# Trends in Medicaid Prescription Drug Utilization and Payments, 1990-97

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*The rising cost of prescription drugs has caused public officials to restructure prescription drug coverage and payment policies in Medicaid. This study examines Medicaid utilization and payments for prescription drugs from 1990 to 1997. Medicaid prescription drug payments grew from $4.4 billion in 1990 to almost $12 billion in 1997, representing an average annual increase of 15.3 percent. In 1997 prescription drug payments per recipient were $1,379 for the blind and disabled, more than 10 times the amount for children. These findings will aid policymakers in setting prepaid plan rates for prescription drugs and monitoring access to care in Medicaid.*

## INTRODUCTION

The Medicaid program provides prescription drugs to certain low-income families with dependent children and low-income persons who are aged, blind, or disabled. The Medicaid program is financed by both the Federal Government and the States. Even though coverage of outpatient prescription drugs is optional in Medicaid, every Medicaid jurisdiction has chosen to cover prescribed drugs for at least Medicaid categorically needy eligible persons. The Federal Government finances between 50 and 83 percent of the expenditures for any individual State. States administer the Medicaid program within broad guidelines established by the Federal Government (Pine, Clauser, and Baugh, 1993).

The rising cost of prescription drugs has caused public officials to restructure prescription drug coverage and payment policies in Medicaid. Information concerning trends in Medicaid prescription drug expenditures is needed to inform policymakers. The purpose of this article is to provide information on Medicaid utilization and expenditures for outpatient prescription drugs from 1990 to 1997. The information is provided as a descriptive historical overview, using aggregate data on Medicaid recipients and payments for outpatient prescription drugs by eligibility group.

Legislative changes had an important impact on the Medicaid prescription drug program during the study period. Two major legislative acts attempting to curtail the rising costs of the Medicaid outpatient prescription drug program were the Omnibus Budget Reconciliation Act of 1990 (OBRA 90) and the Omnibus Budget Reconciliation Act of 1993 (OBRA 93). OBRA 90 amended Title XIX of the Social Security Act by requiring drug manufacturers to provide a drug rebate for all covered outpatient drugs dispensed through the Federal Medicaid program. In general OBRA 90 required that a manufacturer have in effect a rebate agreement with the Federal Government before Federal Medicaid matching funds would be available to States for covered outpatient drugs. Prior to this legislation, many States had

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limited drug formularies. The legislation opened individual State formularies to all manufacturers who have rebate agreements with the Federal Government. Implementation by State Medicaid agencies occurred during 1991.

OBRA 93 amended Title XIX of the Social Security Act by changing the pricing schedule of single-source and innovator multiple-source drugs approved by the Food and Drug Administration after October 1990. In general OBRA 93 had an impact on the computation of the unit rebate amount for covered outpatient drugs. The effective date for implementation of OBRA 93 was October 1, 1993. Presently, more than 500 manufacturers have rebate agreements with the Federal Government which, in turn, address approximately 55,000 drug products (Gaston, 1999).

## METHODOLOGY

### Data and Information Sources

Three sources used by the Federal Government to analyze expenditures incurred in the Medicaid program are the HCFA-2082, the HCFA-64, and the national health expenditures (NHE) statistics. Although each source addresses Medicaid expenditures, each differs in presentation of expenditure information.

#### HCFA-2082

The HCFA-2082 form "Statistical Report on Medical Care: Eligibles, Recipients, Payments and Services" is an annual statistical report for each Federal fiscal year (FY) on Medicaid enrollment, recipients, payments, and utilization that is based on data submitted by State Medicaid agencies to HCFA. Some States submit these reports directly to HCFA. Other States submit person-level enrollment and claims data to HCFA for the Medicaid Statistical Information System (MSIS). For these States HCFA uses the MSIS data to prepare a HCFA-2082 report. The HCFA-2082 report includes schedules of enrollees, recipients, and payments, by type of service and basis of Medicaid eligibility.

For this study detailed data by basis of Medicaid eligibility, without respect to cash-assistance status, are combined into four major eligibility groups: aged, blind and disabled, children and adults,[1] and an all-recipients group that includes a small number of individuals who are not reported in the other four groups. The blind and disabled group includes individuals of any age who were determined to be eligible because of disability. The children's group includes foster care children.

#### HCFA-64

The HCFA-64 form "The Quarterly Medicaid Statement of Expenditures for the Medical Assistance Program" is a statement of expenditures for the Medicaid program that individual States submit to HCFA on a quarterly basis. The report is an accounting statement of actual expenditures made by States for which they are entitled to receive Federal reimbursement under Title XIX for that quarter (Health Care Financing Administration, 1998). Data from quarterly HCFA-64 reports are combined to produce a summary report for each Federal FY. The HCFA-64 data are limited to payments by type of service and do not include detail by basis of Medicaid eligibility.

[1] This study contains detailed data for the 50 States and the District of Columbia. The HCFA-2082 data, as reported by each Medicaid State agency, contain some errors, inconsistencies, and omissions. To the extent possible, HCFA staff adjusted the data to correct for these problems. A small number of State Medicaid agencies did not submit HCFA-2082 data for all years. For example, data for Hawaii are missing for FY 1997. One State, Oklahoma, submitted data for total recipients in FY 1997 but did not provide detailed data by eligibility group (Foltz, 1999).

It should be noted that the HCFA-64 and HCFA-2082 data on payments differ for several reasons. They were produced at different points in time and may differ in the way they capture services rendered to Medicaid recipients during a calendar time period. They were produced for different purposes. Finally, the HCFA-64 data contain aggregate payments and adjustments that are not included in the HCFA-2082 data. Most of the data presented in this analysis are extracted from the HCFA-2082 reports in order to present prescription drug recipient and payment data by selected Medicaid eligibility groups.

### National Health Expenditures

Each year HCFA's Office of the Actuary estimates expenditures for national health spending (NHE) in the United States. Designed as a matrix, NHE measures expenditures by type of service (e.g., hospital care, physician services, nursing home care, and prescription drugs) matched against the sources that pay for these services (e.g., Medicare, Medicaid, private health insurance, and out-of-pocket spending). The current time series of the NHE estimates runs from 1960 through 1997. Estimates are based on information collected from public organizations such as the U.S. Bureau of the Census, HCFA, the U.S. Bureau of Labor Statistics, and other Federal and State government agencies that fund medical programs and from private organizations such as the American Hospital Association and the Health Insurance Association of America.

Expenditures for prescription drugs measure spending for retail purchases of these products by consumers. Prescription drugs purchased as part of a hospital stay or directly from a physician are included with either hospital or physician services. Prescription drug spending is based most recently on data from IMS Health, which collects data on pharmacy transactions in different retail outlets. Expenditure estimates for earlier years are based on information collected by the U.S. Bureau of the Census in the *Census of Retail Trade* series called Merchandise Line Sales. This survey collects data on the value of prescription drug sales from retail outlets such as drug stores and grocery stores (Levit, 1999).

### Medicaid Managed Care Enrollment

Annually HCFA's Center for Medicaid and State Operations produces a report known as the Medicaid Managed Care Enrollment Report, which contains profiles of Medicaid managed care programs on a plan-specific basis. The information presented in the report is collected from State Medicaid agencies by HCFA regional office staff. The report includes the State in which the plan operates, the plan name, plan type, the geographic areas within the State served by the plan, and number of Medicaid enrollees covered by the plan (Health Care Financing Administration, 1997).

In 1992, approximately 12 percent of the Medicaid population was enrolled in some form of managed care. By 1997, nearly 48 percent of the Medicaid population was enrolled in managed care.[2] States increasingly have been relying on the flexibility of waivers of the Social Security Act to restructure their existing Medicaid programs by implementing incremental and comprehensive reform initiatives. There are two types of waivers available to States that allow flexibility in providing high-quality, efficient health services through the Medicaid program: section 1915(b) program waivers

[2] This percentage is for all types of managed care including primary care case management. Enrollees covered under primary care case management typically have services paid under fee-for-service (FFS) arrangements. An estimated 36 percent of enrollees are covered under prepaid plans.

and section 1115 research and demonstration waivers. Both types of waivers are designed to exempt States from statutory requirements in the Social Security Act.

These waivers allow States to pursue program options not available through the State plan-amendment process. The section 1915(b) waivers enable States to mandate participation in a managed care program and restrict the providers from whom recipients receive Medicaid covered services. Section 1115 waivers are much broader in scope and allow comprehensive statewide health reform, including expanding Medicaid coverage to uninsured populations, modifying the Medicaid benefit package, and restricting access to certain providers (Rotwein et al., 1995).

Enrollment in prepaid plans grew rapidly during the 1990s, and the rate of growth varied by State. For enrollees in prepaid plans, Medicaid pays a single premium to a plan for all covered services. There are no separate claim or service records in the data for prescription drugs when the premium includes prescription drugs. Therefore, it is not possible to identify prescription drug recipients or payments for prescription drugs when those prescription drugs are covered under a prepaid plan. For this reason, Medicaid prescription drug recipients and payments reported in the HCFA-2082 and HCFA-64 are understated. Hence, it is important to identify individual States that have experienced substantial growth in the number of enrollees covered by prepaid plans. For this study, the number of Medicaid enrollees in managed care and information on the types of plans in which they were enrolled were compiled to determine the extent to which enrollment in managed care affected Medicaid recipient and payment totals.

## Analytic Measures

### Medicaid Payments

The study contains two measures of Medicaid payments from the HCFA-2082 report: total payments and prescription drug payments. Payments are presented in actual dollars for each FY, according to payment date. Payments are presented as gross amounts prior to the receipt of rebates to the States by prescription drug manufacturers. Data are presented for the 50 States and the District of Columbia. Medicaid payments include all payments for services provided under a FFS setting (i.e., services for which Medicaid paid a provider claim). Similarly Medicaid prescription drug payments include all payments for prescription drugs provided under a FFS setting (i.e., prescription drugs for which Medicaid paid a pharmacy claim). As previously noted, it is not possible to identify prescription drug payments when they are covered by a prepaid plan.

### Medicaid Recipients

This study contains two measures of Medicaid recipients: Medicaid recipients and Medicaid prescription drug recipients. A Medicaid recipient is a Medicaid enrollee who received at least one covered service of any kind for which Medicaid payment was made during the FY. A Medicaid prescription drug recipient is a Medicaid enrollee who received at least one covered prescription drug during the FY. If an enrollee was covered under a prepaid plan, providing either partial or comprehensive coverage during the year, and had at least one FFS claim for a prescription drug during the FY, that enrollee

is counted both as a recipient and a prescription drug recipient. Similarly, if an enrollee was covered under a prepaid plan and received at least one FFS claim, excluding prescription drugs, that enrollee is counted as a recipient but not as a prescription drug recipient. Otherwise, enrollees covered under prepaid plans are excluded from recipient counts because it was not possible to identify plan enrollees who received Medicaid-covered services.

### Medicaid Prescription Drug Payments per Recipient

Payments per recipient are defined as Medicaid payments for prescription drugs divided by the number of Medicaid enrollees who received at least one covered prescription drug during the FY. A consistent approach has been taken to define the numerator and denominator of this statistic. A Medicaid enrollee is represented in the payment amount (in the numerator) and as a prescription drug recipient (in the denominator) if and only if there was a FFS claim for a prescription drug for that person during the FY.

