U.S. Department of Agriculture in 1955. Some changes have occurred since 195in the ways that poverty thresholds are defined, and currently the poverty thresholds rise each year by the same percentage as the annual average Consumer Price Index. Poverty thresholds also depend on family size, the number of related children under 18 living in the family unit, and, to some extent, the age of the householders (157). Definitions of poverty have been the focus of numerous hearings and reports (98,139).

6 NMES found that, in 1987,65 percent of uninsured individuals were in families with incomes below 200 percent of the Federal poverty level annually (123).

Figure D-2b—Uninsured Individuals' Ages, Poverty Levels, Work Experience, Family Living Situation, Race, Ethnicit y, Gender, Years of Education, Residence, and Region



dThe U.S. Department of Commerce, Bureau of the Census, uses the U.S. Executive office of the President, office of Management and Budget's June 1984 definition of *metropolitan areas.* Metropolitan areas are also known as metropolitan statistical areas (MSA). An MSA is a geographic area consisting of a large population nucleus, together with adjacent communities which have a high degree of economic and social integration with that nucleus. An area qualifies for recognition as an MSA if: 1) it includes a city of at least 50,000 population, or 2) it includes a Census Bureau-defined urbanized area of at least 50,000 with a total metropolitan population of at least 100,000 (75,000 in New England). In addition to the county containing the main city or urbanized area, an MSA may include other counties having strong commuting ties to the central county. The territory outside metropolitan statistical areas is referred to as *nonmetropolitan.*

eCentral cities *are* defined in two different ways by the U.S. Department of Commerce, Bureau of the Census. The largest city in each metropolitan statistical area (MSA) (also called metropolitan area) is designated as a central city. There may be additional central cities if specified requirements, designed to identify places of central character within the MSA, are met.

SOURCES: Data on age, poverty level, work experience, household relationships, race, and gender: U.S. Department of Commerce, Bureau of the Census, *Poverty in the United States: 7990,* Current Population Reports, Series P-60, No. 175 (Washington, DC: U.S. Government Printing Office, 1991). Data on education, region, and residence: U.S. Department of Commerce, Bureau of the Census, unpublished 1990 data on health care coverage, from the March 1991 Current Population Survey, November 1991.

calculated that in the employment situations that required employee contributions in 1989, the average annual full-time employee contribution to the premium for employer-subsidized large group health insurance in medium and large firms was $303.72 for individual coverage and $865.20 for family coverage[7] (168).[8] Average annual out-of-pocket costs for health care, not including premiums, are not available for 1990, but in 1987, they averaged $361 per user of health services aged less than 65, ranging from $708 for the average user who was covered by private insurance and in fair to poor health, to $166 for the average user covered by public

7 If the amount of contribution varied by either size or composition of the family, the rate for an employee with a spouse and one child wss used by BLS.

8 Requirements for employee contributions differed according to whether only the employee, or theemployee and his or her family, was covered, whether the plan was an HMO or not, and the employee's type of job (professional and administrative vs. technical and clerical vs. production and service) (168). Across all job types, 59 percent of employers required employee participation inpremiumpayments for an HMO plan covering a single employee, and 73 percent if the HMO plan covered the employee and his or her family (168). In non-HMO plans, the figures were 45 percent and 64 percent, respectively. The number of employers requiring employees to pay a part of the premium price is believed to have increased since 1989.

insurance and in good to excellent health, according to the NMES *(85).* It maybe important to note that: 1) these are average expenditures, not ranges of actual expenditures, and 2) the averages pertain to individual users of health care services. An entire family's health expenditures may be paid for out of the wages of a single earner. One source estimates that the ***approximate average annual yearly cost*** to an insured Federal Government employee and his or her family of four under the Federal Employees Health Benefit Plan can range from $1,500 (if enrolled in a Washington, DC, area HMO) to $6,110 (if enrolled in a high option fee-for-service plan) (51). This estimate includes the cost to the employee of the premium share,[9] dues if applicable,[10] and unreimbursed health care bills, for a ***typical mix*** of hospital, medical, drug, and dental bills. [11] Insurance premiums and health care expenditures are not calibrated to family income.

