4. TRENDS IN ADOLESCENT HEALTH INSURANCE COVERAGE, 1979-1986

The proportion of adolescents without health insurance increased from 16.7 to 20.8 percent from 1979 to 1986 (table 11).[1)2] This increase of 4.1 percentage points is slightly larger than the concurrent increase of 3 percentage points in the under-65 population as a whole (CRS, 1988a). The proportion of uninsured adolescents increased 1.5 percentage points from 1979 to 1981, by an additional 1.5 percentage points from 1982 to 1983, and by 1 point from 1983 to 1984. After that, from 1984 through 1986, the proportion of uninsured adolescents remained relatively stable. Overall, during the period of 1979 to 1986, the proportion of adolescents without health coverage grew by 25 percent to 4.6 million. If, instead, the proportion of adolescents who were uninsured had remained stable throughout the period, 800,000 fewer adolescents would have been uninsured in 1987.

Most of the change in adolescent health insurance coverage from 1979 to 1986 occurred in employment-based and other private coverage (e. g., nongroup family plans) (figure 6). The proportion of adolescents in employment-based health plans declined from 60.8 to 58.6 percent while other private insurance dropped from 8.1 to 5.7 percent. Medicaid-only coverage increased slightly from 8.7 to 9.5 percent (table 11; figure 6c) although not enough to cover increases in the proportion of adolescents living in poverty. These patterns of change parallel that for the adult population.

Poverty, Medicaid, and Private Insurance Coverage

In the early 1980s, two events occurred which were likely to have significant effects on the prevalence of health insurance coverage. First, the country experienced a steep recession, with unemployment peaking at 10.9 percent in December 1982. Second, the Omnibus Reconciliation Act of 1981 (OBRA) changed the rules that States are required to use in determining eligibility for the Aid to Families with Dependent Children (AFDC) and Medicaid programs. The intent and effect of these rule changes were to make it more difficult for the so-called working poor (i.e., people with some earned income but who are still below the poverty level) to be eligible for AFDC and Medicaid. The effects of both the recession and the OBRA changes are clearly seen in the CPS data.

Changes in Poverty and Medicaid.--The proportion of the adolescent population living in poverty increased markedly from 1979 to 1983, rising from 14.7 percent to 21 percent, and then decreasing slightly to 19.4 percent in 1986 (figure 7). Other things being equal, this rise in adolescent poverty should have led to an increase in both the proportion of adolescents who were uninsured as well as those covered by Medicaid.

However, as can be seen in table 12, the proportion of the poor and near-poor who were covered by Medicaid declined dramati-

---

1 This analysis uses data from CPS surveys conducted from March 1980 through March 1987; because of changes in question wording, data from the March 1988 survey are not coo-parable to prior years. The proportion of adolescents without health coverage in 1987 (i. e., 15 percent) is substantially below the estimate for 1986, apparently because of wording changes in the March 1988 questionnaire. The preliminary March 1988 CPS data provide the most accurate estimate of the size and characteristics of the uninsured that is currently available to the public. Nonetheless, it remains important to assess the trends in health coverage from 1979 through 1986. Because CPS questions were not changed from March 1980 through March 1987, such trend analysis is possible. Note that the trend estimates presented here are similar to those that have been identified by comparing 1977 to 1987 National Medical Expenditure Survey results (Short, 1988).

2 Note that 1980 data are not available because the U.S. Census Bureau did not field a complete set of health insurance questions in its March 1981 survey.

Table 11.--Trend in the Health Insurance Status of Adolescents, Age 10-18, 1979-1986

Year[b]	Total population, age 10-18 (in millions)	No health insurance coverage	Insured population[a]			
			Employment-based	Other private	Medicaid only	Other
1979	33.96	16.7%	60.8%	8.1%	8.7%	5.7%
1981	33.52	18.2	60.2	6.4	8.8	6.4
1982	32.78	18.3	60.4	6.5	8.9	5.8
1983	32.05	19.8	59.0	6.4	9.3	5.4
1984	31.80	20.8	58.6	5.9	9.6	5.2
1985	31.36	20.6	58.8	5.5	9.5	5.5
1986	31.16	20.8	58.6	5.7	9.5	5.4

[a] Employment-based includes all with employment-based insurance from someone in the household, and without public coverage; other private includes nongroup insurance from household members and employment-based insurance from nonhousehold members, without public coverage; Medicaid includes all those with Medicaid but without private coverage; other is primarily CHAMPUS, and includes Medicare, and those with both public and private coverage.
[b] 1980 data are not available.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1980 through March 1987 Current Population Surveys.