### NHE

The NHE data on prescription drug payments by calendar year are presented for all payers and the two major payment categories, out-of-pocket and third-party. Third-party payments are split between private and public payments. Public payments are split between Medicaid and other public payments.

### Data Limitations

There are some limitations to be noted regarding the analyses presented in this study:

- Several factors may result in recipient and payment amounts that are understated in these Medicaid data. Prescription drugs provided to Medicaid enrollees during their hospital stay are typically included in an inpatient hospital claim. Also, prescription drugs may be included in claims for other types of services, such as nursing home and home health care, in some instances. In these instances, it is not possible to identify use and payment for these prescription drugs. Furthermore, the Medicaid data do not include any out-of-pocket payments that Medicaid enrollees may make for their prescription drugs. For these reasons, the Medicaid data do not capture use and payment for all prescription drugs provided to Medicaid enrollees.
- Another factor that affects analysis of these Medicaid data is State program variation. During any given time period, there is substantial variation among Medicaid States in terms of options each State has chosen. Program policy choices include optional eligibility groups, coverage of selected prescription drugs, restrictions on prescription drug use (such as limits on the number of Medicaid covered prescriptions per month), and payment methods. Also, these policy choices may have changed within individual States during the study time period. Furthermore, States have varied greatly in terms of implementing managed care plans, including full or partially capitated plans under either section 1915(b) or section 1115 provisions. State-specific data have been annotated in the data tables to identify individual States that have covered large numbers of their Medicaid enrollees in prepaid plans. Nevertheless, the effects of these variations have not been fully measured.
- External factors may also have affected the findings of this study. Data on payments presented in this study are actual dollars that have not been adjusted for inflation.

However, the effect of inflation on payments is moderate because the rate of inflation was low in the study period compared with earlier time periods. Finally, the analyses do not adjust for major Medicaid policy changes such as welfare reform, economic variables that affect an individual's decision to apply for Medicaid enrollment, and changes in the practice of medicine.

## FINDINGS

### Prescription Drug Payments

Total Medicaid payments for outpatient prescription drugs grew from $4.4 billion in 1990 to almost $12 billion in 1997, which represents an average annual rate of growth of 15.3 percent (Table 1).[3,4] The largest single-year increases were observed between 1990 and 1991 (22.7 percent) and between 1991 and 1992 (24.7 percent), when the prescription drug rebate program was being implemented. Several factors caused these large increases. In 1991, implementation of the rebate program expanded prescription drug coverage (opened formularies) in many States. Reported payment data are gross amounts prior to the receipt of rebate payments. Poverty-related eligibility expansions during this time period increased the number of program enrollees.[5] Furthermore, the recession in 1990 and 1991 may have led to increased numbers of Medicaid enrollees.

By eligibility group, the highest amount of payments for each year were for the blind and disabled at $1.9 billion in 1990 and $6.5 billion in 1997. Also, the blind and disabled had the highest annual average rate of growth in this time period of 19.6 percent. The aged had the next highest amount of payments, $1.5 billion in 1990 and $3.3 billion in 1997, with an average annual rate of growth of 12.1 percent. Payments for children were the lowest in 1990, $445 million, but grew to $1.1 billion in 1997, with an annual rate of growth of 13.8 percent. Payments for adults were $571 million in 1990 and $881 million in 1997, with the lowest average annual rate of growth of 6.4 percent. Figure 1 shows the increase in payments for prescription drugs by eligibility group and emphasizes the rapid rate of growth in prescription drug payments for the blind and disabled for this period.

Figure 2 shows Medicaid prescription drug payments as a percent of total Medicaid payments by eligibility group for 1990-97. For all recipients, prescription drug payments increased from 6.8 percent of total Medicaid payments in 1990 to 9.7 percent of total payments in 1997. As noted earlier the blind and disabled had the highest amount of prescription drug payments in every year. In 1990 prescription drug payments for the blind and disabled were 7.6 percent of total Medicaid payments and increased to 12.0 percent of total payments by 1997. Prescription drug payments as a percent of total Medicaid payments grew slightly for the aged between 1990 and 1997 from 7.0 percent to 8.9 percent. For adults, prescription drug payments remained at about 7 percent of total payments for all years in the study period. The percent of prescription drug payments for children was 4.9 percent in 1990, rose to 6.4 percent in 1996, and then declined slightly to 6.3 percent in 1997.

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[3] This increase is comparable to the average annual increase of 14.9 percent, obtained from the HCFA-64 summaries (data not shown).

[4] In the HCFA-64 summary for FY 1997, prescription drug rebates were nearly $2.2 billion or about 18 percent of reported prescription drug payments prior to rebates.

[5] OBRA required State Medicaid agencies to extend eligibility to pregnant women and children (up to age 6) born after September 30, 1983, with incomes below 133 percent of the Federal poverty level (FPL). OBRA required State Medicaid agencies to extend eligibility to children under the age of 19 born after September 30, 1983, with family incomes below 100 percent of the FPL. This second provision means that all children under age 19 and living in poverty will become eligible by 2002.

Figure 3 displays the percent of total Medicaid prescription drug payments by eligibility group. In 1990, 34.4 percent of prescription drug payments were for the aged and 42.5 percent were for the blind and disabled. By 1997 the percent of prescription drug payments for the aged decreased to 28.2 percent, but the percent for the blind and disabled increased to 55.0 percent. The percent of total Medicaid prescription drug payments for children was 10.1 percent in 1990, grew to 12.1 percent in 1994, then decreased to 9.3 percent in 1997. The percent of total prescription drug payments for adults was 13.0 percent in 1990 and steadily decreased to 7.4 percent in 1997. The observed trends for both children and adults may have been caused by increased enrollment in managed care, welfare reform,[6] and the health of the Nation's economy. These factors may have led to lower growth rates in the number of enrollees for children and adults than among aged and blind and disabled enrollees (U.S. General Accounting Office, 1998; Ellwood and Ku, 1998).

Table 2 presents Medicaid prescription drug payments for 1997 by State and eligibility group. There was great variation in State Medicaid programs, including the percent of enrollees in managed care by eligibility groups. California and New York had the largest total payments for prescription drugs, $1.34 billion and $1.09 billion, respectively. Also, California and New York had the largest prescription drug payments for the blind and disabled ($759 million and $685 million, respectively) and adults ($126 million and $86 million, respectively). California and Texas had the largest total prescription drug payments for the aged ($320 million and $259 million, respectively). For children, Texas had the largest payments for prescription drugs ($171 million), followed by California ($124 million).

[6] The Personal Responsibility and Work Opportunities Act of 1996, commonly known as welfare reform, ended the direct connection between receipt of cash benefits under the Aid to Families with Dependent Children program and eligibility for Medicaid.

## Prescription Drug Recipients

In 1990, there were more than 17 million Medicaid prescription drug recipients in the United States (Table 3). The number steadily increased to almost 24.5 million in 1994. This represented an average increase of nearly 10 percent per year between 1990 and 1994. From 1994 to 1997, the number decreased to just under 21 million. The decrease after 1993 was caused, in part, by a large increase in the number of Medicaid enrollees who were covered under prepaid plans. The most noteworthy decreases after 1993 were for adults and children, who were more likely to be covered by prepaid plans than the other two groups during this time period. Overall, the number of Medicaid recipients increased by an annual average of 2.8 percent per year.

A similar pattern to that of total prescription drug recipients was observed for each of the major eligibility groups with the exception of the blind and disabled (Figure 4). That is, the number of prescription drug recipients grew initially and then declined. In addition, the total number of adult prescription drug recipients actually declined between 1990 and 1997. This finding could be the result of the healthy national economy in the 1990s, State and Federal welfare reform initiatives, and other factors. In contrast, the number of blind and disabled prescription drug recipients grew steadily from 3 million in 1990 to more than 4.7 million in 1996, with a small decrease between 1996 and 1997. The average annual rate of growth for the blind and disabled was 6.6 percent.

Between 1990 and 1997, the composition of the prescription drug recipient population changed dramatically (Figure 5).

Children increased from 42.9 percent to 46.8 percent of the population from 1990 to 1993, possibly as a result of the Medicaid eligibility expansions for children enacted in 1989 and 1990. After 1993, both children and adults declined as a percent of the prescription drug recipient population: children from 46.8 to 44.3 percent and adults from 23.1 to 18.9 percent. Because of increasing numbers of blind and disabled prescription drug recipients and declining numbers of prescription drug recipients for the other eligibility groups after 1994, the blind and disabled recipients increased steadily from 17.5 percent of the prescription drug recipient population in 1990 to 23.0 percent in 1997. As previously noted, increased coverage under prepaid plans led to declines in the numbers of prescription drug recipients for adults and children, while the numbers of disabled prescription drug recipients continued to grow. These factors explain the observed changes in Figure 5.

For the all-recipients group, the percent of total Medicaid recipients who received at least one prescription drug during the FY (Figure 6) declined approximately 10 percentage points between 1990 and 1997 (from 72.1 to 62.4 percent). Each of the major eligibility groups experienced a similar decline. The decline was approximately 9 percentage points for the aged (80.9 to 72.0 percent), 5 percentage points for the blind and disabled (82.5 to 77.1 percent), 10 percentage points for children (67.3 to 57.8 percent), and 15 percentage points for adults (72.2 to 57.3 percent). These findings cannot be explained by increased coverage of Medicaid enrollees in prepaid plans. This is because enrollees who were covered under prepaid plans are excluded from both the numerator and denominator of these statistics. Increased enrollment for Qualified Medicare Beneficiaries (QMBs), Qualified Disabled and Working Individuals (QDWIs), and Specified Low-Income Medicare Beneficiaries (SLMBs), who did not receive the full scope of Medicaid-covered services, may explain this finding for the aged and disabled groups. However, further research will be necessary to explain this finding for adults and children.

Table 4 presents the numbers of Medicaid prescription drug recipients by State and eligibility group for Federal FY 1997. Typically the largest number of prescription drug recipients among the four eligibility groups in each State was children. Blind and disabled persons made up the second largest group, followed by adults and the aged. By State the largest number of prescription drug recipients was found in California. Additional States with more than 1 million prescription drug recipients were Florida, Illinois, New York, and Texas. Together, these five States represented 42 percent of the Nation's Medicaid prescription drug recipients.

Figure 7 compares the percent of total Medicaid prescription drug recipients represented by each of the four major eligibility groups with the percent of total Medicaid prescription drug payments represented by each of those groups. Children and adults together represented 63.2 percent of total prescription drug recipients (44.3 and 18.9 percent, respectively) but only 16.7 percent of prescription drug payments. In contrast, the blind and disabled represented 23 percent of total prescription drug recipients but 55 percent of prescription drug payments. Similarly, the aged represented less than 14 percent of prescription drug recipients but more than 28 percent of prescription drug payments. These differences would probably be even greater, given higher utilization of inpatient hospital services by the blind and disabled and the aged, if it were possible to isolate prescription drugs from inpatient hospital payments.

