Medicaid Tape-to-Tape findings: California, New York, and Michigan, 1981

Presented in this report is an overview of Medicaid enrollment, utilization, and expenditures in California during 1981. The California Medicaid program, called Medi-Cal, is the largest in the Nation in terms of program beneficiaries. During 1981, California had one of the most generous Medicaid programs in the country in terms of eligibility and covered services. At the same time, there were benefit limitations and reimbursement restrictions in place that were designed to restrict program expenditures. The data in this report were provided by the State to the Health Care Financing Administration as part of the Medicaid Tape-to-Tape Project. Data from Michigan and New York are also included for comparison purposes.

Introduction

In 1965, Congress passed legislation (Public Law 89-97) amending the Social Security Act to create the Medicare (Title XVIII) and Medicaid (Title XIX) programs. As an expansion to Medical Assistance for the Aged under Kerr-Mills legislation, Medicaid was designed to provide access to health care for low income persons who were aged, blind, disabled, or members of families with dependent children. From the beginning, Medicaid has been a decentralized program. Financing is provided jointly by the States and by the Federal Government. However, the program is administered independently by individual States within broad Federal guidelines that specify coverage provisions, mandatory services, and minimum administrative requirements. Beyond these guidelines, States have considerable flexibility to determine eligibility, additional services, coverage, duration of coverage, administrative structures, and data systems.

During the last decade, Medicaid has grown rapidly, both in the number of recipients and in total expenditures. As a result of this growth, Medicaid has become a large component of many State budgets and has become a highly visible program at the Federal level. As budgets have grown, the Federal Government has attempted to contain Medicaid costs in a variety of ways. The most sweeping changes in Medicaid have resulted from the Omnibus Budget Reconciliation Act of 1981. At the same time, the fiscal crisis existing in many States has forced those States to implement extensive changes in their Medicaid programs.

Because Medicaid was designed as a decentralized program, there has been little detailed data at the national level to measure the impact of change, monitor performance, and forecast program direction. Too often, Medicaid decisions have been made on the basis of intuition or supposition, without "hard" data. As a result, the development of Medicaid data sources has become an important part of the research plan of the Health Care Financing Administration (HCFA). Even with the adequate data, policymakers and administrators will be challenged as they attempt to understand the complexities of the Medicaid program.

One recent data collection project of HCFA is the Tape-to-Tape Project. The primary goals of the Tape-to-Tape Project are to improve HCFA's ability to conduct program evaluation, strengthen program management, evaluate policy alternatives, and assist States in the area of Medicaid financing. The project minimizes the costs and burden of data collection by using person-level data extracted from existing State Medicaid Management Information Systems (MMIS). Because MMIS data are available for enrollment, service use, and expenditures at the person level, they provide maximum flexibility to support a wide variety of analytical activities. Moreover, because enrollment and claims records can be directly linked, MMIS data can be used to produce use and expenditure rates. The list of possible study areas using these data includes enrollment characteristics and turnover, high-cost recipients, institutionalized individuals, cost sharing, inpatient hospital reimbursement, home-based and community-based services, freedom of choice, persons dually entitled, and selected medical conditions. The Tape-to-Tape Project has become an integral part of HCFA's effort to improve Medicaid data capabilities for the coming year.

The Tape-to-Tape Project is being implemented for 1980-84 in the States of California, Georgia, Michigan, New York, and Tennessee. Although these States are not necessarily representative of the national Medicaid program, they account for approximately 40 percent of the Nation's Medicaid recipients and expenditures. The following are major Tape-to-Tape Project tasks:

- Obtain person-level data on Medicaid enrollment, claims, and providers from State MMIS systems.
- Develop "uniform" data file structures to facilitate the comparison of Medicaid programs among States.
- Prepare standard reports describing enrollment, use, expenditures, and provider participation under Medicaid.

Reprint requests: Martin Ruther, Health Care Financing Administration, Room 2502 Oak Meadows Building, 6325 Security Boulevard, Baltimore, Maryland 21207.
• Conduct special studies that focus on important policy, program management, or other research issues for Medicaid.
• Produce research data bases to analyze and evaluate the Medicaid program.

**Medicaid eligibility and benefit structure**

Medicaid is designed to reduce financial barriers to health care for certain groups of indigent persons. The program is related to the welfare system in that primary eligibility for Medicaid benefits is extended to cash assistance recipients under the Supplemental Security Income (SSI) and Aid to Families with Dependent Children (AFDC) programs. States may elect to extend Medicaid coverage automatically to SSI recipients or to require that SSI recipients meet more restrictive standards than were in effect prior to implementation of the SSI program.

The Medicaid program is linked to the public welfare system and covers the following two types of eligible persons:

- **Categorically needy eligibles**: These persons are eligible for Medicaid because they qualify under the Aid to Families with Dependent Children (AFDC) program or the Supplemental Security Income (SSI) program for the aged, blind, and disabled. These eligibles may or may not be receiving cash assistance under the public assistance program when enrolled in the Medicaid program.

- **Medically needy eligibles**: These persons are eligible for Medicaid because they qualify for either AFDC or SSI except that their income is above the categorically needy program standard but below the medically needy program standard but falls below it after subtracting medical expenses (these are known as "spend-down" eligibles). Coverage for medically needy eligibles is optional for the States.

A special subset of persons enrolled in Medicaid are the elderly and disabled who also are enrolled in Medicare (often called "crossovers"). For these persons, Medicaid covers the coinsurance and deductibles required by Medicare, as well as expenses for services not covered by Medicare. In many States the Medicaid program also pays the premium required by Medicare to enroll in Medicare Part B supplementary medical insurance. Many States include within their Medicaid programs one or more "State-only" eligibility groups of low income persons who do not fall within the categorical or income groups described previously. The services provided under these State-only programs are fully funded by the State; however, the Federal Government shares in the administrative costs.

Because States have considerable flexibility to establish financial criteria for welfare eligibility, they simultaneously control income eligibility levels for Medicaid. Thus, individuals in identical circumstances are not necessarily treated identically across States. Moreover, not all of the poor are covered by Medicaid. In addition to income considerations, people must be in one of the designated groups (aged, blind, disabled, or member of a family with dependent children) to be eligible for Medicaid assistance. Low-income persons who are not eligible for Medicaid include nonelderly single persons, most two-parent families, and families with a father working at a low-paying job (Davis, 1979).

**1981 California Medicaid program**

Unless otherwise indicated, all program characteristics data are based on data from La Jolla Management Corporation (1982).

During 1981, the California Medicaid program (Medi-Cal) was one of the more generous programs in the country in both eligibility determination and covered services. The annual AFDC payment level for a family of four (the income level below which a family was eligible for Medicaid) in California was $7,212, the second highest AFDC payment level in the country. Its SSI payments, at average annual rates of $5,258 per person for the aged and disabled, were also the second highest in the country in 1981; $2,092 per year was provided as a State supplement to the national SSI payment. California was 1 of the 30 States with a medically needy program. The medically needy protected income level for a family of four was $8,304—115 percent of the AFDC payment level and the highest in the country.

California has elected a number of eligibility options under its Medicaid plan. It is 1 of the 16 States whose plan includes all three of the AFDC groups not required to be included in the AFDC plan under Federal law: families with unemployed parents, pregnant women with no other eligible children, and children 18 years of age who attend school regularly. California is 1 of 11 States covering all individuals under age 21 years of age who do not qualify as dependent children, but who are otherwise AFDC-eligible. California extends eligibility to all SSI recipients and to recipients of State-only supplementary payments.

In 1981, California covered 30 of the 33 optional services permitted by Federal guidelines. Only Illinois covered as many, and only Minnesota covered more. Coverage was the same for categorically needy and medically needy individuals for both mandatory and optional services. The following optional services were provided in California:

- Intermediate care facility services.
- Intermediate care facility services for mentally retarded.
- Inpatient hospital services for individuals 65 years of age or over in institutions for tuberculosis.
- Skilled nursing facility services for individuals 65 years of age or over in institutions for tuberculosis.

NOTE: The information in this section was extracted in part from Cromwell, et al. (1982).
• Intermediate care facility services for individuals 65 years of age or over in institutions for tuberculosis.
• Inpatient hospital services for individuals 65 years of age or over in mental institutions.
• Skilled nursing facility services for individuals 65 years of age or over in mental institutions.
• Intermediate care facility services for individuals 65 years of age or over in mental institutions.
• Skilled nursing facility services for individuals under 21 years of age.
• Inpatient psychiatric services for individuals under 21 years of age.
• Prescribed drugs.
• Clinic services.
• Emergency hospital services.
• Transportation.
• Christian Science sanitoria.
• Optometric services.
• Eyeglasses.
• Dental services.
• Dentures.
• Podiatric services.
• Chiropractic services.
• Other practitioner services.
• Prosthetic devices.
• Physical therapy.
• Occupational therapy.
• Speech, hearing, and language services.
• Diagnostic services.
• Screening services.
• Preventive services.
• Rehabilitative services.

Most mandatory services and all optional services were subject to certain limitations in California, the most frequent being a prior authorization requirement. This was in contrast to the other States, which often had no such limitations on services. California had no cost-sharing provisions for services.

California was one of the five States that reimbursed nursing homes prospectively on the basis of class rates—one of the more restrictive Medicaid nursing home reimbursement approaches in the country. In 1981, facilities were reimbursed for inpatient hospital services according to Medicare reimbursement principles, basically a cost-based approach. California was 1 of 24 States to use the generally more restrictive fee-schedule approach to physician reimbursement.

Therefore, although the California program included very generous eligibility and coverage provisions, it also included program provisions such as benefit limitations and reimbursement approaches that could be expected to limit program expenditures. On the other hand, its maximum allowable physician fees were near or greater than the national averages—for example, $10.80 for a brief office exam by a general practitioner versus $10.41 nationally; $346.75 for an appendectomy in California versus $304.34 nationally; $350.08 for an emergency hospital service versus $346.75 nationally.

In fiscal year 1980, the California recipient population was the largest in the country at 3.42 million. Its total Medicaid payments were the second highest in the country, at $2.73 billion. In contrast, the New York program was the second largest in terms of recipients and the largest in terms of expenditures (Sawyer, et al., 1983). The California inpatient hospital program was also the largest in the country, with $1.33 billion and 4.02 million days. (New York was second with $0.74 billion and 3.73 million days.) The California skilled nursing facility (SNF) program was the largest in the country in terms of days, but second to New York in terms of dollars; its intermediate care facility (ICF) program was small, with 2.2 million days of care—27 States had larger ICF programs.

Data sources

The data in this report were extracted from the California Medi-Cal Management Information System (MMIS), a State administrative record system designed primarily to facilitate the timely and accurate payment of Medi-Cal claims and, secondarily, to provide data for program monitoring and research. The data are collected on an ongoing basis as part of program administration and consist of three basic types of files: enrollment files containing individual patient demographics, basis of eligibility, and monthly status; claims files containing data on actual health encounters for all types of services that resulted in the filing of a claim; and provider data on provider type and location. The data presented in this report were extracted from the enrollment and claims files. (The files were used to prepare detailed tables from which the authors prepared the tables in this report. The detailed tables are available on request from the HCFA project officers David K. Baugh and Penelope L. Fine.)