Figures 6a-d.--Trends in the Proportion of Insured Adolescents, Age 10-18, by Type of Coverage, 1979-1986'

Figure 6a
Employment-based[b]

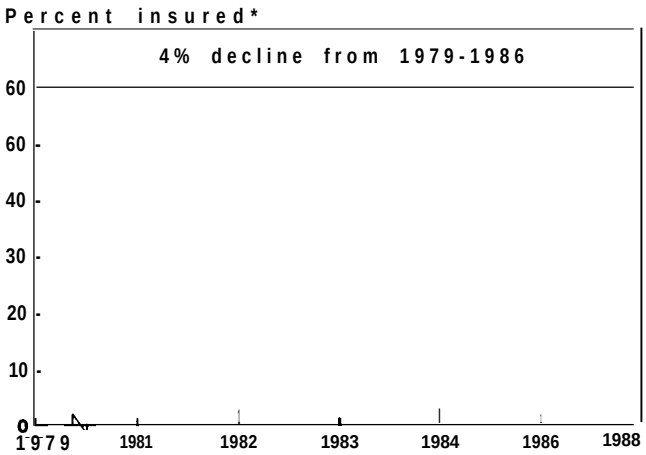


Figure 6b
Other private[c]

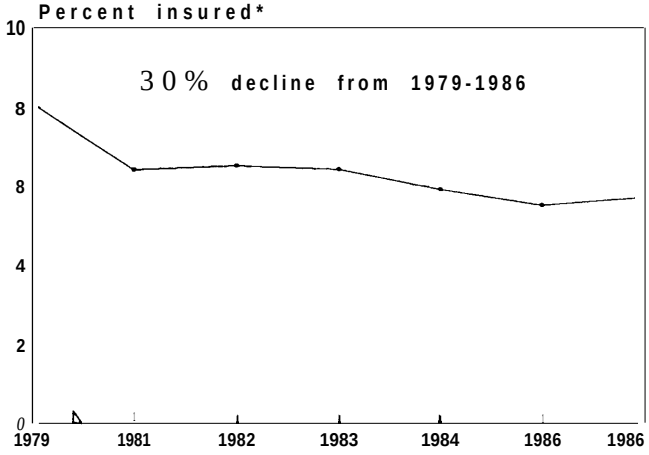


Figure 6C
Medicaid only[d]

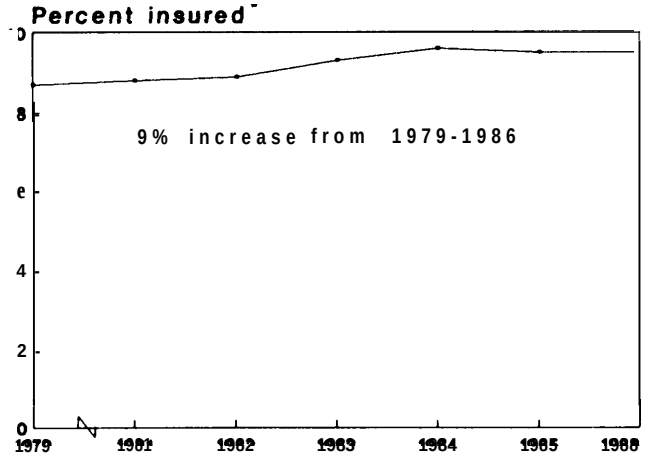
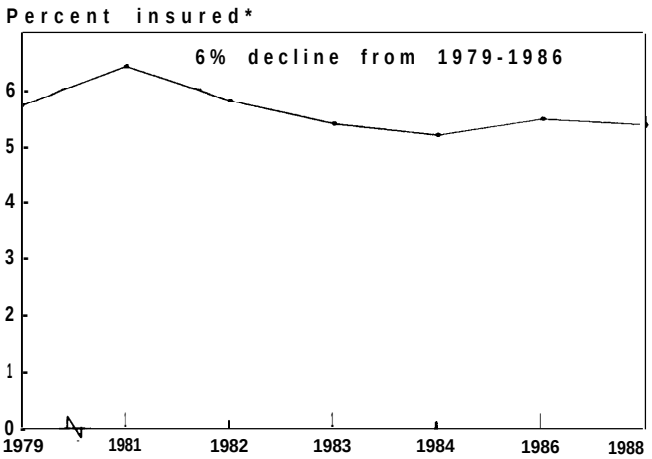


Figure 6d
Other[e]