According to the NMES, the average family paid approximately half of its medical expenses out-of-pocket in the year 1987 (85). At the lower end of the range, the average near-poor family (families with incomes between the Federal poverty line and 125 percent of the poverty line) with public insurance paid 12.5 percent of its medical expenses out of pocket; at the higher end of the scale, low-income families (families with incomes between 125 and 200 percent of the Federal poverty line) with private insurance paid, on average, 55 percent of their medical expenses directly out of pocket.[12]

Health Status of Uninsured Individuals

The majority of individuals in the United States are covered by some form of insurance (see above), and are in good health (10,85,165).[13] As has been well documented, however, there is a relatively small proportion of Americans with serious chronic health problems, and another small proportion every year with short-lived, but serious, acute health problems. On average, 13 percent of U.S. citizens under age 65 reported their health to have been fair or poor in a national survey conducted in 1987 **(85). Almost 4 percent of 15 to 44 year olds and 8 percent of 45 to 64 year olds reported in 1989 that they are limited in the amount or kind of their major activity (e.g., work) as a result of a chronic condition (165). Thirty-two percent of Americans ages 18 to 64 have been found to have experienced a mental disorder at some point during their lifetime, and the annual prevalence of disease is 20 percent (115). What is difficult to sort out is how these varied health problems affect individuals' ability to gain insurance coverage, and how difficulties obtaining insurance coverage affect access and health status.**

The annual CPS does not collect data on respondents' health status when it collects information on health insurance status, but several other national surveys have collected both kinds of data simultaneously. Age (99), income (140), and perhaps other adjustments (120) are clearly appropriate for comparisons of health status by insurance coverage, yet they have not always been made.

The evidence on health status by insurance status suggests that, even without adjustments for income, ***uninsured persons are*** considerably more likely than ***privately insured*** individuals to report being in fair to poor health (figure D-3). However, it is noteworthy that individuals who report being covered by public sources (e.g., Medicaid) are more likely to report being in fair or poor health than either uninsured or privately insured persons (figure D-3). Studies that examine the health status of individuals with both public and private coverage show, as expected, a level of perceived health somewhere between those covered by Medicaid and those with private insurance (figure D-3).[14]

The findings for Medicaid can probably be at least partially accounted for by categorical eligibility for people with disabilities, but it may also be related to the fact that eligibility for Medicaid always involves being sufficiently poor to meet eligibility resource limits.[15]

In fiscal year 1990, blind and disabled persons with low incomes comprised approximately 15 percent of the

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9 The Federal Government pays a substantial amount-up to 75 percent for most employees-toward the premium cost of the plan chosen by an employee. Nationally, about 400 plan options participate, and between one and two dozen are available in each locality (5 1).

10 Dues are required to enroll in some of the Federal employees' plans.

11 For the same family size with bills near $50,000 (the upper limit examined by this source), the approximate yearly cost would be no higher than $9,550 with dental bills included, and $7,410 with dental bills not included (because most stop-loss provisions do not include dental care) (51). No plan includes mental health or nursing home expenses in its stop-loss guarantee.