Because several States are participating in the Tape-to-Tape Project, the first steps in working with their MMIS files were to define a uniform set of variables and to recode data from individual States into uniform files. Once the uniform files were complete, a person-level file was constructed containing one record per enrollee for each year. Within the person-level files, each record includes demographic characteristics, utilization, and expenditures. Tables presented in this report were created from these person-level files.

Definitions

Populations

The following four population groups are of interest:

• Eligibles—These individuals are potential Medicaid enrollees because they meet Medicaid program standards. However, some of them were not program participants because they never applied for Medicaid benefits. (This is the parent population for the enrollees; it is not studied in this report.)
Eligibility groups

Medi-Cal eligibility and cash assistance vary by age, sex, and health status—all important determinants of health services use and expenditures. Therefore, most of the data presented in this report are arrayed by eligibility group. The following are categorized by eligibility group:

- Aged, blind, and disabled persons under the SSI program.
- Adults and children under the AFDC program.

The following are categorized by cash assistance status:

- Categorically needy receiving cash payments.
- Categorically needy not receiving cash payments.
- Medically needy.

The blind are a very small group (0.7 percent of enrollee person years) and are therefore eliminated from most analyses. The same is true of the categorically needy enrollees who do not receive cash assistance (0.1 percent of enrollee person years in California). Within the medically needy category is a subcategory, "other", that includes children for whom the State provides adoption assistance or foster care payments, as well as children in poor families that did not meet the AFDC dependency requirements.

Type of service

Both utilization and expenditure measures are analyzed by type of service. Three summary classes of service are used: hospital care (including acute hospitals but excluding psychiatric and chronic care hospitals); long-term care (including psychiatric hospitals, chronic hospitals, skilled nursing facilities, and intermediate care facilities); and all other care. In some expenditures tables, the "other services" category is disaggregated into services provided by physicians, dentists, other medical providers such as optometrists and chiropractors, hospital outpatient departments or emergency rooms, clinics, pharmacies, and all other (home health, durable medical equipment, ambulance services, and miscellaneous services).

In several tables, persons are grouped according to their institutional status. Persons are defined as being fully institutionalized when they reside in long-term care facilities for their entire period of Medi-Cal eligibility. If a long-term care stay is interrupted by one or more hospital stays, the person is still defined as fully institutionalized if the remainder of the eligibility period is spent in a long-term care facility. They are defined as semi-institutionalized when residing in long-term care facilities for any part of the eligibility period. Because many skilled nursing facility stays in California are for under 20 days, and therefore fully covered by Medicare and not represented in the Medi-Cal claims files, the semi-institutionalized counts are underestimated.

Utilization and expenditure measures

Utilization measures for hospital care are discharges, days of care, and average length of stay. For long-term care services, the measure is days of care; for pharmacy use, it is number of prescriptions, including refills. For other services, the number of visits...
is the utilization measure: physician visits (in the hospital as well as in the office or home), outpatient department or emergency room visits, clinic visits, other medical provider visits, dental visits, and home health visits. An aggregate statistic, ambulatory care visits, is the sum of physician, outpatient department or emergency room, clinic, and other provider visits. This category, though referred to as ambulatory care, contains some services, such as physician visits to inpatients that could not be readily grouped with hospital care. Total use and use per person year of enrollment, per recipient person year of enrollment, and per person year of enrollment are presented.

The measure for expenditures is total Medicaid payments for specified enrollee or recipient or user services in 1981. Again, both total expenditures and expenditures per person year and per recipient person year are presented.

Crossovers

For aged and disabled persons covered by Medicare, Medi-Cal covered coinsurance and deductibles for those services covered by Medicare, as well as expenses for services not covered by Medicare. These persons are called "crossovers."

Limitations

Tape-to-Tape data were drawn directly from the California MMIS and include data for all Medi-Cal enrollees for 1981. Some characteristics of the California data that may affect its interpretation and utility are presented.

Eligibility determinations were carried out at the county level. When an enrollee moved to another county, the unique Medi-Cal identification number used to link records for each person was changed. Enrollment and claims data were matched using Social Security number (and, at times, birthdate and name), but some underdetermined number of unmatched or mismatched records certainly exists. This results in counts of eligibles, recipients, and users that are not completely unduplicated.

Claims for services that were partially covered by Medicare lacked the complete service detail of Medi-Cal claims. This made it difficult to count visits accurately. The assumption was made that only one ambulatory visit occurred per unique date of service. When it occurred that claims for inpatient or long-term care were submitted without claims for per diem charges, expenditures were the claimed costs for the ancillary services. The number of days was imputed as equal to the number of days between the first and last dates of service.

For some medically needy enrollees (those with spend-down liability), the amount paid by Medi-Cal on the claims file represented the amount prior to subtracting the spend-down liability. This means that payments shown in this report are slightly higher than actual payments by the State. This difference is greatest for long-term care payments. For example, California officials report an average payment of $38 per long-term care day, but the amount shown in this report is $42 per day. Only about 5 percent of the Medi-Cal enrollees had any spend-down liability in 1981, so the resulting bias for aggregate expenditures is quite small (less than 1 percent).

Charges for both delivery and newborn babies were grouped on claims, giving rise to problems in counting the number of discharges and hospital days. For claims with labor, delivery, and nursery charges, we allowed twice the number of reported days, but counted the episode as only one discharge. Discharges are therefore underestimated. Length of stay in California, for hospitals and long-term care facilities, is the number of Medi-Cal covered days of stay. (This is different from other Tape-to-Tape States: Michigan and New York hospital service data are the actual number of days, whether covered by Medicaid or not.)

There were claims for 39,624 persons in the claims files who could not be identified in the enrollment files using recipient identification numbers. Claims for those persons were excluded from the utilization and expenditures tables in this report, because corresponding enrollment data were not available.

Conversely, 218,473 persons enrolled in health maintenance organizations had enrollment records but no corresponding claims records. Their enrollment records have been excluded from all tables.

Enrollment

In 1981, 3,586,036 persons, approximately 15 percent of California's population, were at some point enrolled in Medi-Cal. National data on enrollees are not readily available, but aggregate Federal reports suggest that California's enrollees represent between 15 and 20 percent of Medicaid enrollees nationally (Muse and Sawyer, 1982). Because of enrollee turnover, these individual enrollees had a total of only 2,631,904 person years of enrollment in 1981. From Table 1, it can be seen how these enrollees were distributed (by total number and by person years) across eligibility and cash assistance groups. Mean length of enrollment for each group can also be seen in this table.

Assistance groups

By far, the largest assistance group in California in 1981 was the categorically needy receiving cash, who were 74 percent of the enrollees and 80 percent of the person years. Of the remaining enrollees, especially all were medically needy (26 percent of persons ever enrolled). The categorically needy not receiving cash payments were a very small proportion of enrollees and of person years (less than 1 percent), and they are not studied further in this report. Although national data on Medicaid enrollees are not available, program data on Medicaid recipients indicate that the proportion of medically needy recipients in the California Medicaid population is somewhat larger than the
national average. The medically needy averaged about 17 percent of the total recipient population in 1982 across all States with medically needy programs (Rymer, 1983).

### Eligibility groups

Sixty-six percent of persons ever enrolled in California in 1981 were AFDC-related; about two-thirds of AFDC enrollees were children (44 percent of all Medi-Cal enrollees). AFDC adults accounted for 22 percent of the 1981 Medi-Cal enrollment. Both AFDC children and AFDC adults were primarily cash recipients. The aged comprised 14 percent of the Medi-Cal enrollment. The disabled group was 13 percent of persons ever enrolled. The great majority of the disabled (89 percent) were cash recipients. The blind represented less than 1 percent of all persons enrolled. For this reason, they are not analyzed further.

### Age and sex distributions

Age and sex distributions of each enrollment group are provided in Table 2. In 1981, 61 percent of Medi-Cal enrollees were female. Females were a majority in all enrollment groups except the medically needy disabled, which was only 36 percent female. The age distribution of the Medi-Cal population is quite different from the general population because of the categorical restrictions of Medicaid. Almost one-half the population was under 21 years of age (48 percent) and another 19 percent were elderly. In addition, the aged Medi-Cal population was older than the California total elderly population; more than one-half of the aged Medi-Cal enrollees was over 75 years of age, but only 39 percent of the State's elderly population was 75 years of age or over (Bureau of the Census, 1982).

### Table 1

**Percent distribution of persons ever enrolled in Medicaid and of person years of enrollment, by cash assistance status, eligibility group, and mean length of enrollment: California, 1981**

| Cash assistance and status eligibility group | Persons ever enrolled | Person years of enrollment | Mean length of enrollment in months |
|---------------------------------------------|-----------------------|----------------------------|-----------------------------------|
| Total Medicaid                             | 100.0                 | 100.0                      | 8.8                               |
| Aged                                       | 13.6                  | 15.7                       | 10.2                              |
| Disabled                                   | 12.8                  | 15.7                       | 10.8                              |
| AFDC child                                 | 44.0                  | 42.5                       | 8.5                               |
| AFDC adult                                 | 21.7                  | 20.4                       | 8.3                               |
| Other                                      | 7.4                   | 5.0                        | 5.9                               |

Categorically needy receiving cash

| Percent distribution | 73.8 | 79.9 | 9.5 |
|----------------------|------|------|-----|
| Aged                 | 9.4  | 11.5 | 10.7|
| Disabled             | 11.2 | 14.0 | 11.0|
| AFDC child           | 38.0 | 36.8 | 9.0 |
| AFDC adult           | 16.6 | 16.9 | 9.0 |

Categorically needy not receiving cash

| Percent distribution | 0.2  | 0.1  | 5.4 |
|----------------------|------|------|-----|
| Aged                 | 4.2  | 4.2  | 8.9 |
| Disabled             | 1.6  | 1.7  | 9.2 |
| AFDC child           | 7.8  | 5.6  | 6.4 |
| AFDC adult           | 5.0  | 3.5  | 6.1 |
| Other                | 7.4  | 5.0  | 5.9 |

Medically needy

| Percent distribution | 26.0 | 20.0 | 6.7 |
|----------------------|------|------|-----|
| Aged                 | 4.2  | 4.2  | 8.9 |
| Disabled             | 1.6  | 1.7  | 9.2 |
| AFDC child           | 7.8  | 5.6  | 6.4 |
| AFDC adult           | 5.0  | 3.5  | 6.1 |
| Other                | 7.4  | 5.0  | 5.9 |

†Includes blind.

NOTE: AFDC is Aid to Families with Dependent Children.