## Prescription Drug Payments per Recipient

Between 1990 and 1997, prescription drug payments per recipient grew by an annual average of 12.2 percent, from $256 per recipient to $572 per recipient (Table 5). Payments per recipient varied greatly by eligibility group, from a high of $1,379 per recipient for the blind and disabled to a low of $120 for children in 1997. The rate of growth between 1990 and 1997 was greatest, at 13.5 percent, for the blind and disabled. Despite the fact that payments per recipient were lowest for children in 1997, the rate of growth in payments per recipient for children, 12.8 percent, was nearly as high as the rate for the blind and disabled. The trend in prescription drug payments per recipient is shown in Figure 8. As previously noted, the larger percentage of children and adults among all recipients (compared with the blind and disabled, and the aged) means that payments per recipient for the all-recipients group is closer to that of children and adults than to the other groups.

The same general patterns in payments per recipient by eligibility group that were observed in the national data also persisted in data for individual States (Table 6). However, there were noteworthy variations among the States. Prescription drug payments per recipient ranged from $886 to $1,575 for the aged, $958 to $2,396 for the blind and disabled, $73 to $165 for children, and $97 to $476 for adults. These differences may be explained by State variations in recipient demographic characteristics and State Medicaid program differences, such as dispensing fee reimbursements, drug formularies, and prescription limits per month. The variation around the national prescription drug payments per recipient of $572 from a high of $1,383 to a low of $343 was affected in part by the relative size of the major eligibility groups in the State. For example, prescription drug payments per recipient ($1,383) were high in Connecticut because the recipient population contained a much larger percentage of blind and disabled and aged recipients than other States. This was because Connecticut was covering large numbers of adults and children in prepaid plans.

## National Health Accounts

Data on prescription drug payments for all payers in the United States are presented in Table 7 so that the Medicaid findings can be viewed in a broader context. For all payers, prescription drug payments increased from more than $37 billion in 1990 to nearly $79 billion in 1997, an average annual increase of 11.1 percent. However, there was a sharp contrast over this period in increases for the two major categories of payments. Out-of-pocket payments increased by an annual average rate of only 3.4 percent during the period, while third-party payments increased by 16.2 percent. In 1990 payment amounts for out-of-pocket ($18.2 billion) and third-party payments ($19.5 billion) were roughly comparable. As a result of the differential rates of increase, by 1997 out-of-pocket payments ($23 billion) represented less than 30 percent of all payments. In contrast, by 1997 third-party payments ($55.9 billion) represented more than 70 percent of all payments. This finding suggests that the predominance of third-party coverage increases the likelihood that patients will have their prescriptions filled (Levit et al., 1998).

There were important changes occurring during the 1990s that caused the observed increases in third-party payments. During this time, increases in prescription drug payments exceeded the all-payer average for both of the major compo-

nents of third-party payments, private payments (17.4 percent), and public payments (13.7 percent). For private payments a major factor causing the increase could have been expanded coverage of prescription drugs under private insurance plans. The largest component of public payments, Medicaid, grew at an average rate of 14.7 percent during these years. In contrast, other public payments grew by only 9.6 percent over this time period (Levit, 1999).

## CONCLUSIONS

The following are highlighted findings from this study:

- Medicaid payments for prescription drugs grew from $4.4 billion in 1990 to almost $12 billion in 1997, with an annual rate of growth of 15.3 percent (Table 1). The largest single-year increases were observed between 1990 and 1991 (22.7 percent) and between 1991 and 1992 (24.7 percent), when the prescription drug rebate program was being implemented. By eligibility group, the blind and disabled had the highest amount of payments for each year and the highest annual average rate of growth in payments between 1990 and 1997 (Figure 2). By State, the largest total payments for prescription drugs were found in California, followed by New York (Table 2).
- As a percent of total Medicaid payments, prescription drug payments increased from 6.8 percent in 1990 to 9.7 percent in 1997. This percent also increased between 1990 and 1997 for each of the major eligibility groups, with the exception of adults, for whom the percentage remained around 7 percent for all years in the study period. This percentage increased dramatically for the blind and disabled from 7.6 percent in 1990 to 12.0 percent in 1997.
- The number of Medicaid prescription drug recipients grew from 17.3 million in 1990 to 24.5 million in 1994 and then decreased to just under 21 million in 1997 (Table 3). A similar pattern was observed for each major eligibility group, with the exception of the blind and disabled. By eligibility group, children had the largest number of recipients in every year of the study period, 7.3 million in 1990 and 9.1 million in 1997 (Figure 4). By State, the largest number of prescription drug recipients was found in California (Table 4). Additional States with more than 1 million prescription drug recipients were Florida, Illinois, New York, and Texas.
- Medicaid prescription drug payments per recipient grew from $256 per recipient in 1990 to $572 per recipient in 1997, with an average annual rate of growth of 12.2 percent (Table 5). Use of prescription drugs was quite different among the major eligibility groups. The blind and disabled had the highest prescription drug payments per recipient ($1,379) in 1997 (Table 6), more than 6 times the amount for adults ($226) and more than 10 times the amount for children ($120). The blind and disabled also had the highest payments per recipient for each year in the study period and the highest average annual rate of growth in payments per recipient between 1990 and 1997 (Figure 8). The same general patterns in payments per recipient by eligibility group that were observed in the national data also persisted in data for individual States.
- From the NHE data, total payments for all payers for prescription drugs grew from $37.7 billion in 1990 to $78.9 billion in 1997, with an annual rate of growth of 11.1 percent. However, in this time period, there was a major change in type of

payer. In 1990, out-of-pocket payments were $18.1 billion and increased to $23.0 billion in 1997, with an annual rate of growth of 3.4 percent. In contrast, third-party payments grew from $19.5 billion in 1990 to $55.9 billion in 1997, with an annual rate of growth of 16.2 percent. As a result of the differential rates of increase for these two groups, by 1997 out-of-pocket payments were less than 30 percent of total payments, and third-party payments were 70 percent of payments (Table 7). This finding suggests that the availability of third-party payment increases the likelihood that patients will have their prescriptions filled.

The findings from this study begin a process to examine prescription drug use and payment for Medicaid enrollees. The observed decline in the percent of total Medicaid recipients who received at least one prescription drug in a FY during the study period is counterintuitive and unexplained at this time. Prescription drug utilization data should be examined in greater depth. Also, future research is needed to examine the mix of prescription drugs that are being provided to Medicaid enrollees by eligibility group and type of medical condition. This research will aid policymakers in identifying special-needs groups as they are enrolled in prepaid plans and in determining if access to care is adequate after enrollees are covered under prepaid plans. The research should also aid policymakers as they set prepaid prices for benefit packages that include prescription drugs. The latter need will become even greater as State Medicaid agencies move toward risk-adjusted payments to plans.

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## Table 1

## Medicaid Prescription Drug Payments,[1] by Eligibility Group and Year: Federal Fiscal Years 1990-97

| Eligibility Group [2] | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | Annual Rate of Growth [3] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Payments in Millions | | | | |
| All-Recipients | $4,419.6 | $5,423.6 | $6,763.9 | $7,969.2 | $8,874.0 | $9,790.7 | $10,696.1 | $11,970.9 | 15.3 |
| Aged | 1,506.4 | 1,822.7 | 2,190.7 | 2,440.7 | 2,650.3 | 2,861.0 | 3,075.5 | 3,342.7 | 12.1 |
| Blind and Disabled | 1,863.4 | 2,296.5 | 2,922.5 | 3,572.3 | 4,146.4 | 4,794.1 | 5,544.3 | 6,517.5 | 19.6 |
| Children | 444.9 | 589.6 | 806.2 | 965.1 | 1,062.9 | 1,116.5 | 1,114.8 | 1,098.5 | 13.8 |
| Adults | 570.7 | 680.2 | 805.1 | 919.6 | 960.7 | 938.9 | 852.0 | 880.8 | 6.4 |

[1] Medicaid prescription drug payments are gross amounts prior to the receipt of rebates to the States by prescription drug manufacturers. Medicaid prescription drug payments include all payments for prescription drugs provided under a fee-for-service setting (i.e., prescription drugs for which Medicaid paid a pharmacy claim). Because Medicaid pays a single premium to a prepaid plan for all covered services, it is not possible to identify prescription drug payments when they are covered by a prepaid plan. To this extent, Medicaid prescription drug payments presented here may understate total Medicaid payments for prescription drugs.

[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

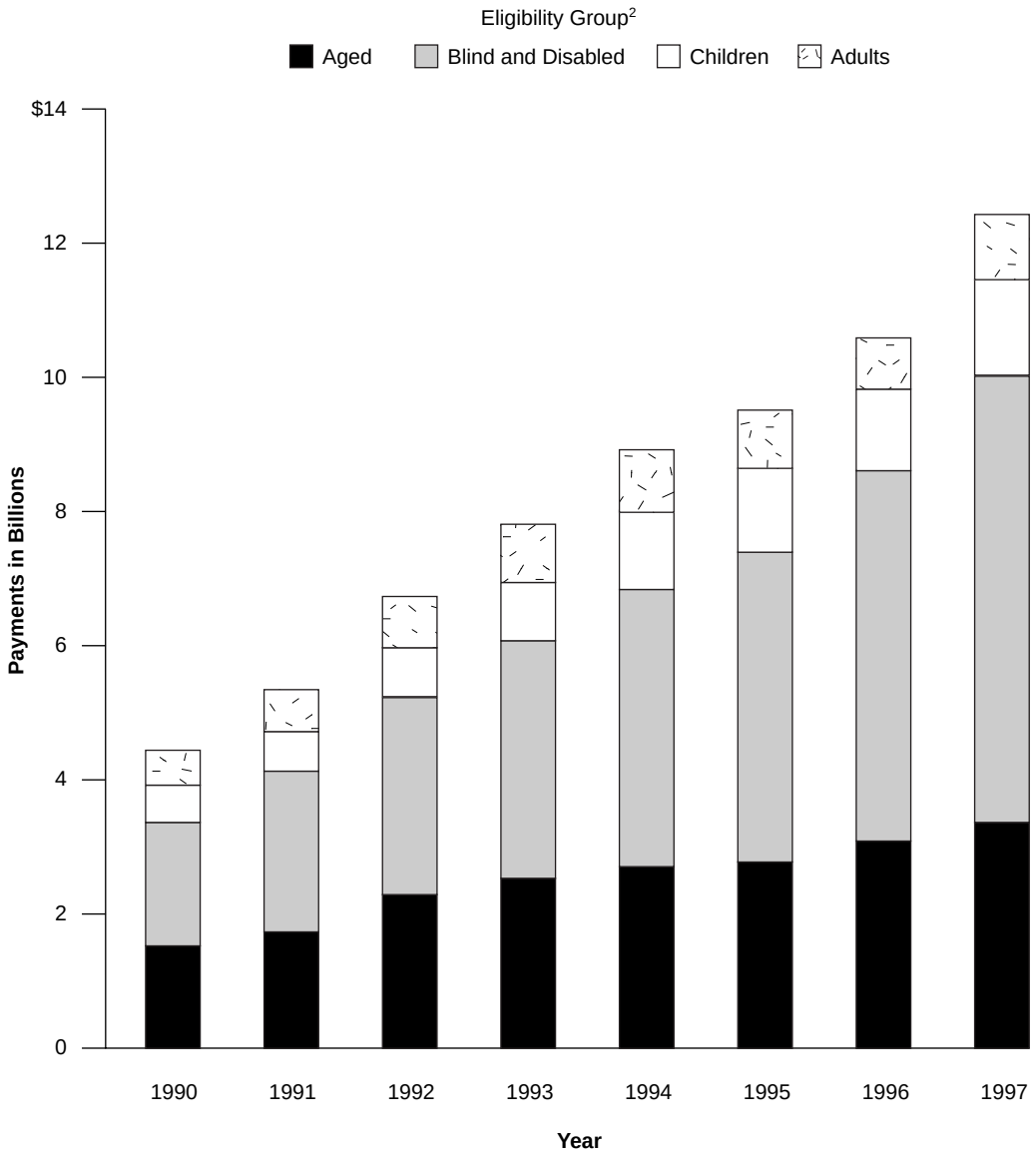
[3] Average annual percent of growth from 1990-97.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Figure 1

**Medicaid Prescription Drug Payments,[1] by Eligibility Group and Year: Federal Fiscal Years 1990-97**




[1] Medicaid prescription drug payments are gross amounts prior to the receipt of rebates to the States by prescription drug manufacturers. Medicaid prescription drug payments include all payments for prescription drugs provided under a fee-for-service setting (i.e., prescription drugs for which Medicaid paid a pharmacy claim). Because Medicaid pays a single premium to a prepaid plan for all covered services, it is not possible to identify prescription drug payments when they are covered by a prepaid plan. To this extent, Medicaid prescription drug payments presented here may understate total Medicaid payments for prescription drugs.