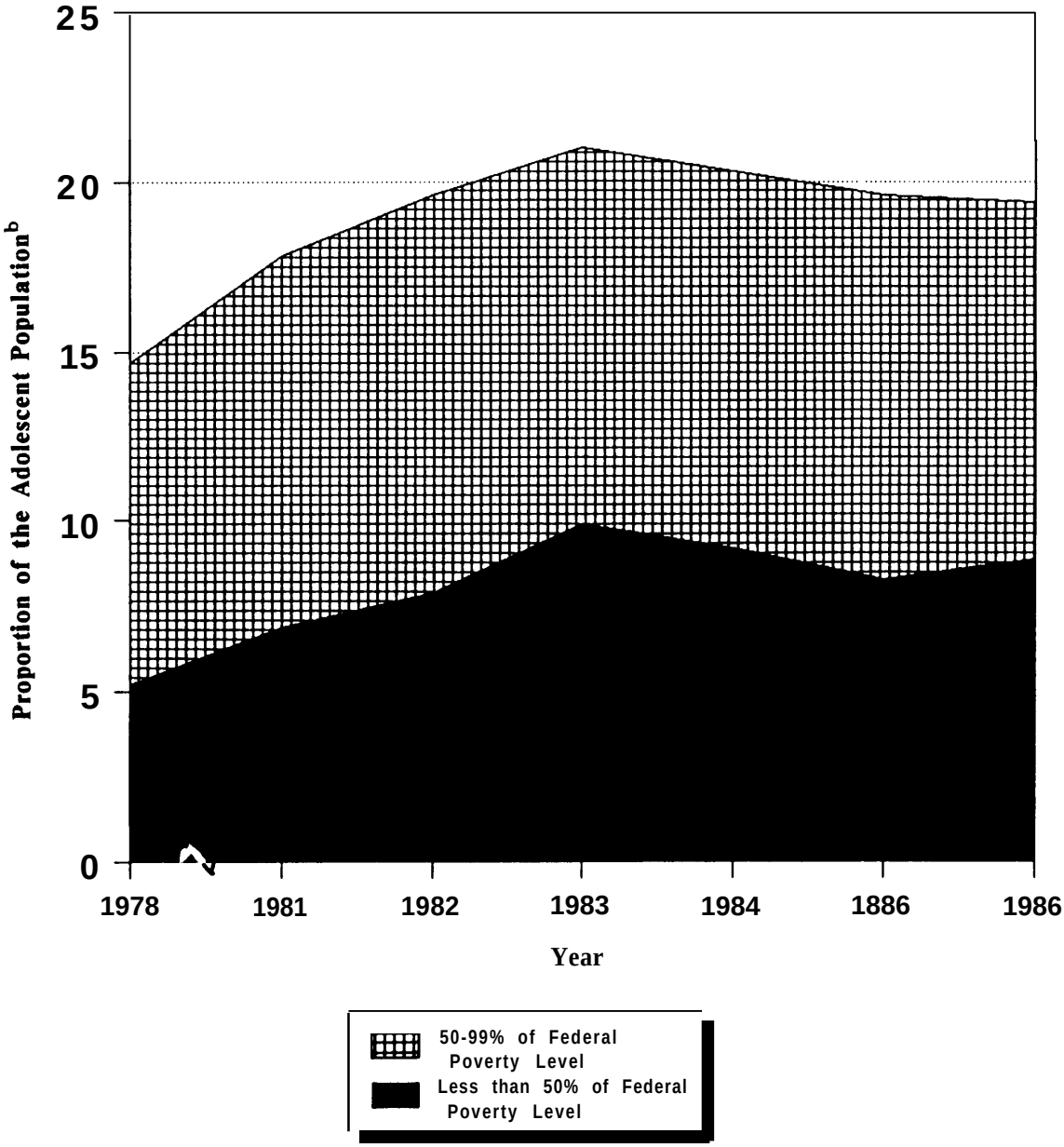


*Note that scales for 'Percent insured" are not equivalent.

[a] 1980 and 1988 data are not available; 1987 data are not comparable.
[b] Employment-based includes all with employment-based insurance from someone in the household, and without public coverage.
[c] Other private includes nongroup insurance from household members and employment-based insurance from non-household members, without public coverage.
Medicaid includes all those with Medicaid but without private coverage. Note that the increase in Medicaid did not keep pace with increases in the proportion of adolescents in poverty.
[d] Other is primarily CHAMPUS, and includes Medicare, and those with both public and private coverage.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1980 through March 1987 Current Population Surveys.

Figure 7---Trends in the Proportion of Adolescents, Age 10-18, Who Live in Poverty, 1979-1986'



[a]1980 data are not available.
[b]See appendix E for Federal poverty levels from 1979-1988.