### Table 2

**Percent distribution of Medicaid enrollees, by age, sex, eligibility group, and cash assistance status: California, 1981**

| Eligibility group and cash assistance status | Sex | Age |
|---------------------------------------------|-----|-----|
|                                             | Total | Male | Female | Total | Under 6 | 6-17 | 18-20 | 21-44 | 45-64 | 65-74 | 75-84 | 85+ |
| Total Medicaid enrollees                    | 100  | 39   | 61     | 100   | 17     | 26   | 5     | 23    | 10    | 9     | 7     | 3    |
| AFDC child                                 | 100  | 49   | 51     | 100   | 35     | 56   | 10    | 0     | 0     | 0     | 0     |      |
| AFDC adult                                 | 100  | 19   | 81     | 100   | 0      | 0    | 87    | 12    | 0     | 0     | 0     |      |
| Aged                                       | 100  | 31   | 69     | 100   | 0      | 0    | 0     | 0     | 37    | 42    | 20    |      |
| Medically needy                             | 100  | 34   | 66     | 100   | 0      | 0    | 0     | 0     | 37    | 34    | 29    |      |
| Disabled                                   | 100  | 44   | 56     | 100   | 1      | 4    | 2     | 30    | 43    | 20    | 0     | 0    |
| Categorically needy                         | 100  | 42   | 58     | 100   | 1      | 4    | 2     | 30    | 41    | 22    | 0     | 0    |
| Medically needy                             | 100  | 64   | 36     | 100   | 0      | 1    | 1     | 28    | 61    | 8     | 0     | 0    |

NOTE: AFDC is Aid to Families with Dependent Children.
Table 3
Percent of Medicaid enrollees receiving services, by cash assistance status and eligibility group: California, 1981

| Cash assistance status | SSI | AFDC | Total | Aged | Disabled | Children | Adults |
|------------------------|-----|------|-------|------|---------|---------|--------|
| Total Medicaid enrollees | 87 | 92 | 93 | 84 | 89 |
| Categorically needy and receiving cash | 89 | 92 | 93 | 85 | 91 |
| Medically needy | 81 | 91 | 88 | 76 | 80 |

NOTES: SSI is Supplemental Security Income. AFDC is Aid to Families with Dependent Children.

Utilization of services

Recipients

During 1981, 87 percent of Medi-Cal enrollees received one or more covered health services (Table 3). This proportion ranged from 84 percent for AFDC children to 93 percent for the disabled. Generally, medically needy groups experienced lower overall recipient proportions than the categorically needy—81 percent and 89 percent, respectively. This rather surprising finding has been observed in New York as well, and it is probably the result of the inclusion in medically needy cases of family members without health problems. Medically needy AFDC children had the lowest proportion of recipients (76 percent), and the categorically needy disabled had the highest (93 percent).

Relatively more females than males received services—90 percent as compared with 84 percent (Table 4). The highest proportions of recipients were 85 years of age or over (95 percent); the lowest proportion of recipients was 6-17 years of age (81 percent).

Table 4
Percent of Medicaid enrollees receiving services, by sex and age: California, 1981

| Sex and age | Recipients as a percent of enrollees |
|-------------|-------------------------------------|
| Sex         |                                     |
| Female      | 90                                  |
| Male        | 84                                  |
| Age         |                                     |
| Under 6 years | 86                               |
| 6-17 years  | 81                                  |
| 18-20 years | 84                                  |
| 21-44 years | 89                                  |
| 45-64 years | 92                                  |
| 65-74 years | 91                                  |
| 75-84 years | 93                                  |
| 85 years or more | 95                           |

Hospital care

Fourteen percent of the Medi-Cal population received hospital care in 1981 (Table 5). This proportion varied by eligibility group, with the lowest rate exhibited by AFDC children (7 percent), and by far the highest by medically needy disabled persons (25 percent). Twenty-three percent of the aged were hospitalized during the year, as were 17 percent of the AFDC adults.

AFDC children exhibited the lowest values of all measures—percent of recipients (7 percent), discharges per 1,000 enrollees (112), days of care per 1,000 enrollees (486), and average length of stay (4.3 days). The highest rates were shown by the medically needy groups, especially the disabled, who had very high values for three of the four measures (25 percent recipients, 491 discharges for 1,000 enrollees, 4,689 days of care per 1,000 enrollees, and average length of stay of 9.6 inpatient days). The AFDC adult values

Table 5
Percent of Medicaid enrollees receiving inpatient hospital services, number of discharges and days of care, and average length of stay, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Percent receiving inpatient hospital services | Discharges per 1,000 enrollees | Days of care per 1,000 enrollees | Average length of stay in days |
|--------------------------------------------|---------------------------------------------|---------------------------------|---------------------------------|-------------------------------|
| Total Medicaid enrollees                   | 14                                          | 245                             | 1,529                           | 6.3                           |
| AFDC child                                 | 7                                           | 112                             | 486                             | 4.3                           |
| AFDC adult                                 | 17                                          | 300                             | 1,383                           | 4.5                           |
| Aged                                       | 23                                          | 352                             | 2,940                           | 8.3                           |
| Categorically needy                         | 24                                          | 352                             | 2,720                           | 7.7                           |
| Medically needy                             | 21                                          | 353                             | 3,537                           | 10.0                          |
| Disabled                                    | 22                                          | 396                             | 3,146                           | 8.0                           |
| Categorically needy                         | 22                                          | 384                             | 2,962                           | 7.7                           |
| Medically needy                             | 25                                          | 491                             | 4,689                           | 9.6                           |
| Other                                       | 10                                          | 283                             | 1,382                           | 4.9                           |

NOTE: AFDC is Aid to Families with Dependent Children.
roughly approximated the rates for the total Medi-Cal population—17 percent of recipients, 300 discharges per 1,000 enrollees, 1,363 days of care per 1,000 enrollees, and average length of stay of 4.5 days. The disabled categorically needy, on the other hand, had moderate measures except for the discharge rate, which was high (384 per 1,000 enrollees). For the aged enrollees, their length of stay and proportion of recipients were high, but their discharge and days of care rates were in the midrange. This may be the result of some missing claims for stays completely covered by Medicare. A comparison of medically and categorically needy groups shows that, for the disabled, all values for the medically needy are substantially higher than those for the categorically needy. The aged categorically and medically needy had the same discharge rate, 353 and 352, respectively. However, days of care and average length of stay were higher for the medically needy aged than for the categorically needy aged.

The hospital discharge rates from these data can be compared with those from the 1981 Health Interview Survey of noninstitutionalized persons in the United States (National Center for Health Statistics, 1982). For example, the national discharge rate for children under 17 years of age was 65 discharges per 1,000 enrollees, compared with 111 discharges per 1,000 enrollees for noninstitutionalized California AFDC children. Nationally, noninstitutionalized persons 65 years of age or over had 284 discharges per 1,000 compared with our observation of 322 for noninstitutionalized aged Medi-Cal enrollees.

**Long-term care**

Four percent of Medi-Cal enrollees received institutional long-term care services in 1981 (Table 6). Long-term care services include nursing home services provided in skilled nursing facilities (SNF’s), intermediate care facilities (ICF’s), and intermediate care facilities for mentally retarded (ICF’s/MR). This important high-cost group of users of long-term care services is discussed separately in a later section. Briefly, as expected, AFDC enrollees were institutionalized only to a negligible extent. For all enrollees, long-term institutional days of care averaged 11 days. Among users (persons who had any long-term care days), the average was 271 days, about three-quarters of a year. Medically needy aged had the highest use (51 percent of enrollees used services, with 319 days per user), followed by medically needy disabled (23 percent used services, with 307 days per user).

**Ambulatory care**

Data on ambulatory care use are presented in Table 7. Two-thirds (67 percent) of all Medi-Cal enrollees had one or more ambulatory visits in 1981, with an average annual rate of 5.3 visits per enrollee per year and 7.9 visits per user per year. Eighty-two percent of AFDC adults and 75 percent of AFDC children used ambulatory services during 1981. These groups had the highest proportions of users, but only moderate utilization per enrollee (4.7 and 7.6 visits per person year, respectively) and per user (6.3 and 9.2 visits per person year, respectively). The disabled had a lower proportion of users (65 percent), but the highest utilization rates (8.2 visits per enrollee per year and 12.5 visits per user per year). Overall, Medi-Cal visit rates are near those reported from the 1981 Health Interview Survey which showed an average of 4.6 physician visits per person year for the U.S. noninstitutionalized population (National Center for Health Statistics, 1982).
Ambulatory visit rates for the aged could not be separately computed because of missing claims for services covered primarily by Medicare, and the lack of individual visit counts on crossover claims.

About three-quarters of ambulatory visits (72 percent) were to physicians (Table 8). Another 22 percent of visits were to hospital outpatient departments, emergency rooms, and clinics. This proportion varied from a low of 12 percent for the medically needy disabled to 26 percent for AFDC children and 27 percent for other medically needy. Enrollees visited other practitioners such as chiropractors, podiatrists, and optometrists less often (7 percent of visits).

Table 8
Percent distribution of Medicaid enrollees, by source of ambulatory care, eligibility group, and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Hospital outpatient department, emergency room, other clinic, Other | Total | Physician | Other clinic | Other clinic practitioner |
|---------------------------------------------|---------------------------------------------------------------|------|------------|--------------|--------------------------|
| Total Medicaid enrollees                    |                                                              | 100  | 72         | 22           | 7                        |
| AFDC child                                  |                                                              | 100  | 70         | 26           | 4                        |
| AFDC adult                                  |                                                              | 100  | 71         | 24           | 5                        |
| Aged                                        |                                                              | NA   | NA         | NA           | NA                       |
| Disabled                                    |                                                              | 100  | 77         | 15           | 8                        |
| Categorically needy                         |                                                              | 100  | 77         | 15           | 8                        |
| Medically needy                             |                                                              | 100  | 80         | 12           | 8                        |
| Other                                       |                                                              | 100  | 69         | 27           | 3                        |

NOTE: AFDC is Aid to Families with Dependent Children.

Dental care

About one-third of the Medi-Cal enrollees (32 percent) received dental care services in 1981 (Table 9). AFDC adults and children were the most likely to receive dental care—40 and 34 percent, respectively, of these groups who received one or more units of care during the year. The aged were least likely to use dental care; only 20 percent of them did so. Data on units of dental service were not available because data were aggregated by month, and units of service could not be enumerated.

Prescribed drugs

As with ambulatory care visits, the proportion of Medi-Cal enrollees using Medi-Cal covered drug services was high (69 percent). The aged most frequently (81 percent) had at least one prescription filled in 1981.

Table 9
Percent of Medicaid enrollees receiving dental services, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Percent receiving dental care services |
|---------------------------------------------|----------------------------------------|
| Total Medicaid enrollees                    | 32                                     |
| AFDC child                                  | 34                                     |
| AFDC adult                                  | 40                                     |
| Aged                                        | 20                                     |
| Categorically needy                         | 22                                     |
| Medically needy                             | 17                                     |
| Disabled                                    | 33                                     |
| Categorically needy                         | 33                                     |
| Medically needy                             | 26                                     |
| Other                                       | 27                                     |

NOTE: AFDC is Aid to Families with Dependent Children.