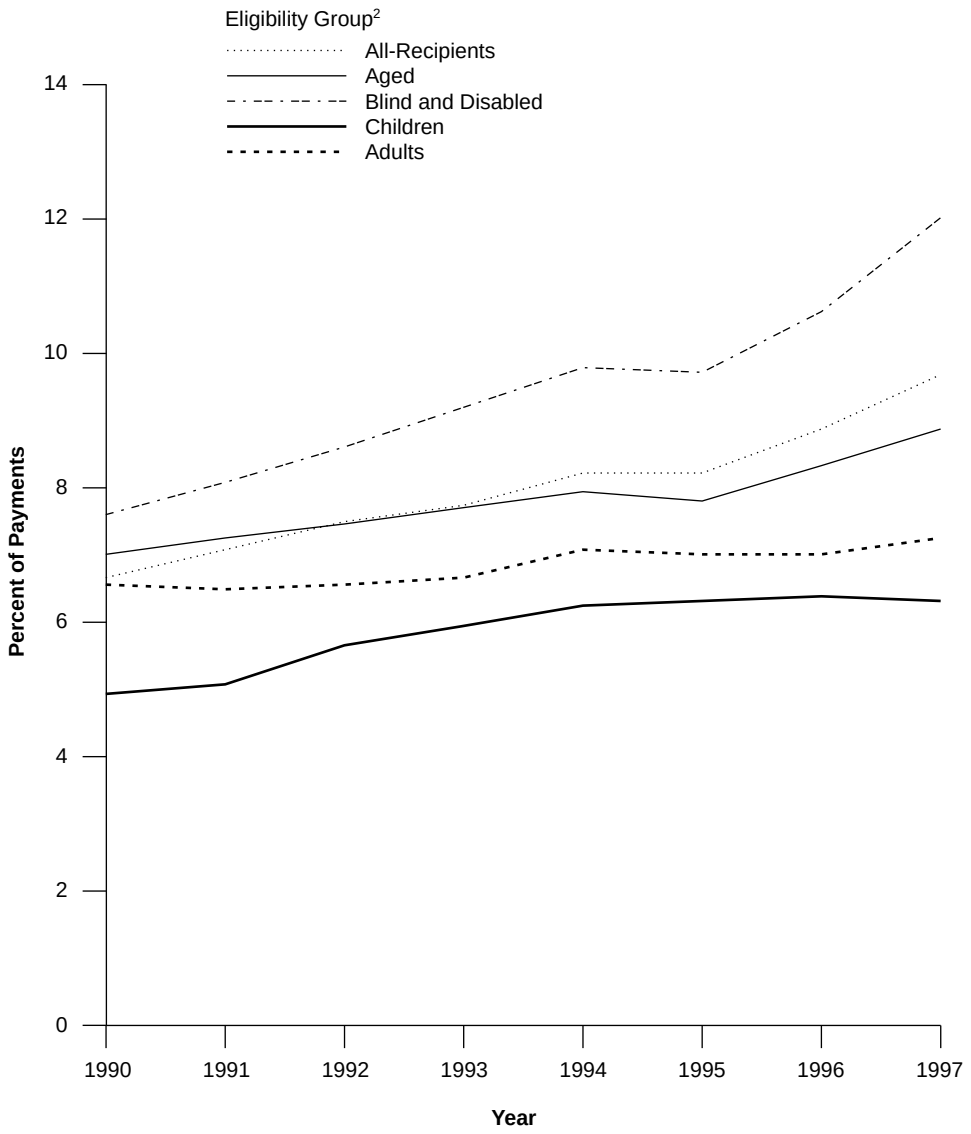
[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. A small number of individuals that are not reported in these four groups have been excluded.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Figure 2

**Medicaid Prescription Drug Payments,[1] as a Percent of Total Medicaid Payments, by Eligibility Group and Year: Federal Fiscal Years 1990-97**




[1] Medicaid prescription drug payments are gross amounts prior to the receipt of rebates to the States by prescription drug manufacturers. Medicaid prescription drug payments include all payments for prescription drugs provided under a fee-for-service setting (i.e., prescription drugs for which Medicaid paid a pharmacy claim). Because Medicaid pays a single premium to a prepaid plan for all covered services, it is not possible to identify prescription drug payment when they are covered by a prepaid plan. To this extent, Medicaid prescription drug payments presented here may understate total Medicaid payments for prescription drugs.

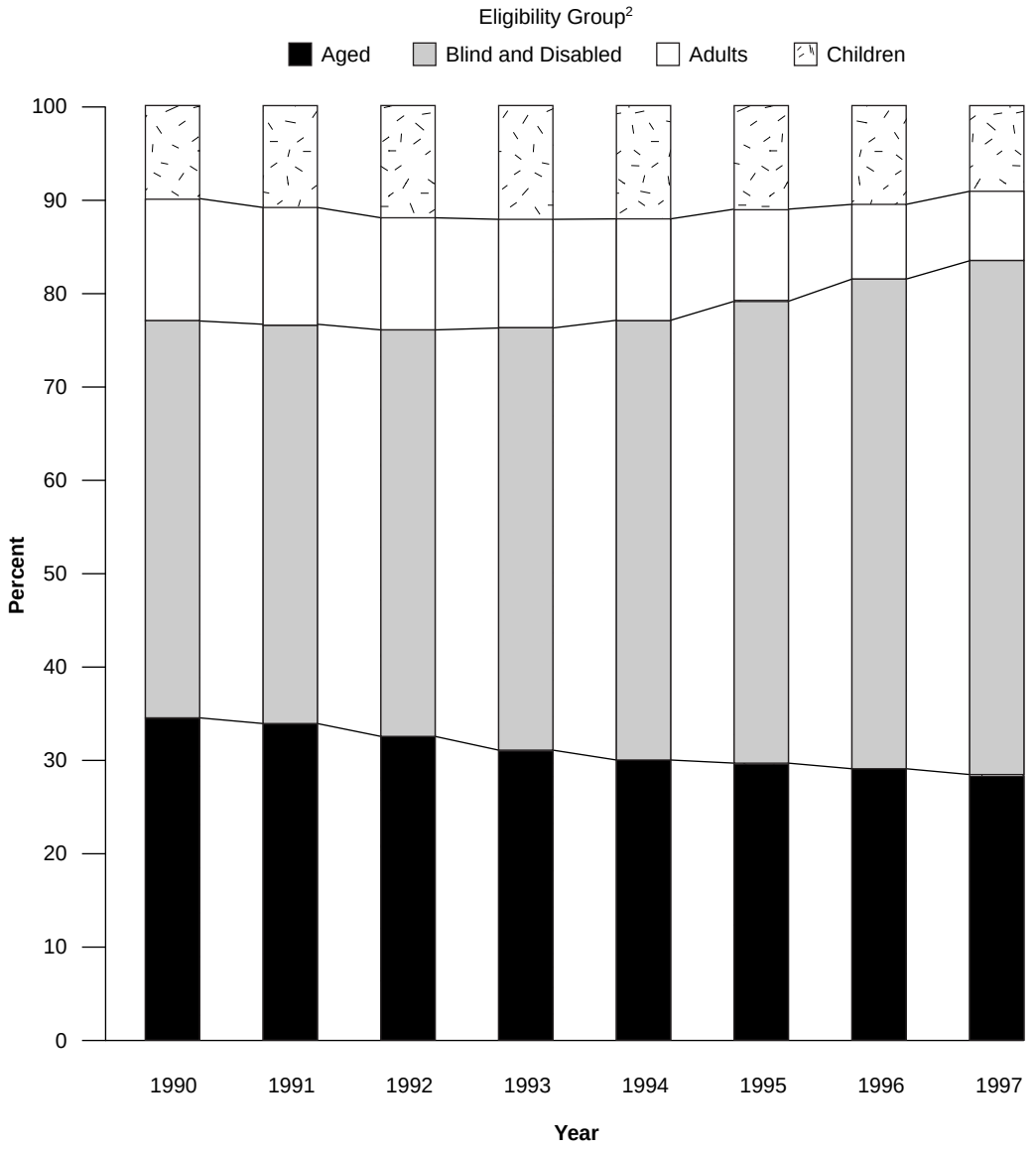
[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Figure 3

**Percent of Medicaid Prescription Drug Payments,[1] by Eligibility Group and Year: Federal Fiscal Years 1990-97**




[1] Medicaid prescription drug payments are gross amounts prior to the receipt of rebates to the States by prescription drug manufacturers. Medicaid prescription drug payments include all payments for prescription drugs provided under a fee-for-service setting (i.e., prescription drugs for which Medicaid paid a pharmacy claim). Because Medicaid pays a single premium to a prepaid plan for all covered services, it is not possible to identify prescription drug payments when they are covered by a prepaid plan. To this extent, Medicaid prescription drug payments presented here may understate total Medicaid payments for prescription drugs.