SOURCE: Office of Technology Assessment, 1989 based on estimates from the March 1980 to March 1987 Current Population Surveys.

Table 12--- Trend in the Health Insurance Status of Adolescents, Age 10-18, by Family Income, 1979-1986

Family income as a percentage of poverty[a]	Year[b]	No health insurance coverage	Insured: Private[c]	Insured: Medicaid[d]
less than 50 percent	1979	38.4%	17.4%	44.5%
	1981	39.9	15.4	45.0
	1982	39.7	18.1	43.1
	1983	40.6	13.8	46.0
	1984	42.6	11.5	45.5
	1985	41.1	11.4	46.8
	1986	42.4	11.2	47.1
50 to 99 percent	1979	29.9	27.3	47.8
	1981	34.5	30.2	38.9
	1982	32.9	31.9	39.4
	1983	34.7	30.5	38.4
	1984	33.9	26.8	42.0
	1985	37.9	22.4	40.3
	1986	38.0	21.8	41.9
100 to 149 percent	1979	28.7	52.6	20.6
	1981	29.6	56.9	16.0
	1982	29.8	57.2	12.0
	1983	32.7	56.3	11.1
	1984	36.0	53.3	11.1
	1985	34.5	51.8	11.9
	1986	37.8	49.8	12.3
150 to 199 percent	1979	24.3	69.5	6.7
	1981	22.1	70.6	6.5
	1982	21.5	72.8	4.5
	1983	22.7	72.2	3.4
	1984	26.2	68.8	4.8
	1985	25.7	67.3	6.0
	1986	25.5	68.1	4.9
200 to 299 percent	1979	13.9	81.5	3.7
	1981	13.5	82.8	2.8
	1982	13.3	83.0	2.1
	1983	14.4	82.1	1.2
	1984	17.0	79.6	1.3
	1985	16.4	80.2	1.3
	1986	15.8	80.1	2.0
300 percent and above	1979	7.8	90.0	1.0
	1981	7.6	90.1	1.0
	1982	7.6	90.1	0.7
	1983	8.0	90.0	0.4
	1984	7.8	90.2	0.3
	1985	8.6	89.6	0.4
	1986	8.9	89.2	0.4

[a] In 1987, the Federal poverty level was $9,056 for a family of three. See appendix E for Federal poverty levels from 1979-1988.
[b] 1980 data are not available.
[c] Includes anyone with private coverage, as well as those who have both private and public coverage.
[d] Includes anyone with Medicaid coverage, as well as those who have both private and Medicaid coverage.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1980 through March 1987 Current Population Surveys.

cally between 1979 and 1983. In 1979, 48 percent of adolescents living in families between 50 to 99 percent of poverty had Medicaid coverage. By 1983, this had dropped to 38 percent, and rebounded slightly to 42 percent in 1984 and 1986.

Medicaid coverage of the near-poor also dropped significantly during this period. In 1979, 21 percent of adolescents in families with incomes from 100 to 149 percent of poverty were covered by Medicaid; in stark contrast, from 1982 through 1986, Medicaid covered only 11 to 12 percent of this group. These declines in Medicaid coverage levels were clearly due to the 1981 OBRA regulations that limited the working poor's eligibility for AFDC and Medicaid benefits.[3]

Changes in Private Health Insurance--- Income-specific rates of private insurance coverage were lower in 1986 than in 1979, but the change was not evenly distributed across income groups or across time. The decline in private coverage was much sharper for lower income than for middle and upper income groups. Further, income-specific private insurance rates increased slightly from 1979 to 1982, and then decreased sharply, particularly among the poor, from 1983 to 1986.

The larger decline in private coverage among the poor is clear. In 1979, nine out of ten adolescents in families with income at 300 percent or more of poverty had private health insurance. This had declined only slightly to 89 percent by 1986. During the same period, private insurance coverage among adolescents in families with income between 200 and 299 percent of poverty declined by only 1.4 percentage points. The trend among adolescents in households below 50 percent of poverty was markedly different; 17 percent were covered by some form of private insurance in 1979, but by 1986, only 11 percent were enrolled in a private health plan. Adolescents in families between 50 to 99 percent of poverty experienced a similar trend; the proportion with private health coverage dropped from 27 to 22 percent from 1979 to 1986.

Although one might have expected a decline in coverage during the recession and an increase in income-specific coverage rates during the recovery, the opposite pattern occurred: coverage rates increased during the recession and declined, especially for the poor, during the recovery. In all income categories (except for those below 50 percent of poverty) the rates of private coverage were higher from 1981 to 1983 than they were in 1979, and then decreased during the 1984 through 1986 period. The reasons for this counterintuitive pattern of change are not apparent.