Table 10
Percent of Medicaid enrollees using prescription drugs and average number of prescriptions per year, per enrollee, and per user, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Percent receiving at least one prescription | Average number of prescriptions 
 per year |
|---------------------------------------------|--------------------------------------------|-------------------------------------|
| Total Medicaid enrollees                    | 69                                        | 8.9                                 |
| AFDC child                                  | 60                                        | 3.5                                 |
| AFDC adult                                  | 73                                        | 7.3                                 |
| Aged                                        | 81                                        | 17.2                                |
| Categorically needy                         | 81                                        | 15.0                                |
| Medically needy                             | 81                                        | 23.4                                |
| Disabled                                    | 80                                        | 19.0                                |
| Categorically needy                         | 82                                        | 19.2                                |
| Medically needy                             | 69                                        | 17.5                                |
| Other                                       | 48                                        | 3.1                                 |

1Including refills.

NOTE: AFDC is Aid to Families with Dependent Children.

(Table 10). AFDC children had relatively low use rates (60 percent) as did the medically needy other group (also primarily children) at 48 percent. The number of prescriptions per enrollee varied from 3.5 per year for AFDC children to 23.4 per year for medically needy aged.

Expenditures

Total reported expenditures for Medi-Cal in 1981 were $3.81 million, or $1,447 per person year of
Table 11
Expenditures per Medicaid enrollee, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Total | Aged | Disabled | Children | Adult |
|---------------------------------------------|-------|------|----------|----------|-------|
| Cash assistance status                      |       |      |          |          |       |
| SSI                                         |       |      |          |          |       |
| Total Medicaid enrollees                    | $1,447| $2,632| $3,028   | $519     | $1,325|
| Categorically needy and receiving cash       | 1,127 | 1,073| 2,608    | 492      | 1,264 |
| Medically needy                              | 2,735 | 6,675| 6,248    | 697      | 1,632 |

1Includes patient liability for spend-down enrollees.

NOTES: SSI is Supplemental Security Income. AFDC is Aid to Families with Dependent Children.

Table 12
Percent distribution of Medicaid enrollees and total expenditures, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Enrollee | Expenditure |
|---------------------------------------------|---------|-------------|
| Total Medicaid enrollees                    | 100     | 100         |
| AFDC child                                  | 43      | 15          |
| AFDC adult                                  | 20      | 19          |
| Aged                                        | 16      | 28          |
| Categorically needy                         | 12      | 8           |
| Medically needy                              | 4       | 20          |
| Disabled                                    | 16      | 34          |
| Categorically needy                         | 14      | 26          |
| Medically needy                              | 2       | 7           |
| Other                                       | 14      | 4           |

1Includes blind persons.

NOTE: AFDC is Aid to Families with Dependent Children.

enrollment (Table 11). AFDC children had the lowest expenditures per person year ($519) of the eligibility groups, and disabled enrollees the highest ($3,028). The medically needy had substantially higher expenditures than cash-assisted enrollees ($2,735 and $1,127 per person year, respectively). The greatest difference, however, was shown by the aged, whose cash-assisted enrollees had expenditures of $1,073 per enrollee per year, but whose medically needy had expenditures of $6,875 per enrollee per year. Expenditures for the medically needy include patient liability for spend-down enrollees.

As is to be expected, enrollees and expenditures are dissimilar in their distribution across cash assistance and eligibility categories (Table 12). AFDC adults are the only group with almost equal proportions of total expenditures and enrollees (19 percent and 20 percent). AFDC children have the highest proportion of enrollees (43 percent), but only a moderate proportion of expenditures (15 percent). The reverse picture occurred among the aged (16 percent of enrollees and 28 percent of expenditures) and disabled (16 percent of enrollees and 34 percent of expenditures). Viewed another way, the majority of the enrollees were in the AFDC groups (63 percent), but the majority of the expenditures were for the SSI groups (66 percent).

Table 13
Expenditures per Medicaid enrollee for types of service, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Total | Inpatient hospital | Long-term care | Ambulatory visits | Dental | Drug | All other |
|---------------------------------------------|-------|-------------------|----------------|-------------------|--------|------|----------|
| Total Medicaid enrollees                    | $1,447| $506              | $455           | $281              | $44    | $85  | $76      |
| AFDC child                                  | 519   | 241               | 6              | 175               | 39     | 24   | 34       |
| AFDC adult                                  | 1,325 | 696               | 2              | 361               | 63     | 63   | 141      |
| Aged                                        | 2,832 | 291               | 1,833          | 254               | 32     | 163  | 59       |
| Categorically needy                          | 1,073 | 264               | 321            | 255               | 34     | 148  | 51       |
| Disabled                                     | 3,028 | 1,118             | 1,014          | 496               | 45     | 215  | 141      |
| Categorically needy                          | 2,841 | 1,086             | 685            | 493               | 45     | 215  | 136      |
| Medically needy                              | 6,248 | 1,547             | 3,750          | 520               | 42     | 214  | 190      |
| Other                                       | 1,075 | 706               | 26             | 208               | 42     | 23   | 70       |

1Includes patient liability for spend-down enrollees.

NOTE: AFDC is Aid to Families with Dependent Children.

Table 14
Percent distribution of Medicaid enrollees and total expenditures, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Enrollee | Expenditure |
|---------------------------------------------|---------|-------------|
| Total Medicaid enrollees                    | 100     | 100         |
| AFDC child                                  | 43      | 15          |
| AFDC adult                                  | 20      | 19          |
| Aged                                        | 16      | 28          |
| Categorically needy                         | 12      | 8           |
| Medically needy                              | 4       | 20          |
| Disabled                                    | 16      | 34          |
| Categorically needy                         | 14      | 26          |
| Medically needy                              | 2       | 7           |
| Other                                       | 14      | 4           |

1Includes blind persons.

NOTE: AFDC is Aid to Families with Dependent Children.

Hospital care

Expenditures by type of service and enrollment group are displayed in Table 13. Hospital care was roughly one-third of the total expenditures per enrollee ($506 out of $1,447) for the total Medi-Cal.
population, but it was about one-half of the expenditures for the AFDC groups ($241 out of $519 for children, and $696 out of $1,325 for adults). Hospital costs were about one-third of the costs for the disabled (37 percent). For the aged, however, hospital care represented only 11 percent of the expenditures, because of the almost universal Medicare coverage that is the primary payer for acute hospital services. Medi-Cal pays only for deductibles, coinsurance, and services not covered by Medicare.

Long-term care

When averaged across the entire Medi-Cal population, expenditures for long-term care ($455 per Medicaid enrollee per year), were about 10 percent lower than those for acute hospital care (Table 13). The AFDC groups had very low mean long-term care expenditures ($6 for children and $2 for adults). In contrast, the aged had long-term care costs that exceeded hospital costs by a ratio of 6:1, for medically needy aged, the ratio was 16:1. The situation was somewhat different for the disabled, whose expenditures per enrollee for long-term care were close to those for hospital care ($994 versus $1,100 per enrollee per year, respectively). The categorically and medically needy disabled differed in their expenditure patterns, with hospital costs being greater for the categorically needy disabled and long-term care costs being greater for the medically needy disabled.

Ambulatory care

Ambulatory expenditures per enrollee averaged $281 in 1981—the third most expensive type of service. AFDC children ($175) and the aged ($254) experienced the lowest levels of ambulatory expenditures per enrollee, and the disabled experienced the highest ($496). As with hospital care, ambulatory care for the aged is frequently covered by Medicare, which may explain these relatively low expenditure rates. Ambulatory care accounted for 19 percent of overall expenditures per person, and this figure ranged from 4 percent for the medically needy aged (a majority of whose expenditures went to long-term care) to 34 percent for AFDC children.

Dental care

Dental expenses were a relatively minor part of the expenditures—$44 per Medicaid enrollee per year. The medically needy aged had the lowest annual per capita expenditures ($28), and AFDC adults the highest ($63). Dental expenses were about 3 percent of the overall expenses; no group exceeded 7 percent.

Prescribed drugs

Prescribed drugs cost, on the average, $85 per Medicaid enrollee per year. This figure was lowest for AFDC children ($24) and for AFDC adults ($63) and highest for disabled enrollees ($215). Drug expenditures for the aged were $163 per year, but they varied between the categorically needy and the medically needy ($148 per year for the categorically needy aged and $201 per year for the medically needy aged).

Type of service and eligibility

The per capita expenses by summary service type and eligibility group are presented in Figure 1. Shown also are the very high expenditures for long-term care for the medically needy, especially the aged population. For the total population, nearly equal amounts per enrollee year were spent for the three summary service categories (inpatient hospital, long-term care, and all other care).

Mean expenditures for all enrollees are compared in Table 14 with mean expenditures for only those enrollees who actually used a particular service (users). Per user costs differed greatly from costs per enrollee for inpatient and long-term care services, but much less so for all other services. Per user costs did not vary as greatly across eligibility groups as per enrollee costs. For example, per user long-term care costs varied from $4,293 for AFDC adults to $16,305 for the medically needy disabled.

Comparisons with other States

Enrollment, utilization, and expenditure patterns of the California Medi-Cal population can be compared with patterns for 1981 in two other States (New York and Michigan), because complete claims, eligibility, and provider files have been obtained from these States under the Tape-to-Tape Project. Before making these comparisons, it is important to highlight the differences in the three States’ Medicaid programs that might lead to observed differences.

These three States were among the four largest programs in total program expenditures during fiscal year 1980. As mentioned earlier, New York and California ranked first and second, respectively. Michigan ranked fourth. Table 15 contains a summary of selected key characteristics for the three State Medicaid programs in 1981. All States had relatively generous programs. All States included the three optional AFDC groups in their AFDC plans: unemployed parents, pregnant women, and children under age 18 regularly attending school. All States also automatically extended Medicaid coverage to SSI recipients. However, the three States had quite different AFDC payment levels and medically needy protected income levels. California had the highest AFDC payment level for a family of four. Unlike the other two States, California set its medically needy protected income level above its AFDC payment level. California also covered more optional services.

Muse and Sawyer (1982) report that, as of December 1980, these three States imposed varying levels of limitations on hospital, nursing home, and physician
services. New York had no limitations at all on hospital, physician, and SNF services and required only preauthorization for ICF services. California and Michigan generally required preauthorization for services and had other service limitations. For example, Michigan covered only one physician visit to a nursing home patient per month and only two speech or hearing evaluations per year. Therefore, New York was the most generous of the three programs in terms of benefit restrictions.