[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. A small number of individuals that are not reported in these four groups have been excluded.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Table 2

## Medicaid Prescription Drug Payments,[1] by State and Eligibility Group: Federal Fiscal Year 1997

| State | Medicaid Eligibility Group [2] | | | | |
|---|---|---|---|---|---|
| | All-Recipients | Aged | Blind and Disabled | Children | Adults |
| | | | Payments in Millions | | |
| Total | $11,970.9 | $3,342.7 | $6,517.5 | $1,098.5 | $880.8 |
| Alabama [3] | 226.1 | 59.3 | 134.9 | 23.6 | 7.9 |
| Alaska | 28.4 | 4.8 | 14.6 | 3.2 | 4.7 |
| Arizona [3,5] | NA | NA | NA | NA | NA |
| Arkansas | 135.8 | 41.6 | 74.7 | 8.3 | 11.3 |
| California [4] | 1,335.1 | 320.3 | 759.2 | 123.8 | 125.6 |
| Colorado [4] | 97.0 | 33.8 | 51.3 | 6.6 | 5.2 |
| Connecticut [4] | 166.7 | 62.1 | 99.4 | 2.9 | 2.3 |
| Delaware[3] | 34.7 | 5.9 | 16.0 | 4.2 | 8.3 |
| District of Columbia [4] | 37.5 | 4.7 | 25.7 | 2.6 | 4.5 |
| Florida [4] | 772.8 | 197.3 | 474.0 | 55.8 | 43.9 |
| Georgia [4] | 339.3 | 64.9 | 187.0 | 57.1 | 29.3 |
| Hawaii [3,5] | NA | NA | NA | NA | NA |
| Idaho | 45.0 | 14.5 | 22.2 | 4.0 | 4.0 |
| Illinois [4] | 523.6 | 111.2 | 311.9 | 51.2 | 49.3 |
| Indiana [4] | 293.3 | 105.5 | 148.7 | 26.1 | 12.7 |
| Iowa [4] | 123.9 | 41.7 | 58.7 | 12.0 | 11.5 |
| Kansas [4] | 104.6 | 33.5 | 51.1 | 12.0 | 6.5 |
| Kentucky | 316.5 | 73.0 | 191.9 | 25.9 | 25.5 |
| Louisiana | 315.4 | 113.6 | 139.0 | 44.8 | 17.9 |
| Maine | 102.5 | 29.7 | 53.7 | 8.0 | 9.1 |
| Maryland [3] | 172.7 | 45.1 | 99.9 | 13.4 | 14.3 |
| Massachusetts [4] | 398.1 | 88.8 | 250.7 | 23.4 | 35.2 |
| Michigan [4] | 365.3 | 80.1 | 219.9 | 29.0 | 35.4 |
| Minnesota [3] | 155.8 | 39.1 | 97.7 | 9.5 | 9.5 |
| Mississippi | 208.6 | 64.9 | 111.8 | 17.4 | 14.1 |
| Missouri [4] | 320.7 | 112.6 | 172.2 | 22.7 | 12.8 |
| Montana [4] | 35.5 | 8.7 | 18.5 | 3.1 | 4.2 |
| Nebraska | 79.7 | 27.8 | 35.9 | 9.9 | 6.2 |
| Nevada | 26.7 | 8.0 | 14.8 | 2.3 | 1.4 |
| New Hampshire [4] | 45.4 | 14.4 | 20.0 | 5.9 | 5.0 |
| New Jersey [4] | 369.8 | 101.0 | 245.7 | 12.1 | 10.5 |
| New Mexico [4] | 63.3 | 11.2 | 33.9 | 11.3 | 6.9 |
| New York [4] | 1,090.9 | 235.4 | 685.4 | 83.7 | 86.4 |
| North Carolina [4] | 403.8 | 141.4 | 177.9 | 47.2 | 37.3 |
| North Dakota | 25.2 | 10.4 | 10.6 | 2.5 | 1.8 |
| Ohio [3] | 580.6 | 199.7 | 313.5 | 29.6 | 37.8 |
| Oklahoma [3,6] | 110.9 | NA | NA | NA | NA |
| Oregon [3] | 73.2 | 17.9 | 34.1 | 2.9 | 18.3 |
| Pennsylvania [4] | 552.3 | 215.5 | 267.6 | 39.9 | 28.9 |
| Rhode Island [3] | 52.2 | 17.3 | 33.9 | 0.7 | 0.3 |
| South Carolina | 159.6 | 53.4 | 81.4 | 17.1 | 7.7 |
| South Dakota | 27.6 | 9.4 | 14.4 | 2.8 | 1.0 |
| Tennessee [3,5] | NA | NA | NA | NA | NA |
| Texas [4] | 750.1 | 259.4 | 248.0 | 171.3 | 71.3 |
| Utah [4] | 50.8 | 9.0 | 25.7 | 6.6 | 8.9 |
| Vermont [3] | 44.3 | 13.8 | 21.2 | 4.7 | 4.2 |
| Virginia [4] | 249.6 | 85.4 | 123.8 | 25.9 | 14.6 |
| Washington [4] | 205.0 | 56.1 | 136.4 | 6.4 | 5.9 |
| West Virginia | 133.0 | 30.1 | 71.9 | 16.5 | 14.6 |
| Wisconsin [4] | 205.5 | 64.7 | 129.0 | 6.4 | 5.3 |
| Wyoming | 14.9 | 4.4 | 7.0 | 2.1 | 1.2 |

[1] Medicaid prescription drug payments are gross amounts prior to the receipt of rebates to the States by prescription drug manufacturers. Medicaid prescription drug payments include all payments for prescription drugs provided under a fee-for-service setting (i.e., prescription drugs for which Medicaid paid a pharmacy claim). Because Medicaid pays a single premium to a prepaid plan for all covered services, it is not possible to identify prescription drug payments when they are covered by a prepaid plan. To this extent Medicaid prescription drug payments presented here may understate total Medicaid payments for prescription drugs.

[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

[3] These 12 States have comprehensive health care reform demonstrations that include fully capitated payment arrangements implemented as of June 1997.

[4] These 25 States have other managed care programs that have fully capitated payment arrangements as of June 1997.

[5] Data are not reported for these States.

[6] Data are not reported by eligibility group for this State.

NOTES: Data are reported for the 50 States and the District of Columbia. NA is not available.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1997.

## Table 3

## Medicaid Prescription Drug Recipients,[1] by Eligibility Group and Year: Federal Fiscal Years 1990-97

| Eligibility Group [2] | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | Annual Rate of Growth [3] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Recipients in Thousands | | | | |
| All-Recipients | 17,287.4 | 19,595.6 | 22,023.3 | 23,895.6 | 24,462.8 | 23,718.3 | 22,575.7 | 20,943.9 | 2.8 |
| Aged | 2,590.4 | 2,735.1 | 2,872.9 | 2,953.0 | 3,010.8 | 2,980.2 | 2,966.4 | 2,846.4 | 1.4 |
| Blind and Disabled | 3,021.3 | 3,287.2 | 3,664.1 | 4,117.6 | 4,427.9 | 4,569.1 | 4,755.4 | 4,726.9 | 6.6 |
| Children | 7,255.6 | 8,605.2 | 10,060.9 | 10,986.3 | 11,234.4 | 10,705.6 | 9,980.2 | 9,123.4 | 3.3 |
| Adults | 4,055.6 | 4,604.5 | 5,048.4 | 5,409.9 | 5,381.2 | 4,969.8 | 4,336.0 | 3,893.5 | -0.6 |

[1] A Medicaid prescription drug recipient is a Medicaid enrollee who received at least one covered prescription drug during the fiscal year. If an enrollee was covered under a prepaid plan, providing either partial or comprehensive coverage during the year, and had at least 1 fee-for-service claim for a prescription drug during the fiscal year, that enrollee is counted as a prescription drug recipient. Otherwise, enrollees covered under prepaid plans are excluded from prescription drug recipient counts because it is not possible to identify the plan enrollees who received Medicaid covered services. Therefore, these data may understate the number of recipients and prescription drug recipients.

[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

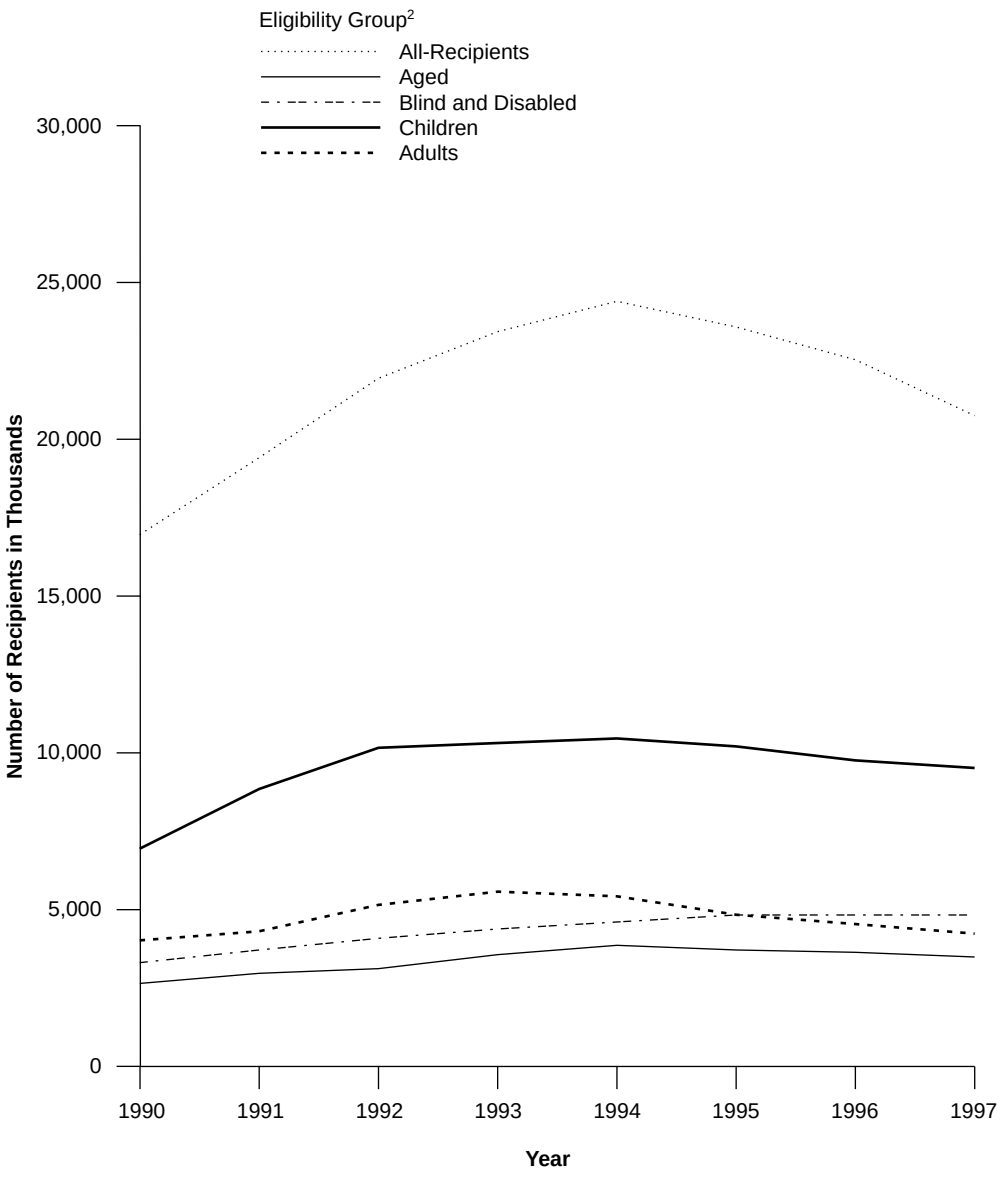
[3] Average annual percent of growth from 1990-97.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Figure 4

## Number of Medicaid Prescription Drug Recipients,[1] by Eligibility Group and Year: Federal Fiscal Years 1990-97




[1] A Medicaid prescription drug recipient is a Medicaid enrollee who received at least 1 covered prescription drug during the fiscal year. If an enrollee was covered under a prepaid plan, providing either partial or comprehensive coverage during the year, and had at least 1 fee-for-service claim for a prescription drug during the fiscal year, that enrollee is counted as a prescription drug recipient. Otherwise, enrollees covered under prepaid plans are excluded from prescription drug recipient counts because it is not possible to identify the plan enrollees who received Medicaid covered services. Therefore, these data may understate the number of prescription drug recipients.