Understanding the Increase in the Uninsured, 1979 to 1986

The following examines why the proportion of adolescents without health insurance grew from 1979 to 1986. First, four hypotheses, drawn from two of the most carefully prepared studies of changes in coverage at the national level, will be analyzed (Wilensky, 1988 and CRS, 1988a)

1. There were more adolescents living in families at or near the poverty level in 1986 than in 1979.
2. Given the same family income distribution, fewer adolescents were covered by Medicaid in 1986 than in 1979.
3. Given the same family income distribution, fewer adolescents were covered by private health insurance in 1986 than in 1979.
4. Employment has shifted from historically high-coverage industries, such as manufacturing, to low-coverage industries, such as the service sector. (To the extent that evidence is found for the hypothesis that income-specific rates of private coverage have declined,

3 The relationship to OBRA can be seen clearly by noting that Medicaid coverage levels did not decline among the very poorest, those below 50 percent of poverty. OBRA was not intended to affect eligibility for those with no (or very small) earned incomes.

change in the industrial base of the economy might begin to explain the rate of decline in private coverage.)

5. There were more privately insured parents who did not insure their children in 1986 than 1979 (possibly because employers are requiring greater contributions for dependent coverage).
6. There were more adolescents who lived outside their parents' homes and were thus more likely to be uninsured in 1986 than in 1979.

Changes in Poverty, Medicaid Coverage, and Private Health Insurance: Three Simulations.-- The first three hypotheses can be analyzed by using simulation methods similar to those used to examine regional differences in coverage rates. Three simulations are constructed. The first simulation computes the proportion of adolescents who would have been insured in each year from 1979 to 1986, if the family income distribution of adolescents by poverty level had remained at 1979 levels. The difference in each year's calculated versus actual proportion of uninsured adolescents reflects the effects of changes in poverty and family income on the uninsured.

The **second simulation** computes the percentage of adolescents who would have been uninsured each year if the income-specific rates of Medicaid coverage had remained at 1979 levels.

The **third simulation is** the same as the second, except that it assumes no change throughout the period from the 1979 income-specific rates of private health coverage. Then, the third simulation is divided into two parts to determine the individual effects of changes in private coverage rates for those above and below 150 percent of poverty.

As noted earlier, from 1979 to 1986, the proportion of uninsured adolescents rose from 16.7 to 20.8 percent, an increase of 4.1 percentage points. As detailed in table 13, it appears that approximately:

- 1 percentage point of the increase in the uninsured (24 percent of the total change) was due to a growth in adolescent poverty;
- 1.6 percentage points (39 percent of the total) were a result of decreases in the income-specific rates of Medicaid coverage; and
- 1.5 percentage points (37 percent of the total) are accounted for by decreases in the income-specific rates of private coverage (principally among adolescents below 150 percent of poverty).

It is important to look closely at the variations in coverage throughout the period. By 1983, just past the height of the recession, growth in the number of poor adolescents could have increased the proportion of uninsured by 1.9 percentage points, while the drop in Medicaid coverage might have contributed an additional 2.6 percentage point rise in the uninsured. This potential total increase of 4.5 points was partially offset, however, by a concurrent rise in private coverage.

Afterward, these trends reversed. Income-specific rates of private coverage declined every year after 1982; the net effect reversing from a potential 2.4 percentage point *decrease* in the proportion of uninsured adolescents in 1982, to a potential *increase* of 1.5 points in 1986 (table 13). At the same time, after peaking in 1983, a slight decline in adolescent poverty and small increase in income-specific Medicaid rates helped reduce the negative effect of the drop in private coverage.

In summary, not only were there more poor adolescents in 1986 than in 1979, but they were less likely to have Medicaid. Further, decreases in private coverage affected the poor much more than the nonpoor.[4]

4 Note that most studies of the growing gap between rich and poor in the 1980s focus on cash income and ignore declines in health coverage; such an approach understates the disparity in wealth, since the value of health insurance is not taken into account (see, for example, Palmer and Sawhill, eds., 1984).