For California, hospital reimbursements in 1981 were based on Medicare principles. Michigan and New York had prospective hospital reimbursement systems. Michigan began implementing its system in 1980; therefore, not every hospital was on this system in 1981. The New York prospective reimbursement system was somewhat different from those of the other States, because it was based on hospital peer groups. Hospitals were grouped according to their characteristics (e.g., bed size and teaching status), and per diem rates were established based on the historical cost pattern within the peer group. In the case of physician reimbursement, all three States used fee schedules. All three States used prospective systems for reimbursing nursing homes (Bartlett and Hanson, 1981).
### Table 14
Expenditures per Medicaid enrollee and per user for summary service types, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Inpatient hospital services | Long-term care services | All other services |
|---------------------------------------------|-----------------------------|-------------------------|-------------------|
|                                             | Enrollee | User | Enrollee | User | Enrollee | User |
| **Total Medicaid enrollees**                | $506 | $3,568 | $455 | $11,361 | $466 | $560 |
| AFDC child                                  | 241 | 3,659 | 6 | 10,259 | 272 | 324 |
| AFOC adult                                  | 696 | 4,074 | 2 | 4,293 | 626 | 707 |
| Aged                                        | 291 | 1,249 | 1,833 | 10,188 | 508 | 556 |
| Categorically needy                          | 284 | 1,094 | 321 | 5,559 | 488 | 532 |
| Medically needy                              | 307 | 1,731 | 5,945 | 11,609 | 563 | 620 |
| Disabled                                    | 1,118 | 4,981 | 1,014 | 14,582 | 896 | 977 |
| Categorically needy                          | 1,086 | 4,793 | 685 | 13,634 | 889 | 961 |
| Medically needy                              | 1,547 | 6,217 | 3,750 | 16,305 | 951 | 1,119 |
| **Other**                                   | 706 | 6,781 | 26 | 9,721 | 109 | 527 |

**NOTE:** AFDC is Aid to Families with Dependent Children.

### Table 15
State summary, by Medicaid program characteristics: California, Michigan, and New York, 1981

| Medicaid program characteristic | California | Michigan | New York |
|---------------------------------|------------|----------|----------|
| Presence of optional groups in AFDC plans:† | X | X | X |
| Unemployed parents              | X          | X        | X        |
| Pregnant women                  | X          | X        | X        |
| Children under 18 years of age regularly attending school | X | X | X |
| Medicaid coverage of all Supplemental Security Income recipients | X | X | X |
| AFDC annual payment level (family of four) | $7,212 | $5,640 | $6,180 |
| Annual SSI payment level for aged SSI recipients living independently | 5,268 | 3,468 | 3,936 |
| Annual medically needy protected income level (family of four) | 8,304 | 5,580 | 6,000 |
| Number of optional services covered | 30 | 25 | 25 |

† If these groups are in the AFDC plan, Medicaid coverage must be extended to them.

**NOTES:** AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. 

**SOURCE:** La Jolla Management Corporation, *Analysis of State Medicaid Program Characteristics, 1982.*
Resource characteristics of the three States are shown in Table 16. The number of hospital beds per 1,000 population in Michigan and New York were comparable to the national rate of 4.4 per 1,000. However, California had fewer hospital beds per 1,000 (3.4). The number of nursing home beds per 1,000 in California was comparable to the national average (6.8 per 1,000), however, Michigan greatly exceeded the national rate (8.7 per 1,000). The rate of physicians per 1,000 for Michigan was only slightly lower than the national average of 1.9 per 1,000, but the rate for both California and New York exceeded the national average.

In addition to variations in Medicaid program characteristics and the supply of health services, other reasons why findings differed between States related to data artifacts. Only partial data are available for certain upstate New York counties in 1981 that were being phased into the MMIS of that State. The result is that data for New York are dominated by New York City. Also, some long-term care claims are missing for both Michigan and New York. For Michigan, about 1 month of nursing home claims are missing; and for New York, most of the mental health and mental retardation institutional claims and claims for personal care services are missing.

And, finally, although every attempt was made to recode State variables to achieve uniformity and comparability across States, it is always possible that differences in variable definitions or methods of acquiring and processing data across States have affected the data presented.

Table 16
State and United States summary, by health services resource characteristics: California, Michigan, New York, and United States, 1981

| Health services resource characteristics | United States | California | Michigan | New York |
|-----------------------------------------|--------------|------------|----------|----------|
| Short-term hospital beds per 1,000      | 4.4          | 3.4        | 4.3      | 4.6      |
| Nursing home beds per 1,000 population | 6.8          | 6.9        | 8.7      | 5.9      |
| Active, non-Federal physicians per 1,000 population | 1.9         | 2.3        | 1.6      | 2.7      |

1For resident population, including members of the armed services living in the United States.
21980 data.
3For civilian population, excluding members of the armed services living in the United States. Excludes doctors of osteopathy.

SOURCE: U.S. Bureau of the Census: Statistical Abstract of the United States, 104th Edition, U.S. Department of Commerce, Dec. 1983.

Utilization

Data on the utilization of acute hospital services in the three States are presented in Table 18. Also, a comparison of days of hospital care per 1,000 person years of enrollment for each enrollment group is made. The patterns of utilization were quite different in the different States. Service utilization varied from 1,529 days of care per 1,000 for all enrollees in California to 2,500 per 1,000 in New York. Michigan, with 1,620 days of care per 1,000, more closely resembled California in hospital utilization patterns. For example, for medically needy groups, California enrollees had fewer than one-half as many inpatient hospital days as did New York enrollees, as shown in the ratios of California to New York rates in the last column of the table.

All three States provided the mandatory inpatient hospital service benefit to all categories of enrollees. California did have substantial prior authorization requirements. Also, New York and Michigan data include denied days; California data exclude those days.
Table 18

Days of inpatient hospital care per 1,000 Medicaid enrollees, by eligibility group and cash assistance status: California, Michigan, and New York, 1981

| Eligibility group and cash assistance status | California | Michigan | New York | Ratio of California to Michigan | Ratio of California to New York |
|---------------------------------------------|------------|----------|----------|-------------------------------|-------------------------------|
| Days of hospital care                       |            |          |          |                               |                               |
| Total Medicaid enrollees                    | 1,529      | 1,620    | 2,500    | .94                           | .61                           |
| AFDC child                                  | 490        | 560      | 910      | .88                           | .54                           |
| AFDC adult                                  | 1,360      | 1,750    | 1,750    | .79                           | .78                           |
| Aged                                        | 2,940      | 3,900    | 6,100    | .75                           | .48                           |
| Categorically needy                         | 2,720      | 4,140    | 4,400    | .66                           | .62                           |
| Medically needy                             | 3,540      | 3,610    | 8,320    | .96                           | .43                           |
| Disabled                                    | 3,150      | 4,940    | 5,170    | .64                           | .61                           |
| Categorically needy                         | 2,960      | 3,830    | 4,150    | .77                           | .71                           |
| Medically needy                             | 4,690      | 8,380    | 11,980   | .58                           | .39                           |
| Other                                       | 1,380      | 1,940    | 1,980    | .71                           | .70                           |

NOTE: AFDC is Aid to Families with Dependent Children.

Differences between States in hospital benefits do not appear to explain these substantial variations in hospital utilization.

Differences in inpatient hospital use between the three States follow patterns that have been observed in the Medicare population. In 1977, the Medicare days of care rate was 4,017 per 1,000 in the Northeast and 2,816 in the West (Gornick, 1982). The ratio of hospital use West to Northeast for Medicare in 1977 was, therefore, 0.70. This is similar to the 0.61 ratio of California to New York for Medicaid in 1981. So the differences between the States may be, in large part, the result of regional medical care practice differences rather than of differences in State programs.

Also, California had a lower ratio of hospital beds to the population of the State than the other States did. A long-term care service comparison is presented in Table 19. As with inpatient hospital care, in general, the pattern of service utilization for California was lower than that of the comparison States, in spite of the exclusion of some long-term care service utilization from the New York and Michigan files, as mentioned earlier. The one enrollment group whose utilization in California exceeded the two other States was the medically needy disabled. The aged (the group most often receiving long-term institutional care in all States) showed a lower pattern of service use in California than in New York or Michigan. The aged

Table 19

Days of long-term care per 1,000 Medicaid enrollees, by eligibility group and cash assistance status: California, Michigan, and New York, 1981

| Eligibility group and cash assistance status | California | Michigan | New York | Ratio of California to Michigan | Ratio of California to New York |
|---------------------------------------------|------------|----------|----------|-------------------------------|-------------------------------|
| Days of long-term care                      |            |          |          |                               |                               |
| Total Medicaid enrollees                    | 10,860     | 11,890   | 15,090   | .91                           | .72                           |
| AFDC child                                  | 50         | 360      | 59       | .14                           | 1.00                          |
| AFDC adult                                  | 20         | 130      | 90       | .15                           | .22                           |
| Aged                                        | 50,320     | 110,080  | 87,860   | .46                           | .58                           |
| Categorically needy                         | 8,740      | 20,030   | 13,570   | .44                           | .64                           |
| Medically needy                              | 163,420    | 198,740  | 182,780  | .82                           | .89                           |
| Disabled                                    | 17,960     | 27,130   | 13,320   | .66                           | 1.34                          |
| Categorically needy                         | 11,640     | 18,610   | 5,050    | .63                           | 1.99                          |
| Medically needy                              | 70,310     | 56,320   | 62,920   | 1.25                          | 1.12                          |
| Other                                       | 480        | 10,520   | 1,310    | .05                           | .37                           |

NOTES: Long-term care includes inpatient psychiatric care, chronic care, skilled nursing care, and intermediate care. AFDC is Aid to Families with Dependent Children.
Table 20
Mean ambulatory care visits per person year, by Medicaid eligibility group and cash assistance status: California, Michigan, and New York, 1981

| Eligibility group and cash assistance status | California | Michigan | New York | Ratio of California to Michigan | Ratio of California to New York |
|---------------------------------------------|------------|----------|----------|-------------------------------|-------------------------------|
| Mean visits                                 |            |          |          |                               |                               |
| Total Medicaid enrollees                    | 5.3        | 5.3      | 9.3      | 1.00                          | .57                           |
| AFDC child                                  | 4.7        | 4.1      | 5.9      | 1.15                          | .80                           |
| AFDC adult                                  | 7.6        | 6.5      | 11.4     | 1.17                          | .67                           |
| Aged                                        |            |          |          |                               |                               |
| Disabled                                    | 8.8        | 8.8      | 17.8     | .93                           | .46                           |
| Categorically needy                         | 8.4        | 8.2      | 15.1     | 1.02                          | .46                           |
| Other                                       | 5.1        | 5.0      | 6.1      | 1.02                          | .84                           |
| NOTES: Visits include physician, other practitioner, outpatient hospital, clinic and rural health clinic visits but exclude dental visits. AFDC is Aid to Families with Dependent Children. NA is not available. |

had 50,320 days of care per 1,000 persons in California, compared with 110,080 days in Michigan and 87,060 days in New York. These differences occurred in spite of the absence of great program differences between the States in 1981. Again, other differences (such as the supply of long-term care beds) may explain the patterns.

Ambulatory care visit rates are compared across States in Table 20. Although overall ambulatory visit rates were the same in California and Michigan (5.3 visits per person year), rates for New York were much higher for all enrollment groups. In California, Medicare crossover claims for physician services often group several visits on one claim, without separately identifying each visit. Therefore, visit rates for California’s aged cannot be compared with those for Michigan and New York.