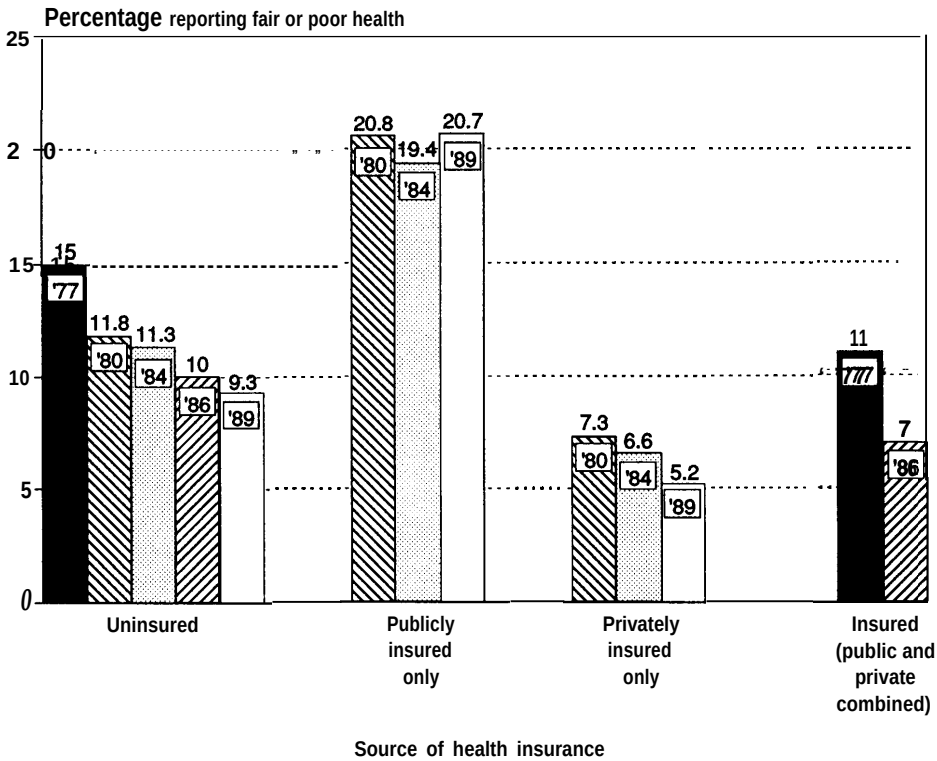
12 The average range of proportions of out-of-pocket medical expenditures was from. 175 for the publicly insured in "excellent to good" heal@ to .798 for the uninsured in "excellent to good health" (85).

13 Being in good health does not mean, however, that individuals may not require some level of health services. For example, 19 to 24 year olds, who are least likely to be insured, are also at highest risk of serious accidental trauma (e.g., that caused ina car crash) (165). More common examples of health services used by people who are healthy overall include preventive services such as immunizations, prenatal care, dental care, and screening for cancer detection; services for acute problems such as upper respiratory infections, ear infections, and crises affecting mentahealth; and services for chronic, but not necessarily serious, problems such as minor vision impairments.

14 Perceived health status (e.g., a response t. some variant of the question, "Would you say your health is excellent, very good, good, fair, or poor?") has been found to be a relatively good indicator of individual health status, especially in terms of predicting male mortality (74).

15 Persons are eligible for Medicaid if they are in families with dependent children, are pregnant women, or are adults who are blind, disabled, or 65 years of age or over; and if they are sufficiently poor to meet eligibility resource limits (174).

Figure D-3-Percentage of Population Under Age 65, All Incomes Combined, Reporting Fair and Poor Health Status, by Insurance Coverage, Various Studies, Various Years, Unadjusted Data



[a]Year data collected.

SOURCE: 1977: K. Davis and D. Rowland, "Uninsured and Underserved: Inequities in Health Care in the United States," *Milbank Memorial Funk Quarterly* 61(2):149-176, *1983. 1980:* U.S. Department of Health and Human Services, Health Care Financing Administration, "Access to Medical Care in 1980," *National Medical Care Utilization and Expenditure Survey, Series* B, Descriptive Report No. 12, prepared by E.S. Leicher, E.M. Howell, L. Corder, et al. (Baltimore, MD: HCFA, 1985). 1984: D. Rowland and B. Lyons, "Triple Jeopardy: Rural, Poor, and Uninsured," *Health* Services Research 23(6):975-1004, 1989. 1986: U.S. Congress, Library of Congress, Congressional Research Service, *Health Insurance and the Uninsured: Background Data and Analysis* (Washington, DC: U.S. Government Printing Office, June 1988). 1989: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics, unpublished data from the National Health Interview Survey on the percent of persons assessed by respondents to be in fairorpoorhealth by age and health care coverage status, United States, 1989, Hyattsville, MD, April 6, 1992.