Table 13.--Estimates of the Effects of Changes in Poverty and Rates of Medicaid and Private Coverage on the Proportion of Adolescents Without Health Insurance, 1981-1986

Factor(s)	Simulation	Estimated effect on the proportion of adolescents without health insurance					
		1981	1982	1983	1984	1985	1986
Poverty level	Assume the 1979 poverty level distribution of adolescents	-1.2%	-1.6%	-1.9%	-1.6%	-1.2%	-1.0%
Medicaid coverage	Assume the 1979 rate of Medicaid coverage (by poverty level)	-1.5	-2.4	-2.6	-2.1	-1.8	-1.6
Private coverage	1. Assume the 1979 rate of private coverage (by poverty level)	1.3	2.4	1.4	-0.4	-1.0	-1.5
	2. Assume the 1979 rate of private coverage for adolescents below 150 percent of poverty only	0.6	1.4	0.6	-0.3	-0.5	-1.1
	3. Assume the 1979 rate of private coverage for only adolescents at 150 percent of poverty or above	0.6	1.1	0.8	-0.2	-0.4	-0.5
Poverty level, Medicaid coverage rate, and private coverage rate	Assume the 1979 poverty level distribution of adolescents, Medicaid coverage rate, and private coverage rate (i.e., all of the above)	-1.4	-1.6	-3.1	-4.1	-4.0	-4.1

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1982 to March 1987 Current Population Survey.

Private Coverage and Changes in Employment and the Economy .--Why has the decline in private coverage occurred? It has been suggested that it may be due, in part, to sectoral changes in the economy; that is, fewer job opportunities in manufacturing (where benefits are traditionally provided) and more jobs in the relatively low-paying, low-benefits service sector (Wilensky, 1988). It makes sense that this might be part of the explanation, but as can be seen below, relatively straightforward analysis of the data does not provide much support for this explanation.

From 1982 to 1986, an average of 17.3 percent of adolescents were without any health coverage. During this period, those whose parents were employed in public administration, durable goods, transportation, mining, and nondurable goods industries had consistently high rates of private health coverage and a 10.4 percent overall uninsured rate (table 14). Adolescents with parents in finance, wholesale trade, and professional services had an average rate of private coverage: 16.7 percent were uninsured. Private coverage in construction, retail trade, business services, and entertainment industries was lower than average; more than one out of four adolescents with parents in these industries were uninsured. Finally, coverage was very low in agriculture and personal services; 38 percent of adolescents linked with these industries had no health insurance .

There was relatively little change in the distribution of the adolescent population among these four industry groups from 1979 to 1986 (figure 8). The proportion of adolescents with parents in the high coverage industries decreased slightly from 45.4 to 42.8 percent and the proportion of adolescents linked to industries with an average coverage rate increased from 25.2 to 27.4 percent. However, given this relatively small shift in the adolescent population distribution, the difference in coverage rates between these two industry groups was not large enough to substantially affect the aggregate number of uninsured. (There was virtually no net increase in the proportion of adolescents whose parents work in low or very low coverage industries.)

Thus, at least at this fairly aggregate level of analysis, sectoral change does not appear to account for the observed increases in the proportion of uninsured adolescents. It is possible that a more refined analysis which considers occupational as well as more detailed industrial classifications would result in different conclusions. Such an analysis is beyond the scope of this paper.

Dependent Coverage, Parent's Insurance Status, and Adolescent Living Arrangements.-- In 1979, 6.1 percent of adolescents living with insured parents were without health coverage (table 15). By 1986, this proportion had risen to 7.2 percent; an increase of approximately 250,000 uninsured adolescents that accounted for almost one-quarter of the period's overall 4 percentage point growth in the proportion of uninsured adolescents.

This trend is worrisome, but the extent of the problem and need for a public policy response are tempered by two observations. First, it is clear that most of the increase in adolescents without health coverage (i. e., more than three-quarters) was due to other factors discussed above. Second, analysis of preliminary 1987 data found that only 3.3 percent of adolescents living with insured parents were themselves uninsured. This is less than half the 7.2 percent rate in 1986, indicating that the wording changes in the March 1988 CPS may have had a particularly large effect on this estimate.

The principal reason why more adolescents were uninsured in 1986 than in 1979 is simply that more lived with uninsured parents in 1986 than in 1979. During this period, the proportion of adolescents who lived with uninsured parents increased from 8.8 to 10.5 percent. This increase accounts for 37 percent of the overall 1979 to 1986 increase in uninsured adolescents.