Table 21
Mean expenditures per Medicaid enrollee, by eligibility group and cash assistance status: California, Michigan, and New York, 1981

| Eligibility group and cash assistance status | California | Michigan | New York | Ratio of California to Michigan | Ratio of California to New York |
|---------------------------------------------|------------|----------|----------|-------------------------------|-------------------------------|
| Mean expenditure                            |            |          |          |                               |                               |
| Total Medicaid enrollees                    | $1,447     | $1,171   | $1,887   | 1.24                          | .77                           |
| AFDC child                                  | 519        | 412      | 527      | 1.26                          | .98                           |
| AFDC adult                                  | 1,325      | 1,096    | 1,067    | 1.21                          | 1.24                          |
| Aged                                        | 2,632      | 3,357    | 6,034    | .78                           | .44                           |
| Categorically needy                          | 1,073      | 1,218    | 1,856    | .88                           | .58                           |
| Medically needy                              | 16,875     | 5,466    | 11,475   | 1.26                          | 1.60                          |
| Disabled                                    | 3,028      | 3,526    | 3,405    | .86                           | .89                           |
| Categorically needy                          | 2,641      | 2,801    | 2,618    | .94                           | 1.01                          |
| Medically needy                              | 16,248     | 5,947    | 8,825    | 1.05                          | .72                           |
| Other                                       | 1,075      | 2,096    | 710      | .51                           | 1.51                          |

1Includes patient liability for spend-down enrollees.
NOTE: AFDC is Aid to Families with Dependent Children.
Table 22
Medicaid expenditures per service unit, by selected expenditure measures: California, Michigan, and New York, 1981

| Expenditure measure                  | California | Michigan | New York | Ratio of California to |
|-------------------------------------|------------|----------|----------|------------------------|
|                                     |            | Michigan | New York | Michigan               | New York               |
| Expenditures per day of hospital care | $331       | $227     | $198     | 1.46                   | 1.67                   |
| Expenditures per day of long-term care | 42         | 36       | 62       | 1.17                   | .68                    |
| Expenditures per physician visit    | 23         | 11       | 16       | 2.09                   | 1.44                   |

1Includes patient liability for spend-down enrollees.

New York ($1,887). California's expenditures for its aged and disabled groups were lower than the other States, but its expenditures for the AFDC population matched or exceeded those for the two other States.

Although service utilization patterns were lower in California, the greater similarities between the States in expenditures must be the result of the use of higher cost services by California enrollees. This is illustrated in Table 22. California paid $100 a day more than both Michigan and New York for hospital care. Medi-Cal rates were $331 per hospital day compared with $227 in Michigan and $198 in New York. They also paid $23 per physician visit, substantially more than the $11 in Michigan and the $16 in New York. On the other hand, the $42 per day for long-term care was about the same as that for Michigan ($36) and lower than that for New York ($62). Because the $42 per day in California includes patient spend-down liability and California reported Medicaid payments of $38 per day, actual program payments were close to those for Michigan. Obviously, service mix and intensity may explain many of these differences, because a day of hospital or long-term care or a physician visit is only a gross measure of the actual services provided.

Special interest groups

High-cost recipients—The previous analyses have suggested that there are high-cost groups of persons for example, users of hospital and long-term care services. Figure 2 is a Lorenz Curve displaying the cumulative percent of the total expenditures as a function of the cumulative percent of all Medi-Cal enrollees. As illustrated by the dashed line, 90 percent of the enrollees accounted for 28 percent of the total California Medi-Cal expenditures in 1981. Another way of viewing this is that the top 10 percent of enrollees accounted for 2.7 billion dollars, or 72 percent of the total Medi-Cal expenditures.

The high-cost group (i.e., those recipients with the top 10 percent of Medi-Cal expenditures) represent a substantially different mix of enrollment groups than those comprising the total Medi-Cal population (Table 23). Although AFDC children comprised about 43 percent of the total Medi-Cal enrollee population, they represented about 12 percent of high-cost recipi-
Table 23
Percent distribution of high-cost recipients and total Medicaid enrollees, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | High-cost recipients¹ | All enrollees |
|---------------------------------------------|------------------------|--------------|
| Total Medicaid enrollees | 100.0 | 100.0 |
| AFDC child | 11.8 | 42.5 |
| AFDC adult | 23.2 | 20.4 |
| Aged | 31.4 | 15.7 |
| Categorically needy | 7.7 | 11.7 |
| Medically needy | 23.7 | 4.2 |
| Blind and disabled | 31.4 | 16.4 |
| Categorically needy | 25.2 | 14.7 |
| Medically needy | 6.2 | 1.7 |
| Other | 2.2 | 5.0 |

¹Top 10 percent of expenditures.

NOTE: AFDC is Aid to Families with Dependent Children.

Thus, high-cost recipients used 7 times more hospital days and had nearly 6 times more discharges than the average enrollee. High-cost recipients also used an average of 120 long-term care days per year and had 15 ambulatory care visits per year. In comparison, the total Medi-Cal population averaged 11 long-term care days and 5 ambulatory care visits per year. High-cost recipients had 11.1 times greater long-term care use and 3 times greater ambulatory care use than the total Medi-Cal population in 1981.

Institutionalized enrollees

One of the most expensive recipient groups is the institutionalized. In this analysis, the institutionalized Medi-Cal population is compared with the noninstitutionalized. For some parts of the analysis, the institutionalized are divided into two subgroups—the fully institutionalized (recipients who spent their entire enrollment period in a long-term care facility) and the semi-institutionalized (recipients in an institution for only part of their enrollment period). Noninstitutionalized recipients are those persons who did not spend any part of their enrollment period in a long-term care facility.

Table 25
Percent distribution of Medicaid enrollees, institutional status of enrollee, by eligibility group, and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Total | Noninstitutionalized | Semi-institutionalized | Fully institutionalized |
|---------------------------------------------|-------|----------------------|------------------------|------------------------|
| Total Medicaid enrollees | 100 | 96 | 2 | 2 |
| AFDC child | 100 | 99 | 1 | 0 |
| AFDC adult | 100 | 100 | 0 | 0 |
| Aged | 100 | 82 | 9 | 9 |
| Categorically needy | 100 | 94 | 5 | 1 |
| Medically needy | 100 | 49 | 22 | 30 |
| Disabled | 100 | 93 | 4 | 3 |
| Categorically needy | 100 | 95 | 3 | 2 |
| Medically needy | 100 | 77 | 10 | 13 |
| Other | 100 | 100 | 0 | 0 |

¹Top 10 percent of expenditures.

NOTE: AFDC is Aid to Families with Dependent Children.
In 1981, there were some 105,456 institutionalized Medi-Cal enrollees—only 4 percent of the total Medi-Cal enrollee population. The fully institutionalized and the semi-institutionalized were each about 2 percent of overall enrollment (Table 25). The institutionalized aged were 18 percent of all aged enrollees, and the institutionalized disabled were 7 percent of all disabled enrollees.

The institutionalized population is compared with the noninstitutionalized population with regard to sex composition in Table 26. The institutionalized population was even more predominantly female than the noninstitutionalized. Sixty-eight percent of the California institutionalized in 1981 were female. For the aged institutionalized, there were proportionally more females than in the noninstitutionalized aged population. This pattern was not true for the disabled. Fifty-one percent of the institutionalized disabled were male, but only 44 percent of the noninstitutionalized disabled were male.

### Table 26

| Institutional status and eligibility group | Total | Male | Female |
|------------------------------------------|-------|------|--------|
| Total                                   | 100   | 0    | 100    |
| Institutionalized                        | 100   | 32   | 68     |
| Aged                                    | 100   | 24   | 76     |
| Disabled                                 | 100   | 51   | 49     |
| Noninstitutionalized                    | 100   | 39   | 61     |
| Aged                                    | 100   | 32   | 68     |
| Disabled                                 | 100   | 44   | 56     |

The age distribution of Medi-Cal enrollees by institutional status and eligibility group is presented in Table 27. Only 17 percent of noninstitutionalized enrollees were 65 years of age or over, compared with 76 percent of the institutionalized. The "old" old (or the frail elderly) were a sizable proportion of the institutionalized population. Thirty-four percent of institutionalized recipients were age 85 or older.

Thus, the institutionalized aged conform to commonly held expectations regarding the demographic characteristics of an institutionalized population. They were very old and had a very high percent of women. However, the institutionalized disabled were demographically quite different in that they were most often under 65 years of age and almost evenly split between males and females. It is common to equate the institutionalized population with the elderly; however, it is important to remember that approximately 27 percent of the institutionalized population was disabled and had a markedly different demographic composition.

Patterns of utilization and expenditures were also quite different for the institutionalized aged and the disabled (Table 28). The fully institutionalized disabled were decidedly more costly than the fully institutionalized aged. Fully institutionalized disabled recipients incurred long-term care expenditures of $21,380 per person year compared with $13,323 per person year for fully institutionalized aged recipients (Table 29). Semi-institutionalized disabled recipients incurred expenditures of $7,909 per person year for long-term care compared with $7,212 per person year for semi-institutionalized aged recipients.

An analysis of utilization and expenditures by type of long-term care service shows even greater differences between the institutionalized aged and disabled. No aged recipients received care in ICF/MR facilities. However, the fully institutionalized disabled spent 191 days per person year receiving ICF/MR care, and semi-institutionalized disabled recipients spent 41 days per person year receiving ICF/MR care (Table 28). ICF/MR recipients were very costly; fully institutionalized disabled recipients had expenditures of $14,625 per person year for ICF/MR care (Table 29).

ICF/MR care, thus, was a sizable proportion of the total Medi-Cal expenditures for the institutionalized disabled.

The institutionalized differed from the noninstitutionalized with regard to hospital utilization patterns (Table 28). The semi-institutionalized had by far the heaviest use rates for hospital care, with the highest use by the disabled group. Semi-institutionalized recipients also had the highest expenditures ($1,697 per person year) for inpatient hospital care (Table 29). Fully institutionalized recipients had expenditures of only $399 per person year for inpatient hospital care. Noninstitutionalized enrollee expenditures for inpatient hospital care amounted to $557 per person year.