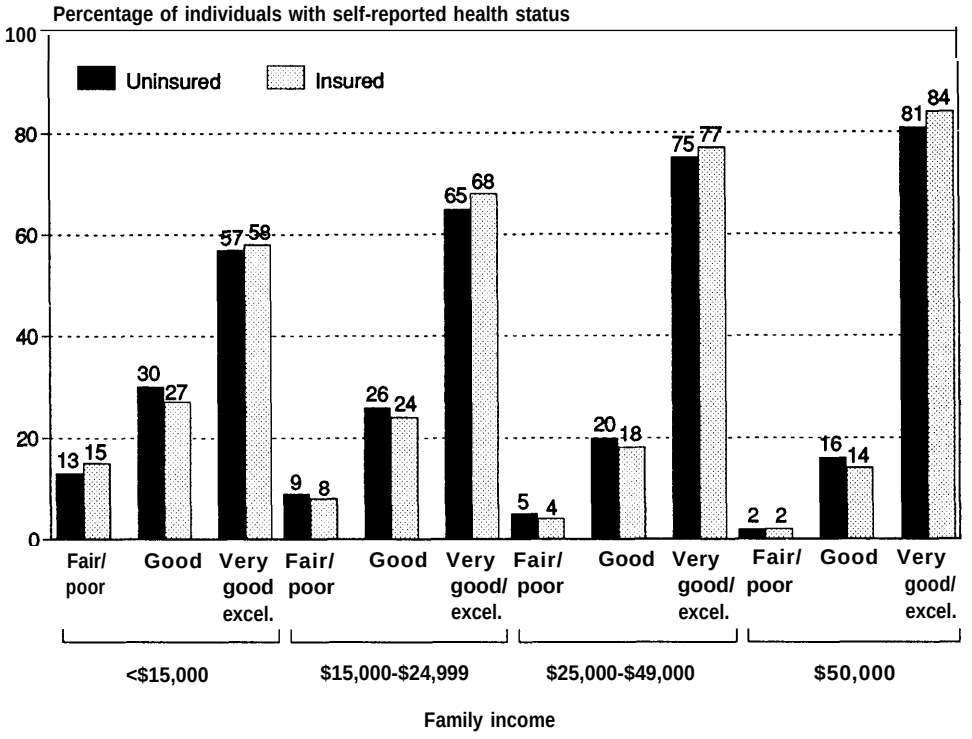
estimated 25.3 million Medicaid recipients; another 13 percent of Medicaid beneficiaries in 1990 were age 65 or older (161). Forty-four percent of the estimated 25.3 million Medicaid recipients in 1990 were children under 21, most of whom qualified under provisions related to low-income families with dependent children (161). The extent of the health care needs of these blind, disabled, and aged individuals is suggested by the fact that these enrollees accounted for 71 percent of all Medicaid payments in 1990 (161).

As shown in figure D-4, ***insured*** individuals in families with the lowest incomes (below $15,000 in 1986), and therefore more likely to be covered by Medicaid, were more likely than uninsured individuals (public and private combined) to report their health as fair or poor (140). Conversely, insured individuals in every family income group were slightly more likely than uninsured individuals to perceive themselves as being in very good to excellent health (figure D4;140). Although the causal relationships are poorly understood, lower socioeconomic status has been found to be predictive of higher-than-expected infant mortality, developmental problems, morbidity,psychological distress, and mortality (24,59,93,188).

Health Status as a Reason for Refusal of Coverage

Because most individuals purchase insurance coverage as part of employer-based group health plans, they

Figure D-4-Reported Health Status by Family Income and Health Insurance Status, 1986



SOURCE: U.S. Congress, Library of Congress, Congressional Research Services, *Health Insurance and the Uninsured: Background Data* andAnalysis(Washington, DC: U.S. Government Printing Office, June 1966), based on 1986 NHIS public use tapes.

typically are neither refused coverage outright, nor refused coverage for so-called preexisting conditions.[16] Premiums for group policies are usually experience-rated[17] and adjusted annually on the basis of the actual claims experience of the group in the previous year. Groups that incur higher than average medical expenditures are charged a proportionately higher rate, but the cost is distributed equally among all group members, minimizing the burden for any one individual. By contrast, people without access to group coverage have difficulty in obtaining health insurance at comparable premiums (10). Individuals in small group plans (e.g., small employers), where there are fewer individuals to share the cost of premiums, may also have difficulty obtaining health insurance at premiums comparable to those of large groups, especially if one or more employees develop a serious chronic health problem (75,76).