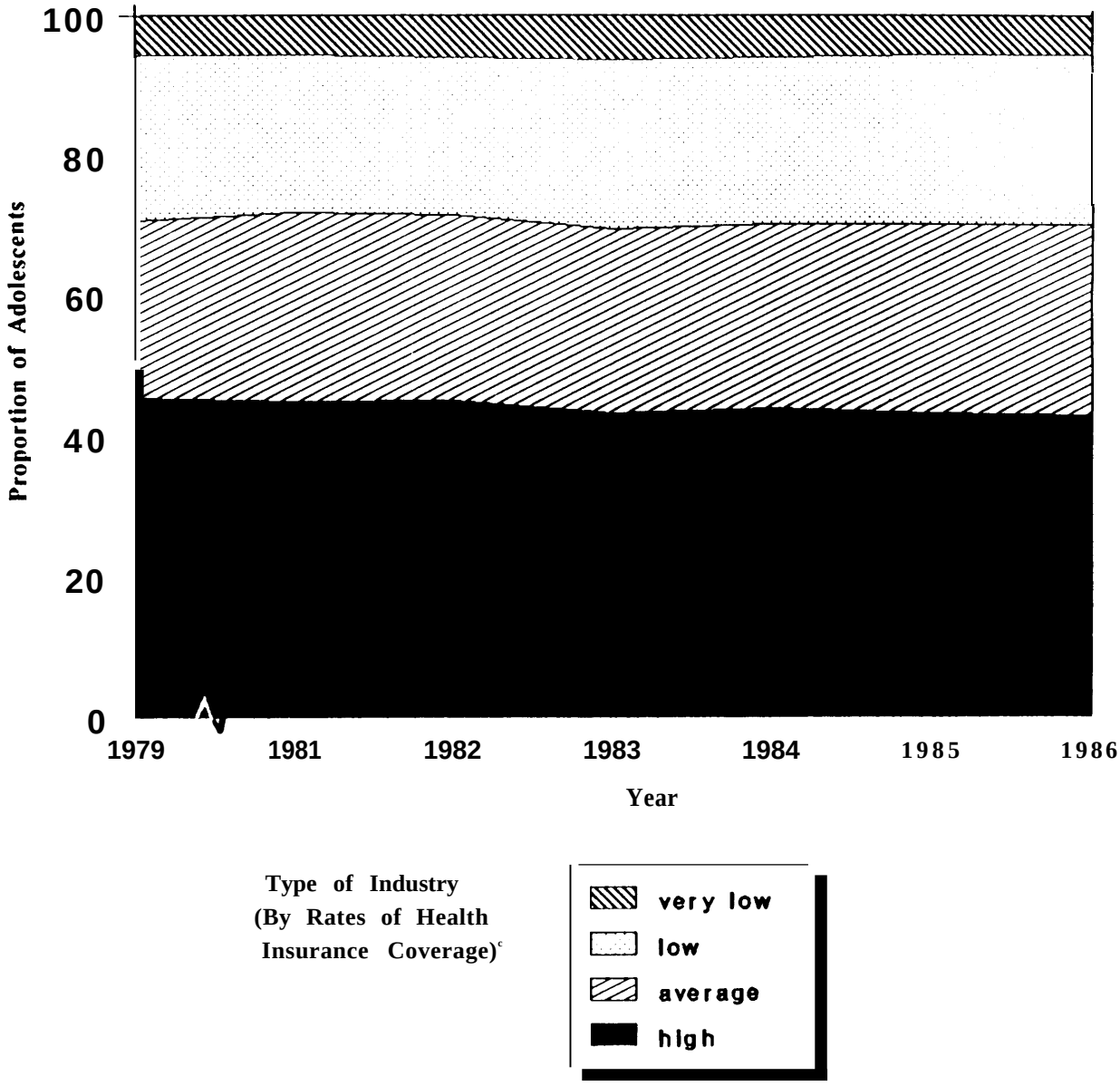
Table 14--- Industry of Parent's Employers and Health Insurance Status of Adolescents, 1982-1986'

Rate of coverage	Industry[b]	Percent of total	No health insurance coverage	Insured: private and public — Private only	Medicaid only	Other[c]
High	public admin.	6.3%	8.6%	82.5%	1.7%	7.3%
	durable goods	17.5	9.9	84.8	1.4	3.9
	transportation	9.2	10.5	84.2	1.5	3.8
	mining	1.4	11.7	84.1	0.8	3.3
	nondurable goods	9.7	12.2	81.6	2.6	3.6
	Total	44.1	10.4	83.6	1.7	4.2
Average	finance	5.1	14.8	80.4	1.5	3.4
	wholesale trade	4.6	14.2	79.9	2.0	4.0
	prof. services	16.8	17.9	73.4	4.3	4.4
	Total	26.5	16.7	75.9	3.4	4.1
Lou	construction	8.2	24.5	68.7	2.7	4.1
	retail trade	10.4	26.0	62.8	6.4	4.8
	business service	4.2	27.6	61.3	5.5	5.5
	entertainment	0.6	29.7	57.4	5.9	7.1
	Total	23.4	25.9	64.5	4.9	4.7
Very Lou	agriculture	3.4	36.7	52.3	6.9	4.1
	personal services	2.6	39.4	39.5	16.7	4.4
	Total	6.0	37.9	46.8	11.1	4.2
All industries		100.0%	17.3%	74.9%	3.5%	4.3%

[a] Estimates are based on pooled data from March 1983 to March 1987 Current Populations Surveys.
[b] Refers to the industry of the household head unless only the spouse had employment-based health insurance.
[c] Includes adolescents with CHAMPUS, Medicare, or a combination of public and private coverage.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1983 to March 1987 Current Population Surveys.