Institutionalized recipients also had higher levels of ambulatory care utilization and expenditures than noninstitutionalized enrollees had (Tables 28 and 29). For example, semi-institutionalized disabled recipients had 13.1 physician visits per person year and 28 prescription drug purchases per person year. They had expenditures of $351 per person year for physician visits and $319 per person year for prescription drugs.
### Table 28
Units of service category per Medicaid enrollee, by eligibility group and institutional status: California, 1981

| Eligibility group and institutional status | Long-term days of care per person | Inpatient hospital days per 1,000 persons | Hospital discharges per 1,000 persons | Physician visits per person | Prescription drugs per person |
|------------------------------------------|----------------------------------|-----------------------------------------|--------------------------------------|-----------------------------|-------------------------------|
|                                          | Total                            | Psychiatric | ICF/MR | Other | ICF | SNF | Total   | Psychiatric | ICF/MR | Other | ICF | SNF | Total   | Psychiatric | ICF/MR | Other | ICF | SNF | Total   |
| Fully institutionalized                  | 1.9                              | 54.7       | 15.1   | 295.5 | 2,040 | 150 | 2.2     | 33.3       | 0.4   | 37.0  |     |     |        |           |        |      |     |     |        |
| Semi-institutionalized                   | 1.6                              | 11.3       | 7.6    | 160.4 | 9,770 | 880 | 4.8     | 30.0       |       |      |     |     |        |           |        |      |     |     |        |
| Noninstitutionalized                    | 0                                | 0          | 0      | 0     | 1,550 | 270 | 4.5     | 9.2        |       |      |     |     |        |           |        |      |     |     |        |

**Aged**

| Fully institutionalized                  | 1.8                              | 0          | 15.4   | 350.2 | 1,820 | 140 | 0.4     | 37.0       |       |      |     |     |        |           |        |      |     |     |        |
| Semi-institutionalized                   | 1.0                              | 0          | 8.4    | 187.0 | 8,890 | 800 | 1.0     | 31.3       |       |      |     |     |        |           |        |      |     |     |        |
| Noninstitutionalized                    | 0                                | 0          | 0      | 0     | 2,660 | 360 | 0.9     | 15.1       |       |      |     |     |        |           |        |      |     |     |        |

**Disabled**

| Fully institutionalized                  | 2.2                              | 191.0      | 14.3   | 159.1 | 2,440 | 190 | 6.5     | 24.0       |       |      |     |     |        |           |        |      |     |     |        |
| Semi-institutionalized                   | 1.9                              | 41.0       | 6.1    | 102.9 | 11,910 | 1,000| 13.1    | 28.2       |       |      |     |     |        |           |        |      |     |     |        |
| Noninstitutionalized                    | 0                                | 0          | 0      | 0     | 3,090 | 410 | 6.6     | 20.1       |       |      |     |     |        |           |        |      |     |     |        |

NOTES: ICF/MR is Intermediate care facility for mentally retarded. ICF is intermediate care facility. SNF is skilled nursing facility.

### Table 29
Medicaid expenditures per enrollee, by service category, eligibility group, and institutional status: California, 1981

| Eligibility group and institutional status | Service category | Total | Psychiatric | ICF/MR | Other | ICF | SNF | Inpatient hospital | Physician visits | Prescription drugs | Other care |
|------------------------------------------|------------------|-------|-------------|-------|-------|-----|-----|-------------------|------------------|-------------------|-----------|
| Fully institutionalized                  | $16,645          | 986   | $4,171      | 437   | 10,909 | 399 | 51  | $278              | $302             |                   |           |
| Semi-institutionalized                   | 10,141           | 170   | 909         | 222   | 6,083  | 1,697| 130 | 276               | 1,854            |                   |           |
| Noninstitutionalized                    | 1,101            | 0     | 0           | 0     | 0      | 557 | 103 | 58                | 353              |                   |           |

**Aged**

| Fully institutionalized                  | 14,013           | 79    | 0           | 447   | 12,797 | 142  | 8   | 292               | 248              |                   |           |
| Semi-institutionalized                   | 8,780            | 45    | 0           | 244   | 6,922  | 723  | 23  | 265               | 557              |                   |           |
| Noninstitutionalized                    | 807              | 0     | 0           | 0     | 0      | 288  | 20  | 153               | 346              |                   |           |

**Disabled**

| Fully institutionalized                  | 23,193           | 135   | 14,625      | 413   | 6,207  | 983  | 153 | 244               | 433              |                   |           |
| Semi-institutionalized                   | 13,404           | 137   | 3,314       | 178   | 4,280  | 3,942| 351 | 319               | 883              |                   |           |
| Noninstitutionalized                    | 2,054            | 0     | 0           | 0     | 0      | 1,105| 159 | 229               | 561              |                   |           |

NOTES: ICF/MR is Intermediate care facility for mentally retarded. ICF is intermediate care facility. SNF is skilled nursing facility.

These figures are significantly higher than comparable data for noninstitutionalized recipients.

The institutionalized disabled, as shown in Table 30, were more expensive than the institutionalized aged when expenditures per day of service were considered as well. Within both the institutionalized aged and disabled groups, the expenditures per long-term care day for fully and semi-institutionalized subgroups were about equal.

Institutionalized and noninstitutionalized aged recipients had lower Medi-Cal hospital expenditures per day and per discharge than other Medi-Cal groups. These low totals are because Medicare benefits for hospital care to the aged are substantial.

In comparison, inpatient hospital expenditures for the institutionalized disabled were much higher per day and per discharge. The fully institutionalized disabled had both the highest expenses per day ($403) and per discharge ($5,183) of any group.

In conclusion, all institutionalized groups were far more expensive per person year than the noninstitutionalized. The utilization and expenditure patterns of the institutionalized were largely shaped by aged recipients who were 70 percent of the institutionalized Medi-Cal population. However, disaggregation of the total Medi-Cal population by both eligibility group and institutional status uncovers the differences in utilization and expenditures for the institutionalized.
Medicaid expenditures per service category unit, by eligibility group and institutional status: California, 1981

| Eligibility group and institutional status | Long-term care expenditure per day | Hospital expenditure per day | Hospital expenditure per discharge |
|-------------------------------------------|-----------------------------------|------------------------------|-----------------------------------|
| Total                                     | $43                               | $196                         | $2,592                            |
| Fully institutionalized                   | 41                                | 174                          | 1,977                             |
| Semi-institutionalized                   | 37                                | 81                           | 904                               |
| Noninstitutionalized                   | 360                               | 2,082                         |                                    |
| Aged                                     |                                    |                              |                                    |
| Fully institutionalized                   | 36                                | 78                           | 1,022                             |
| Semi-institutionalized                   | 37                                | 81                           | 904                               |
| Noninstitutionalized                   | 360                               | 2,082                         |                                    |
| Disabled                                  |                                    |                              |                                    |
| Fully institutionalized                   | 58                                | 403                          | 5,283                             |
| Semi-institutionalized                   | 52                                | 331                          | 3,941                             |
| Noninstitutionalized                   | 58                                | 397                          | 2,669                             |

NOTE: Includes patient liability for spend-down enrollees.

For the noninstitutionalized, the spend-down process allows Medicaid eligibility to be extended to persons whose income is higher than the medically needy income level, provided they have medical expenses great enough to reduce their income to the level of the medically needy. Few persons qualify for Medicaid under this provision. Only 3 percent of noninstitutional Medi-Cal enrollees in 1981 (71,544 persons) went through the spend-down process to become eligible for Medi-Cal benefits.

Almost all of these enrollees were in the medically needy population; therefore, this analysis focuses only on that population. Fifteen percent of the noninstitutional medically needy were spend-down enrollees (Table 31). Eight percent of the noninstitutional medically needy had spend-down liabilities of less than $1,200 per year (Table 31). However, only 2 percent of the noninstitutional medically needy contributed $3,600 or more per year toward their medical expenses before Medi-Cal coverage. The remaining 5 percent had spend-down liabilities of $1,200 to $3,600 per year. Noninstitutionalized spend-down enrollees were fairly evenly distributed across medically needy groups (Table 32). The spend-down population was 24 percent AFDC children, 23 percent aged, 16 percent AFDC adults, 23 percent other medically needy, and 15 percent disabled. However, the disabled and aged were overrepresented in the spend-down population relative to their proportion in the medically needy group overall.

Medicaid expenditures per noninstitutionalized medically needy spend-down recipient are shown in Table 33. The average person without a spend-down liability generally had a higher Medicaid expenditure ($1,466) per recipient in 1981 than those with a spend-down liability ($1,427). However, Table 33 does show very high expenditures per recipient for those with spend-down liabilities of $3,600 per year toward the cost of their medical care. These persons had Medicaid expenditures per recipient of $2,701 annually, compared with $1,466 for those without spend-down liabilities. Those in the highest spend-down liability group required extensive services. Not only were their costs to Medicaid high ($2,701 per year), but also they

Table 31

Percent distribution of noninstitutionalized medically needy Medicaid enrollees, by annual spend-down liability and eligibility group: California, 1981

| Eligibility group       | Total | None | $1,599 | $600-1,199 | $1,200-2,399 | $2,400-3,599 | $3,600 or more |
|-------------------------|-------|------|--------|------------|--------------|--------------|----------------|
| Total                   | 100   | 85   | 5      | 3          | 3            | 2            | 2              |
| AFDC child              | 100   | 89   | 3      | 2          | 3            | 1            | 2              |
| AFDC adult              | 100   | 88   | 3      | 2          | 3            | 2            | 2              |
| Aged                    | 100   | 72   | 13     | 7          | 5            | 2            | 1              |
| Disabled                | 100   | 70   | 11     | 7          | 7            | 3            | 2              |
| Other                   | 100   | 88   | 2      | 2          | 3            | 2            | 3              |

NOTE: AFDC is Aid to Families with Dependent Children.
Table 32
Percent distribution of total and spend-down noninstitutionalized medically needy, by eligibility group: California, 1981

| Eligibility group | Noninstitutionalized medically needy | Total | Spend-down |
|-------------------|-------------------------------------|-------|------------|
|                   | Percent distribution                |       |            |
| Total             |                                     | 100   | 100        |
| AFDC child        |                                     | 32    | 24         |
| AFDC adult        |                                     | 20    | 16         |
| Aged              |                                     | 12    | 23         |
| Disabled          |                                     | 7     | 15         |
| Other             |                                     | 28    | 23         |

NOTE: AFDC is Aid to Families with Dependent Children.

A type of spend-down also occurs with the institutionalized population. Indeed, most of the Medi-Cal institutionalized population in 1981 contributed toward the cost of their medical care. This occurred because institutionalized Medicaid enrollees are required to contribute any income they have toward the cost of their nursing home care, except for a small amount they are allowed to retain each month to cover their personal needs (usually $25). Then Medi-Cal pays for the cost of care not covered by the enrollee contribution.

As mentioned earlier, 4 percent of Medi-Cal enrollees in 1981 were institutionalized. Of this group, 44 percent had no spend-down liability and 56 percent contributed through spend-down each month to the cost of their care (Table 34).

The institutional spend-down population in 1981 contributed substantial amounts toward the cost of their institutional care. Twenty-nine percent of the institutionalized medically needy population contributed $3,600 or more yearly. An additional 24 percent contributed between $1,200 and $3,599.

These contributions represent significant additional dollars spent on health care for Medi-Cal enrollees, yet they are often overlooked. If the spend-down amounts are conservatively estimated at $3,600 per year for all enrollees who had yearly spend-downs of $3,600 or more and the same approach is used to estimate the contributions for the balance of the spend-down population, the size of the overall spend-down

Table 33
Medicaid expenditure per medically needy noninstitutionalized recipient, by annual spend-down liability and eligibility group: California, 1981

| Eligibility group | No spend-down liability | Total | $1-599 | $600-1,199 | $1,200-2,399 | $2,400-3,599 | $3,600 or more |
|-------------------|-------------------------|-------|--------|------------|--------------|--------------|---------------|
|                   |                         | Total | $1,486 | $1,427 | $1,037 | $1,185 | $1,551 | $1,804 | $2,701 |
| AFDC child        |                         | 915   | 777 | 688 | 738 | 662 | 947 | 1,098 |
| AFDC adult        |                         | 2,012 | 1,950 | 1,620 | 1,602 | 2,011 | 2,104 | 2,786 |
| Aged              |                         | 1,272 | 731 | 605 | 577 | 613 | 1,494 | 3,825 |
| Disabled          |                         | 3,150 | 2,598 | 1,761 | 2,099 | 3,309 | 3,717 | 7,377 |
| Other             |                         | 1,359 | 1,536 | 1,082 | 1,249 | 1,570 | 1,536 | 2,434 |

NOTE: AFDC is Aid to Families with Dependent Children.