As part of the 1987 NMES, a small sample of individuals who reported being uninsured were asked whether they had ever investigated the cost of obtaining private health insurance, and, if so, whether they had ever been denied private health insurance or offered limited coverage because of their health. Based on findings from the NMES survey, Beauregard estimated that, in 1987, about 889,000 uninsured persons under age 65 (2.5 percent of the total uninsured population in this age group) had been denied private health insurance or offered limited coverage because of their health (10). The presence of chronic conditions or other serious health problems or functional limitations increased the likelihood of wanting to purchase, and of being denied, private health insurance, as did having received treatment for a wide range of serious medical problems known to be closely associated with declining social or physical functioning (i.e., life-threatening, degenerative, or chronic conditions) (10). For example, coverage denial rates for persons with hypertension and arthritis or rheumatism, while low at 6.5 percent, still exceeded those for the

16 As defined by insurers, a *preexisting condition* is a condition existing before an insurance policy goes into effect and commonly defined as One which would cause an ordinarily prudent person to seek diagnosis, care, or treatment.

17 Experience rating is a method of adjusting health plan premiums based on the historical utilizationand distinguishingcharacteristics of a specific subscriber group.

uninsured population in general. However, Beauregard notes that these numbers should be interpreted as lower bound estimates of the extent to which preexisting conditions limit access to health insurance. She notes that:

> only persons who lacked private coverage at the time of the round 1 household interview were asked if they had ever been denied health insurance or limited in the type of insurance they could obtain because of their health [and] NMES household data do not permit estimates of the number of privately insured whose policies excluded preexisting conditions (10).

Later investigations by the NMES will include analyses of the features of actual insurance policies held by a sample of respondents to the household portion of the study. It should be noted that the NMES results apply to 1987. Anecdotal evidence suggests that the use of preexisting conditions to deny coverage has become more prevalent since that time (32).

The Underinsured

Defining and counting individuals who are ***underinsured,*** or those without sufficient insurance coverage, is even more complicated than counting those who are completely uninsured, because, as implied above, whether an individual is underinsured can depend on a patient's diagnosis, where the patient receives care, the duration of the episode of illness, what types of treatment are required, and whether there is a dollar or time limit to coverage (55). One 1985 estimate, based on 1977 data and a definition of underinsurance as being "inadequately protected against the possibility of large medical bills," put the number of underinsured at 56 million people, or **26 percent of the nonelderly population (48).** To this population of 56 million who may be inadequately protected because of shortcomings in coverage could be added those whose insurance precludes coverage of specific conditions or imposes a waiting period before such coverage becomes operative;[18] individuals who are covered by Medicaid but who lack access to health care because of health care providers' reluctance to treat Medicaid clients; and others (32,55).

Summary

The American system of financing health care is a patchwork. Most Americans have some coverage for health care expenses through their employer, or through the employment of a family member. Americans who are not covered through an employment-based insurance plan are covered by Medicaid or Medicare. Perhaps 35 million Americans lack any health insurance coverage at all. To label these people "the uninsured" suggests that Americans who lack insurance are a homogeneous group. In reality, they are quite heterogeneous in demographic characteristics and in health status. Although uninsured individuals are overrepresented in certain demographic groups, uninsured individuals in the United, States are represented in the same age, gender, racial and ethnic, income, employment, regional, and health status groupings as are insured individuals. Finally, complete lack of health insurance is not the only potential financial barrier to access. An unknown number of Americans may be underinsured in that particular medical conditions or costly services are not covered, or they are otherwise susceptible to large medical bills.

18 According to the U.S. Department of Labor, Bureau of Labor Statistics' 1989 survey of employers, 49 percent of medium and large firms imposed a length-of-service requirement before participation in a health benefits plan could commence (168). The most frequent length-of-service requirement was 3 months, a requirement characterizing 17 percent of medium and large firms combined. Firms were more likely to impose a length-of-service requirement for production and service employees (58 percent of firms) than for technical and clerical employees (45 percent of firms) or professional and administrative employees (38 percent of firms). BLS no longer examines policies for clauses concerning preexisting conditions. BLS found that fee-for-service plans were consistent in the types of preexisting condition clauses that they used, and HMOS are not allowed to exclude coverage of preexisting conditions (67). In the fee-for-service plans surveyed by BLS prior to its 1989 and 1990 surveys, if an employee had been treated for a condition before joining the plan but went 90 days without treatment, he or she would be covered; if the employee had been treated within the 90 days prior to enrolling in the plan, then he or she would have to wait a year before becoming eligible for coverage of services specific to the preexisting condition (67). There is no systematic source of information about current use of preexisting condition clauses in employment-based group plans.