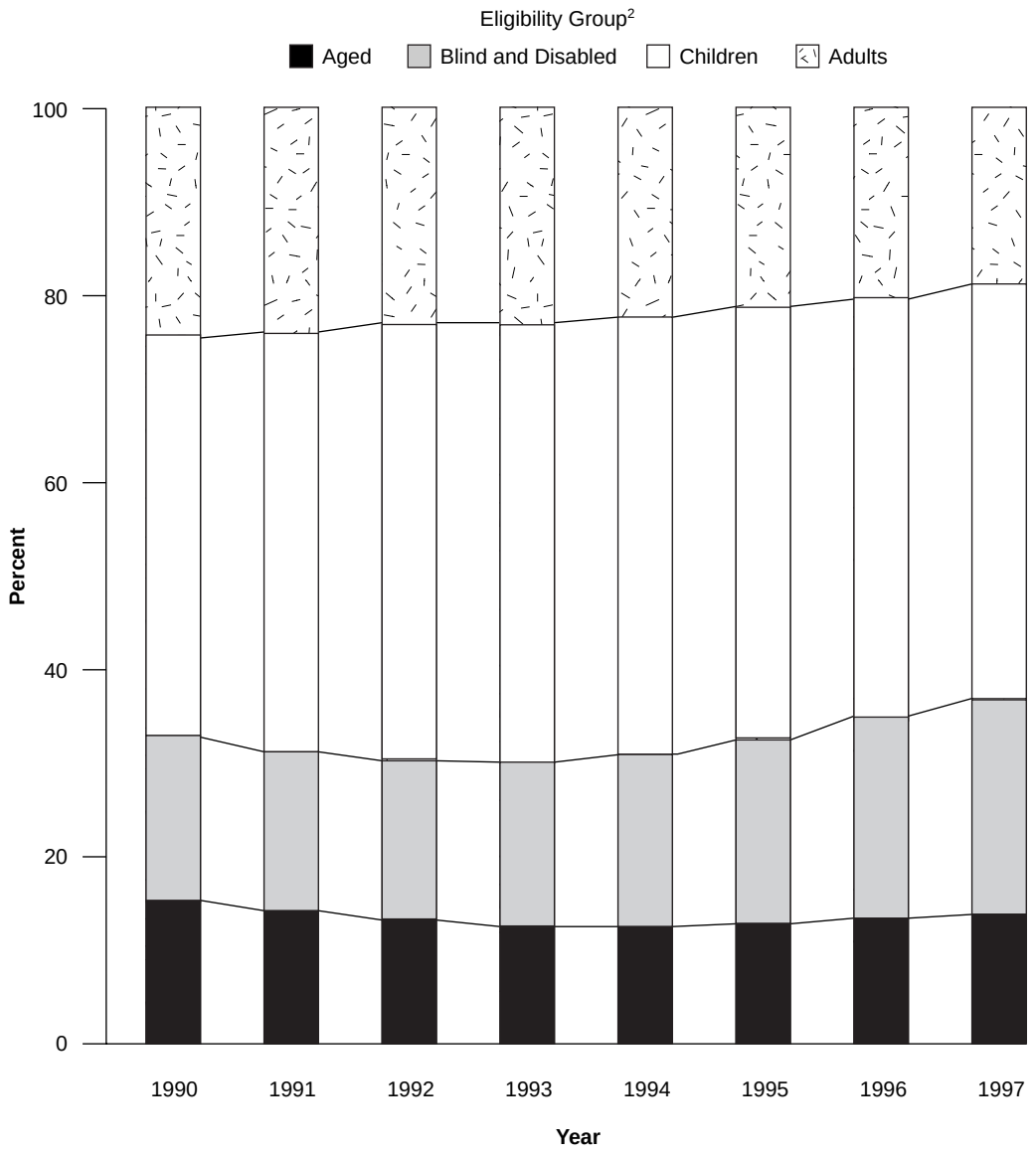
[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Figure 5

**Percent of Total Medicaid Prescription Drug Recipients,[1] by Eligibility Group and Year: Federal Fiscal Years 1990-97**




[1] A Medicaid prescription drug recipient is a Medicaid enrollee who received at least 1 covered prescription drug during the fiscal year. If an enrollee was covered under a prepaid plan, providing either partial or comprehensive coverage during the year, and had at least 1 fee-for-service claim for a prescription drug during the fiscal year, that enrollee is counted as a prescription drug recipient. Otherwise, enrollees covered under prepaid plans are excluded from prescription drug recipient counts because it is not possible to identify the plan enrollees who received Medicaid covered services. Therefore, these data may understate the number of prescription drug recipients.

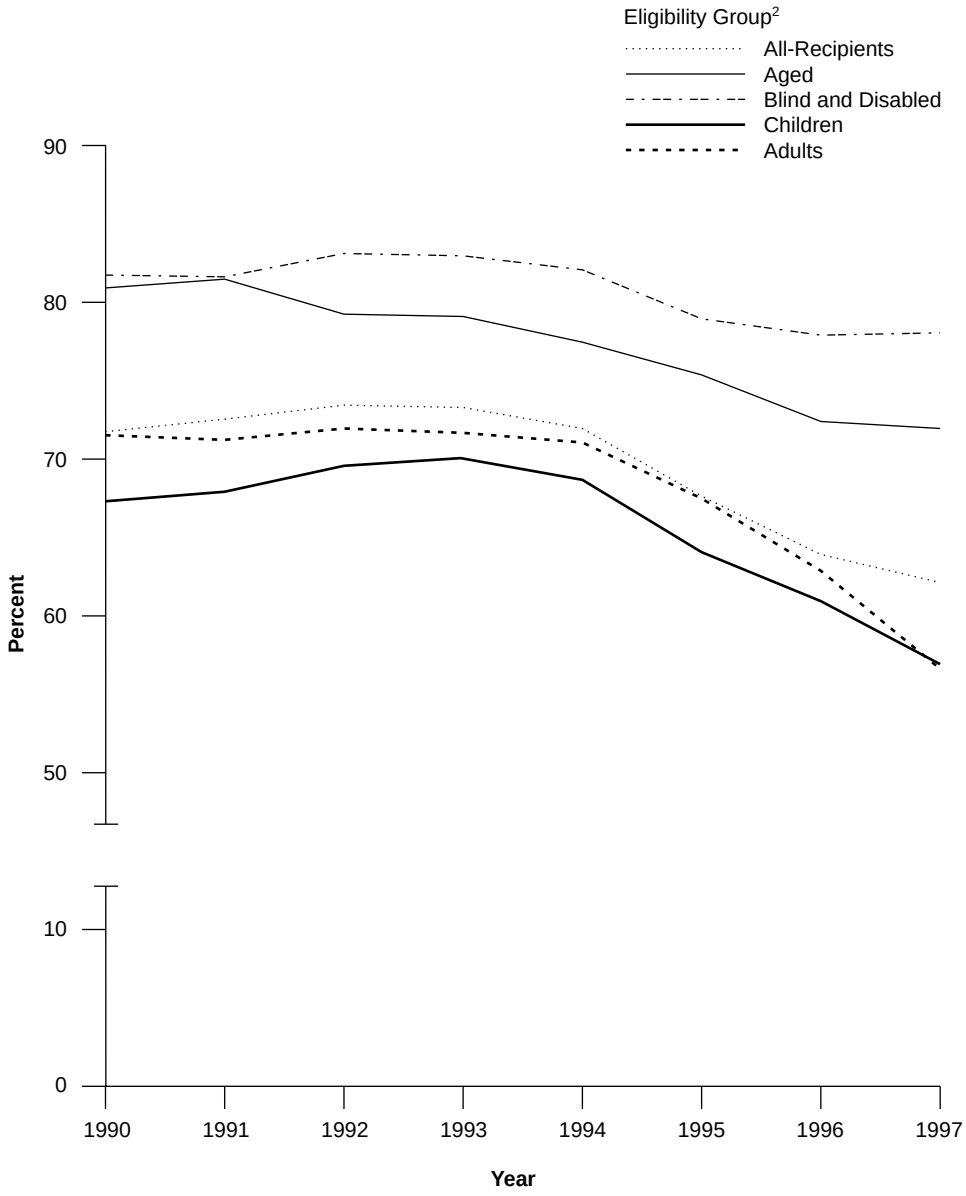
[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. A small number of individuals that are not reported in these four groups have been excluded.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Figure 6

## Medicaid Prescription Drug Recipients,[1] as a Percent of Total Medicaid Recipients: Federal Fiscal Years 1990-97




[1] A Medicaid prescription drug recipient is a Medicaid enrollee who received at least 1 covered prescription drug during the fiscal year. If an enrollee was covered under a prepaid plan, providing either partial or comprehensive coverage during the year, and had at least 1 fee-for-service claim for a prescription drug during the fiscal year, that enrollee is counted as a prescription drug recipient. Otherwise, enrollees covered under prepaid plans are excluded from prescription drug recipient counts because it is not possible to identify the plan enrollees who received Medicaid covered services. Therefore, these data may understate the number of prescription drug recipients.