Figure 8.--Distribution of Adolescents, Age 10-18, by Parent's Industry of Employment Categorized by Rates of Health Insurance Coverage[a,b]



[a]1980 data are not available.
[b]Refers to the industry of the household head unless only the spouse has employment-based coverage.
[b]High coverage rates are found in public administration, durable goods, transportation, mining, and nondurable goods. Average includes finance, wholesale trade, and professional services. Low includes construction, retail trade, business services, and entertainment. Very Low includes agriculture and personal services.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1980 to March 1987 Current Population Surveys.

Table 15.--Trend in Parental and Adolescent Health Insurance Status, 1979-1986'

	Parent's insurance status[b]	1979	1981	1982	1983	1984	1985	1986
Distribution of adolescent population	not insured	8.8%	9.2%	9.3%	10.2%	10.9%	10.8%	10.5%
	insured	85.7	84.8	85.0	83.9	83.3	83.5	83.1
	not living with parent[c]	5.5	6.1	5.7	5.9	5.8	5.8	6.3
	All[d]	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Proportion of adolescents without health coverage	not insured	91.9%	95.1%	97.7%	97.4%	97.3%	97.5%	96.4%
	insured	6.1	6.3	6.1	6.8	7.1	7.2	7.2
	not living with parent[c]	61.3	67.7	7.7	71.3	72.4	71.5	73.9

a 1980 data are not available.

[b]Refers to the insurance status of the household head unless only the spouse had employment-based health coverage.

[c]Includes all adolescents not living with their parents and married adolescents living with their parents.

[d]Percentages may not total 100 percent due to rounding.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1980 through March 1987 Current Population Surveys.

Eighteen percent of the overall rise in the proportion of adolescents without health coverage was due to a fall in the coverage rate among adolescents not living with a parent. In 1979, 61 percent were uninsured; by 1986 the proportion without coverage rose to 74 percent. At the same time, the uninsured rate among adolescents who lived with uninsured parents also rose, increasing from 92 to 96 percent (and contributing to 10 percent of the overall climb in the uninsured). Among both groups the proportion of adolescents who obtained health insurance from their own jobs declined precipitously.[3]

Changes in adolescent living arrangements had a minimal effect on the proportion of uninsured. From 1979 to 1986, the proportion of adolescents who did not live with a parent rose from 5.5 to 6.3 percent, accounting for only 11 percent of the overall 4 percentage point increase in uninsured adolescents.

Other Explanations for Increases in Uninsured Adolescents

Declining rates of health insurance coverage may also result from increases in administrative and medical care costs. People may be less willing to purchase insurance for themselves or their dependents as the cost of coverage increases.[4] National health expenditure estimates suggest that insurers' administrative costs rose by 18 percent per year from 1980 to 1986 (U.S. Dept. of Health and Human Services, 1987).5 Increases in real per capita health care costs averaged 4.6 percent per year from 1980 to 1986 and may have further encouraged the poor and near-poor to rely on whatever free care is available at the local hospital or health center rather than use scarce dollars to purchase (or have their employer purchase) health coverage. Although not within the scope of this paper, the affects of rising health care costs on the prevalence of private health coverage clearly merit further study.

3 In 1979, a total of 700,178 (4.3 percent) of 15- to 18-year-olds had their own health insurance; by 1986, this number had dropped to 332,106 (2.3 percent). (It is assumed that only 15- to 18-year-olds, and not younger adolescents, might have health insurance coverage on their own.) Of the 15- to 18-year-olds with their own insurance coverage who lived on their own, 11.5 percent (161,056 of 15- to 18-year-olds) were insured in 1979; by 1986, this proportion had dropped to 4.9 percent (68,175 of 15- to 18-year-olds).

4 Cost is defined here as the difference between expected medical costs and the price of an insurance policy.

5 The 18 percent per year increase occurred in a category of expenditures including administrative costs for public programs (primarily Medicare and Medicaid), private insurance administrative costs, and insurance company profit or loss (or, in the case of nonprofit insurers, addition or deletion from reserves). Most of the 18 percent increase occurred in private insurance costs.