[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Table 4

## Medicaid Prescription Drug Recipients,[1] by State and Eligibility Group: Federal Fiscal Year 1997

| State | Medicaid Eligibility Group [2] | | | | |
|---|---|---|---|---|---|
| | All-Recipients | Aged | Blind and Disabled | Children | Adults |
| | Recipients in Thousands | | | | |
| Total | 20,943.9 | 2,846.4 | 4,726.9 | 9,123.4 | 3,893.5 |
| Alabama [3] | 412.7 | 50.8 | 122.7 | 199.0 | 36.6 |
| Alaska | 42.2 | 3.3 | 6.1 | 19.4 | 11.9 |
| Arizona [3,5] | NA | NA | NA | NA | NA |
| Arkansas | 254.1 | 39.7 | 74.4 | 65.0 | 74.1 |
| California [4] | 3,158.4 | 381.5 | 609.9 | 1,376.2 | 695.7 |
| Colorado [4] | 156.6 | 29.8 | 37.3 | 59.0 | 30.4 |
| Connecticut [4] | 120.5 | 45.9 | 45.2 | 16.9 | 12.6 |
| Delaware [3] | 68.7 | 4.4 | 10.6 | 33.5 | 19.1 |
| District of Columbia [4] | 64.5 | 4.5 | 17.6 | 24.4 | 18.0 |
| Florida [4] | 1,024.6 | 159.2 | 260.3 | 424.6 | 174.3 |
| Georgia [4] | 847.0 | 64.6 | 177.5 | 435.9 | 165.0 |
| Hawaii [3,5] | NA | NA | NA | NA | NA |
| Idaho | 80.0 | 9.2 | 15.0 | 39.6 | 14.0 |
| Illinois [4] | 1,008.7 | 84.2 | 212.6 | 487.9 | 224.1 |
| Indiana [4] | 352.8 | 57.5 | 71.4 | 161.0 | 61.9 |
| Iowa [4] | 221.1 | 33.1 | 41.6 | 91.5 | 54.7 |
| Kansas [4] | 170.2 | 23.8 | 35.2 | 77.1 | 31.1 |
| Kentucky | 494.3 | 47.5 | 146.5 | 208.9 | 89.3 |
| Louisiana | 563.9 | 75.7 | 127.1 | 300.5 | 60.6 |
| Maine | 139.5 | 21.2 | 33.3 | 55.1 | 27.6 |
| Maryland [3] | 256.4 | 34.8 | 64.8 | 106.5 | 50.3 |
| Massachusetts [4] | 559.2 | 82.4 | 156.1 | 202.8 | 117.9 |
| Michigan [4] | 688.9 | 76.1 | 175.6 | 279.6 | 152.6 |
| Minnesota [3] | 227.0 | 35.2 | 62.3 | 87.1 | 41.5 |
| Mississippi | 391.3 | 57.0 | 116.7 | 136.2 | 80.9 |
| Missouri [4] | 395.5 | 77.0 | 94.9 | 161.6 | 60.7 |
| Montana [4] | 62.1 | 7.1 | 12.4 | 25.7 | 12.3 |
| Nebraska | 152.0 | 21.8 | 25.0 | 78.5 | 26.7 |
| Nevada | 55.9 | 8.2 | 14.0 | 23.4 | 8.9 |
| New Hampshire [4] | 71.7 | 10.7 | 10.2 | 38.2 | 12.4 |
| New Jersey [4] | 347.1 | 79.2 | 125.8 | 89.6 | 51.6 |
| New Mexico [4] | 184.5 | 11.9 | 31.4 | 110.3 | 30.6 |
| New York [4] | 1,667.9 | 216.0 | 447.8 | 719.3 | 284.8 |
| North Carolina [4] | 779.2 | 118.0 | 148.6 | 377.0 | 135.6 |
| North Dakota | 39.7 | 7.8 | 6.9 | 17.2 | 7.6 |
| Ohio [3] | 786.3 | 130.7 | 207.0 | 277.1 | 171.5 |
| Oklahoma [3,6] | 207.4 | NA | NA | NA | NA |
| Oregon [3] | 149.5 | 21.2 | 29.1 | 32.5 | 66.6 |
| Pennsylvania [4] | 763.3 | 160.7 | 191.1 | 311.7 | 97.7 |
| Rhode Island [3] | 46.8 | 15.8 | 24.4 | 4.9 | 1.4 |
| South Carolina | 359.9 | 60.3 | 86.2 | 159.7 | 53.7 |
| South Dakota | 47.8 | 7.5 | 10.4 | 23.6 | 6.4 |
| Tennessee [3,5] | NA | NA | NA | NA | NA |
| Texas [4] | 1,986.2 | 236.8 | 239.9 | 1,173.2 | 336.2 |
| Utah [4] | 105.7 | 7.1 | 15.0 | 54.0 | 27.0 |
| Vermont [3] | 83.1 | 12.4 | 13.7 | 37.3 | 18.3 |
| Virginia [4] | 396.7 | 64.2 | 83.0 | 185.4 | 64.1 |
| Washington [4] | 292.7 | 49.8 | 95.1 | 86.9 | 60.4 |
| West Virginia | 280.6 | 25.1 | 66.4 | 136.3 | 52.7 |
| Wisconsin [4] | 266.0 | 56.7 | 99.2 | 71.1 | 38.2 |
| Wyoming | 33.4 | 3.1 | 5.4 | 18.1 | 6.6 |

[1] A Medicaid prescription drug recipient is a Medicaid enrollee who received at least 1 covered prescription drug during the fiscal year. If an enrollee was covered under a prepaid plan, providing either partial or comprehensive coverage during the year, and had at least 1 fee-for-service claim for a prescription drug during the fiscal year, that enrollee is counted as a prescription drug recipient. Otherwise, enrollees covered under prepaid plans are excluded from prescription drug recipient counts because it is not possible to identify the plan enrollees who received Medicaid covered services. Therefore, these data may understate the number of recipients and prescription drug recipients.

[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

[3] These 12 States have comprehensive health care reform demonstrations that include fully capitated payment arrangements implemented as of June 1997.

[4] These 25 States have other managed care programs that have fully capitated payment arrangements as of June 1997.

[5] Data are not reported for these States.

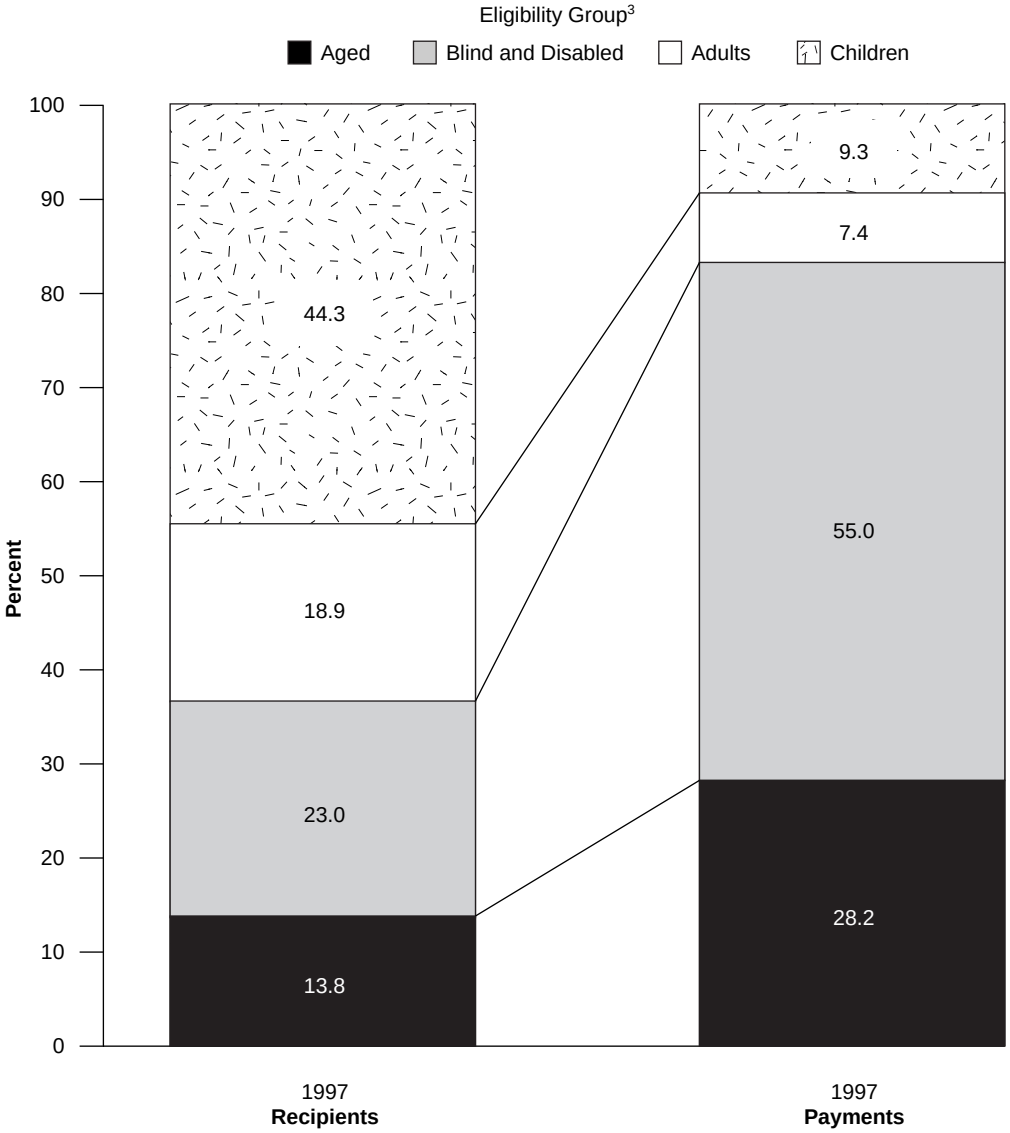
[6] Data are not reported by eligibility group for this State.

NOTES: Data are reported for the 50 States and the District of Columbia. NA is not available.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1997.

## Figure 7

**Percent of Total Medicaid Prescription Drug Recipients[1] and Payments,[2] by Eligibility Group and Year: Federal Fiscal Year 1997**




[1] A Medicaid prescription drug recipient is a Medicaid enrollee who received at least 1 covered prescription drug during the fiscal year. If an enrollee was covered under a prepaid plan, providing either partial or comprehensive coverage during the year, and had at least 1 fee-for-service claim for a prescription drug during the fiscal year, that enrollee is counted as a prescription drug recipient. Otherwise, enrollees covered under prepaid plans are excluded from prescription drug recipient counts because it is not possible to identify the plan enrollees who received Medicaid covered services. Therefore, these data may understate the number of prescription drug recipients.

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NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082.

## Table 5

## Medicaid Prescription Drug Payments per Recipient,[1] by Eligibility Group and Year: Federal Fiscal Years 1990-97

| Eligibility Group [2] | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | Annual Rate of Growth [3] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Payments per Recipient | | | | |
| All-Recipients | $256 | $277 | $307 | $334 | $363 | $413 | $474 | $572 | 12.2 |
| Aged | 551 | 666 | 763 | 827 | 880 | 960 | 1,037 | 1,174 | 11.4 |
| Blind and Disabled | 567 | 699 | 798 | 868 | 936 | 1,049 | 1,166 | 1,379 | 13.5 |
| Children | 52 | 69 | 80 | 88 | 95 | 104 | 112 | 120 | 12.8 |
| Adults | 124 | 148 | 159 | 170 | 179 | 189 | 196 | 226 | 9.0 |

[1] Medicaid prescription drug payments per recipient are defined to be Medicaid payments for prescription drugs divided by the number of Medicaid enrollees who received at least 1 covered prescription drug during the fiscal year. A consistent approach has been taken to define the numerator and denominator of this statistic. A Medicaid enrollee is represented in the payment amount (the numerator) and as a prescription drug recipient (the denominator) if and only if there was a fee-for-service claim for a prescription drug for that person.

[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

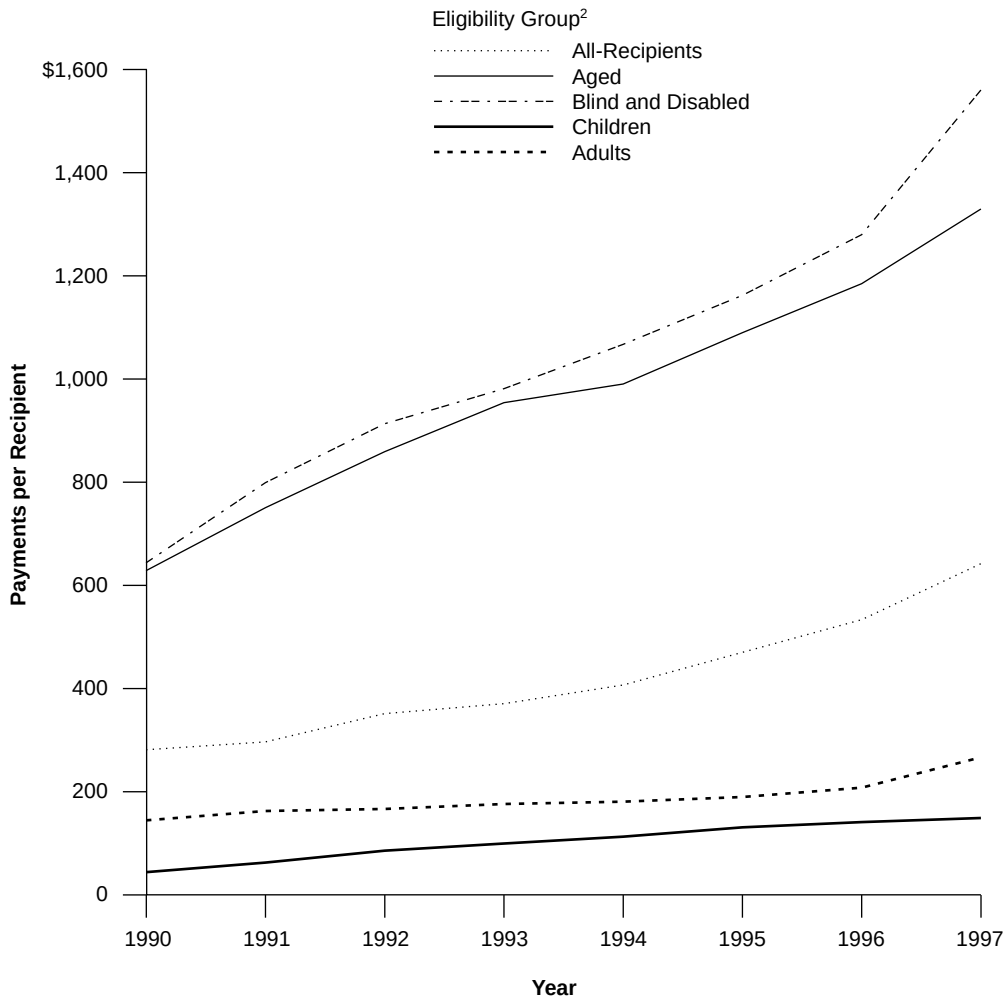
[3] Average annual percent of growth from 1990-97.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Figure 8

**Medicaid Prescription Drug Payments per Recipient,[1] by Eligibility Group[2] and Year: Federal Fiscal Years 1990-97**




[1] Medicaid prescription drug payments per recipient are defined to be Medicaid payments for prescription drugs divided by the number of Medicaid enrollees who received at least 1 covered prescription drug during the fiscal year. A consistent approach has been taken to define the numerator and denominator of this statistic. A Medicaid enrollee is represented in the payment amount (in the numerator and as a prescription drug recipient in the denominator) if and only if there was a fee-for-service claim for a prescription drug for that person.

[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

NOTE: Data are reported for the 50 States and the District of Columbia.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1990-97.

## Table 6

## Medicaid Prescription Drug Payments per Recipient,[1] by State and Eligibility Group: Federal Fiscal Year 1997

| State | Medicaid Eligibility Group [2] | | | | |
|---|---|---|---|---|---|
| | All-Recipients | Aged | Blind and Disabled | Children | Adults |
| | Payments per Recipient | | | | |
| Total | $572 | $1,174 | $1,379 | $120 | $226 |
| Alabama [3] | 548 | 1,167 | 1,100 | 118 | 216 |
| Alaska | 673 | 1,474 | 2,396 | 165 | 394 |
| Arizona [3,5] | NA | NA | NA | NA | NA |
| Arkansas | 534 | 1,049 | 1,004 | 128 | 153 |
| California [4] | 423 | 840 | 1,245 | 90 | 181 |
| Colorado [4] | 619 | 1,137 | 1,374 | 111 | 172 |
| Connecticut [4] | 1,383 | 1,352 | 2,200 | 173 | 185 |
| Delaware [3] | 505 | 1,333 | 1,504 | 126 | 431 |
| District of Columbia [4] | 582 | 1,028 | 1,459 | 107 | 251 |
| Florida [4] | 754 | 1,239 | 1,821 | 131 | 252 |
| Georgia [4] | 401 | 1,004 | 1,053 | 131 | 178 |
| Hawaii [3,5] | NA | NA | NA | NA | NA |
| Idaho | 563 | 1,575 | 1,480 | 102 | 282 |
| Illinois [4] | 519 | 1,320 | 1,468 | 105 | 220 |
| Indiana [4] | 831 | 1,834 | 2,082 | 162 | 204 |
| Iowa [4] | 560 | 1,259 | 1,412 | 131 | 211 |
| Kansas [4] | 615 | 1,404 | 1,450 | 156 | 208 |
| Kentucky | 640 | 1,535 | 1,310 | 124 | 285 |
| Louisiana | 559 | 1,501 | 1,094 | 149 | 296 |
| Maine | 735 | 1,401 | 1,613 | 145 | 329 |
| Maryland [3] | 674 | 1,296 | 1,541 | 126 | 284 |
| Massachusetts [4] | 712 | 1,078 | 1,606 | 115 | 299 |
| Michigan [4] | 530 | 1,052 | 1,252 | 104 | 232 |
| Minnesota [3] | 686 | 1,110 | 1,568 | 110 | 229 |
| Mississippi | 533 | 1,139 | 958 | 128 | 174 |
| Missouri [4] | 811 | 1,462 | 1,815 | 140 | 211 |
| Montana [4] | 571 | 1,223 | 1,491 | 120 | 339 |
| Nebraska | 525 | 1,274 | 1,436 | 127 | 230 |
| Nevada | 477 | 984 | 1,051 | 100 | 155 |
| New Hampshire [4] | 633 | 1,342 | 1,959 | 156 | 400 |
| New Jersey [4] | 1,065 | 1,276 | 1,953 | 135 | 204 |
| New Mexico [4] | 343 | 939 | 1,081 | 103 | 224 |
| New York [4] | 654 | 1,090 | 1,531 | 116 | 303 |
| North Carolina [4] | 518 | 1,198 | 1,198 | 125 | 275 |
| North Dakota | 636 | 1,321 | 1,524 | 142 | 242 |
| Ohio [3] | 738 | 1,528 | 1,514 | 107 | 221 |
| Oklahoma [3,6] | 535 | NA | NA | NA | NA |
| Oregon [3] | 490 | 844 | 1,170 | 90 | 275 |
| Pennsylvania [4] | 724 | 1,341 | 1,400 | 128 | 296 |
| Rhode Island [3] | 1,114 | 1,099 | 1,385 | 134 | 201 |
| South Carolina | 443 | 886 | 945 | 107 | 144 |
| South Dakota | 577 | 1,261 | 1,379 | 118 | 156 |
| Tennessee [3,5] | NA | NA | NA | NA | NA |
| Texas [4] | 378 | 1,096 | 1,034 | 146 | 212 |
| Utah [4] | 481 | 1,269 | 1,714 | 123 | 329 |
| Vermont [3] | 533 | 1,114 | 1,550 | 125 | 231 |
| Virginia [4] | 629 | 1,329 | 1,491 | 140 | 228 |
| Washington [4] | 700 | 1,126 | 1,435 | 73 | 97 |
| West Virginia | 474 | 1,197 | 1,082 | 121 | 277 |
| Wisconsin [4] | 773 | 1,142 | 1,300 | 90 | 140 |
| Wyoming | 445 | 1,431 | 1,305 | 116 | 179 |

[1] Medicaid prescription drug payments per recipient are defined to be Medicaid payments for prescription drugs divided by the number of Medicaid enrollees who received at least 1 covered prescription drug during the fiscal year. A consistent approach has been taken to define the numerator and denominator of this statistic. A Medicaid enrollee is represented in the payment amount (the numerator) and as a prescription drug recipient (the denominator) if and only if there was a fee-for-service claim for a prescription drug for that person.

[2] The Medicaid eligibility group identifies the basis on which Medicaid eligibility was determined, regardless of cash-assistance status. The Blind/Disabled group includes individuals of any age who were determined to be eligible because of disability. The Children's group includes foster care children. The All-Recipients group includes a small number of individuals that are not reported in the other four groups.

[3] These 12 States have comprehensive health care reform demonstrations that include fully capitated payment arrangements implemented as of June 1997.

[4] These 25 States have other managed care programs that have fully capitated payment arrangements as of June 1997.

[5] Data are not reported for these States.

[6] Data are not reported by eligibility group for this State.

NOTES: Data are reported for the 50 States and the District of Columbia. NA is not available.

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations: HCFA Form-2082, 1997.

## Table 7

## All-Payer Prescription Drug Payments and Percent of Total, by Payment Category and Year: Calendar Years 1990-97

| Payment Category[2] | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | Annual Rate of Growth[1] |
|---|---|---|---|---|---|---|---|---|---|
| **All Payers** | | | | | | | | | |
| Payments in Millions | $37,677 | $42,148 | $46,598 | $50,632 | $55,189 | $61,060 | $69,111 | $78,888 | 11.1 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | — |
| **Out-of-Pocket** | | | | | | | | | |
| Payments in Millions | $18,189 | $19,295 | $20,400 | $21,175 | $21,368 | $20,702 | $21,797 | $23,016 | 3.4 |
| Percent | 48.3 | 45.8 | 43.8 | 41.8 | 38.7 | 33.9 | 31.5 | 29.2 | — |
| **Third-Party** | | | | | | | | | |
| Payments in Millions | $19,488 | $22,854 | $26,198 | $29,457 | $33,821 | $40,358 | $47,313 | $55,873 | 16.2 |
| Percent | 51.7 | 54.2 | 56.2 | 58.2 | 61.3 | 66.1 | 68.5 | 70.8 | — |
| **Private** | | | | | | | | | |
| Payments in Millions | $12,973 | $15,178 | $17,929 | $20,109 | $23,455 | $28,649 | $33,899 | $39,905 | 17.4 |
| Percent | 34.4 | 36.0 | 38.5 | 39.7 | 42.5 | 46.9 | 49.1 | 50.6 | — |
| **Public** | | | | | | | | | |
| Payments in Millions | $6,515 | $7,676 | $8,269 | $9,348 | $10,366 | $11,709 | $13,414 | $15,968 | 13.7 |
| Percent | 17.3 | 18.2 | 17.7 | 18.5 | 18.8 | 19.2 | 19.4 | 20.2 | — |
| **Medicaid** | | | | | | | | | |
| Payments in Millions | $5,073 | $6,175 | $6,707 | $7,752 | $8,553 | $9,646 | $11,057 | $13,224 | 14.7 |
| Percent | 13.5 | 14.7 | 14.4 | 15.3 | 15.5 | 15.8 | 16.0 | 16.8 | — |
| **Other Public** | | | | | | | | | |
| Payments in Millions | $1,442 | $1,501 | $1,562 | $1,596 | $1,813 | $2,063 | $2,357 | $2,744 | 9.6 |
| Percent | 3.8 | 3.6 | 3.4 | 3.2 | 3.3 | 3.4 | 3.4 | 3.5 | — |

[1] Average annual percent of growth from 1990-97.

[2] All payer payment amounts are split between out-of-pocket amounts (those amounts paid out of personal funds) and third party payments (those amounts paid by insurers or programs). Third party payments are further split by whether the insurer and/or program was either public or private. Finally, public was split between Medicaid and other public sources.

SOURCE: Health Care Financing Administration, Office of the Actuary, National Health Expenditures, 1990-97.