Table 34
Percent distribution of institutionalized Medicaid enrollees, by annual spend-down liability and eligibility group: California, 1981

| Eligibility group | Total | None | $1-599 | $600-1,199 | $1,200-2,399 | $2,400-3,599 | $3,600 or more |
|-------------------|-------|------|--------|------------|--------------|--------------|---------------|
|                   | Percent distribution |       |        |            |              |              |               |
| Total             | 100   | 44   | 1      | 2          | 10           | 14           | 29            |
| Aged              | 100   | 33   | 1      | 2          | 12           | 16           | 37            |
| Disabled          | 100   | 69   | 1      | 1          | 7            | 9            | 13            |
Table 35
Percent distribution of total and spend-down institutionalized Medicaid enrollees, by eligibility group: California, 1981

| Eligibility group | Institutionalized population |
|-------------------|-----------------------------|
|                   | Total | Spend-down |
| Percent distribution | 100% | 100% |
| Total              | 100  | 100  |
| Aged               | 70   | 64   |
| Disabled           | 27   | 15   |
| Blind              | 1    | 1    |
| AFDC child         | 1    | 0    |
| AFDC adult         | 0    | 0    |

NOTE: AFDC is Aid to Families with Dependent Children.

did not spend-down. Total expenditures per semi-institutionalized enrollee without spend-down liability were $9,103, compared with $11,825 for the spend-down group. However, for the fully institutionalized without spend-down liability, total expenditures per enrollee were much higher ($21,490) than for those with spend-down liability ($15,020).

Turnover in Medi-Cal enrollees

The Medi-Cal population can be divided into two distinct groups: those enrolled for the full year and those enrolled for only part of the year. Yearly turnover rates of Medi-Cal program enrollment groups are compared here. The data presented in Table 37 show that about 75 percent of enrollees in 1981 were enrolled in Medi-Cal for the full year. Thus, only 25 percent of all enrollees had not been Medi-Cal enrollees for the full calendar year. However, there was substantial variation in rates of turnover across enrollment groups.

As shown in Table 37, the aged and disabled eligibility groups had relatively low turnover compared with the AFDC adult and AFDC child groups. There was also lower turnover in the categorically needy enrollment groups than in the medically needy enrollment groups. Although 80.1 percent of the categorically needy enrollees were on Medi-Cal for the full year, only 53.7 percent of the medically needy enrollees were enrolled for the full year. Within the categorically needy group, the AFDC adult and AFDC child enrollment groups had higher rates of turnover that either the categorically needy aged or disabled. Among the medically needy, 74.1 percent of the aged enrollment group and 77.9 percent of the disabled enrollment group were on Medi-Cal for the full year. In contrast, the medically needy AFDC adult and AFDC child enrollment groups had only 44.6 percent and 47.5 percent, respectively, who were enrolled for the full year. The medically needy-other had only 43.3 percent of enrollees who were on Medi-Cal for the full year. This was the highest level of turnover in any eligibility group.

Table 36
Total expenditure per institutionalized enrollee, by Medicaid eligibility group and spend-down liability: California, 1981

| Institutional status and eligibility group | No spend-down liability | Annual spend-down liability |
|------------------------------------------|-------------------------|------------------------------|
|                                          | Total | $1-599 | $600-1,199 | $1,200-2,399 | $2,400-3,599 | $3,600 or more |
| Total                                    |       |        |           |              |               |               |
| Semi-institutionalized                   |       |        |           |              |               |               |
| Total                                    | $9,103| $11,825| $7,834    | $11,000      | $11,950       | $12,133       |
| Aged                                     | 6,841 | 11,109 | 6,894     | 9,746        | 11,079        | 11,139        |
| Disabled                                 | 12,775| 15,545 | 10,954    | 14,413       | 15,869        | 16,442        |
| Fully institutionalized                  |       |        |           |              |               |               |
| Total                                    | 21,490| 15,020 | 17,918    | 15,724       | 15,458        | 15,446        |
| Aged                                     | 14,828| 13,938 | 14,111    | 13,898       | 13,964        | 13,864        |
| Disabled                                 | 24,522| 21,069 | 22,137    | 23,782       | 21,988        | 22,363        |

1Includes Medicaid and patient liability for spend-down enrollees.
Table 37
Percent of persons continuously enrolled in Medicaid for the entire year, by eligibility group and cash assistance status: California, 1981

| Eligibility group | SSI | AFDC |
|-------------------|-----|------|
| Cash assistance status | Total | Aged | Disabled | Child | Adult | Other |
|---------------------|------|------|---------|-------|-------|-------|
| Total Medicaid enrollees | 74.6 | 88.1 | 92.9 | 69.5 | 69.5 | 43.3 |
| Categorically needy | 90.1 | 93.4 | 94.8 | 73.0 | 74.9 | — |
| Medically needy | 53.7 | 74.1 | 77.9 | 47.5 | 44.6 | 43.3 |

NOTES: SSI is Supplemental Security Income. AFDC is Aid to Families with Dependent Children.

Data on expenditures per enrollee for eligibility group by length of program enrollment are shown in Table 38. These data do not show consistent differences in expenditures across groups with varying durations of enrollment. Overall, expenditures for those enrolled for less than 6 months were $1,531 per person year, those enrolled 6-11 months spent $1,353 per person year, and full-year enrollees spent $1,472 per year. However, higher turnover groups were more costly for all eligibility groups except the aged and disabled medically needy. For those groups, full-year enrollees were more expensive to Medi-Cal.

Table 38
Total expenditures per Medicaid enrollee, by selected lengths of enrollment, eligibility group, and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Length of enrollment | Expenditure |
|---------------------------------------------|----------------------|-------------|
| Total Medicaid enrollees | 1-5 months | 6-11 months | 12 months |
| AFDC child | 822 | 612 | 430 |
| AFDC adult | 1,516 | 1,388 | 1,260 |
| Aged | 3,483 | 3,508 | 2,450 |
| Categorically needy | 2,055 | 1,776 | 985 |
| Medically needy | 4,706 | 5,321 | 7,614 |
| Disabled | 5,031 | 4,104 | 2,835 |
| Categorically needy | 4,474 | 3,750 | 2,465 |
| Medically needy | 6,262 | 5,202 | 6,643 |
| Other | 1,917 | 1,022 | 553 |

NOTES: AFDC is Aid to Families with Dependent Children.

Crossovers

Those eligible for both Medicare and Medicaid benefits (commonly referred to as "crossovers") have been found to be older, to be in poorer health, and to have higher levels of utilization and expenditures than either the total Medicare or total Medicaid population (McMillan et al., 1983; McMillan and Gornick, 1984). Here we will examine how Medicaid enrollees who also received Medicare benefits differed from the total State Medicaid enrollee population with regard to enrollment group composition, demographics, utilization of services, and Medi-Cal expenditures.

In 1981, approximately 25 percent of the Medi-Cal population were crossover enrollees. The enrollment group composition of the crossover population compared with the total Medi-Cal population is shown in Table 39. Fifty-five percent of the crossover population were aged enrollees; only 16 percent of the total Medi-Cal population were aged. Likewise, 40 percent of the crossover population were disabled and only 16 percent of the total Medi-Cal population were disabled.

Other characteristics of the crossover population as compared with the total Medi-Cal population are displayed in Table 40. The crossover population was decidedly older than the total Medi-Cal population. The percent of elderly was 3.6 times greater in the crossover population. Sixty-four percent of the crossover population were female, similar to the proportion (61 percent) who were female in the total Medi-Cal population. Fourteen percent of all crossovers were institutionalized.

Crossovers used more services per person year than the average Medi-Cal enrollee, a direct result of the

Table 39
Percent distribution of crossovers and total enrollees, by eligibility group and cash assistance status: California, 1981

| Eligibility group and cash assistance status | Crossovers | All enrollees |
|---------------------------------------------|-----------|--------------|
| Total Medicaid enrollees | 100 | 100 |
| AFDC child | 43 | 3 |
| AFDC adult | 20 | 2 |
| Aged | 16 | 5 |
| Categorically needy | 11 | 1 |
| Medically needy | 4 | 4 |
| Disabled | 16 | 4 |
| Categorically needy | 14 | 3 |
| Medically needy | 2 | 1 |
| Other | 6 | 3 |

NOTE: AFDC is Aid to Families with Dependent Children.
Table 40
Crossovers and total Medicaid enrollees, by selected demographic characteristics, service utilization, and expenditure: California, 1981

| Characteristic, service utilization, and expenditure | Crossovers | Total Medicaid enrollees | Ratio of crossovers to total |
|--------------------------------------------------|-----------|-------------------------|-----------------------------|
| **Demographic characteristic**                   |           |                         |                             |
| Percent 65 years or over                          | 68        | 19                      | 3.6                         |
| Percent female                                    | 64        | 61                      | 1.1                         |
| Percent institutionalized                         | 14        | 4                       | 3.5                         |

| **Service utilization**                            |           |                         |                             |
| Inpatient hospital days per 1,000 persons          | 3,270     | 1,530                   | 2.1                         |
| Inpatient hospital discharges per 1,000 persons    | 410       | 240                     | 1.7                         |
| Long-term care days per 1,000 persons              | 37.19     | 10.86                   | 3.5                         |
| Physician visits per year                          | 2.70      | 3.84                    | .8                          |
| Prescription drug purchases per person             | 19.6      | 8.9                     | 2.2                         |

| **Expenditure**                                    |           |                         |                             |
| Total Medicaid expenditures per person             | $2,729    | $1,447                  | 1.9                         |
| Inpatient hospital expenditures per person         | 575       | 506                     | 1.1                         |
| Long-term care expenditures per person             | 1,446     | 455                     | 3.2                         |
| Physician expenditures per person                  | 64        | 89                      | .8                          |
| Prescription drug expenditures per person          | 200       | 85                      | 2.3                         |

higher concentration of the aged and disabled groups in the crossover population. Crossovers had twice the inpatient hospital days and nearly twice the number of discharges compared with the total Medi-Cal population. Crossovers also had 3.5 times the number of long-term care days and 2.2 times the number of prescription drug purchases of the total Medi-Cal population.

Crossovers had higher expenditures per person year than the total Medi-Cal population. Medi-Cal expenditures were 1.9 times higher for crossovers than for the total, in spite of the major contribution of Medicare to the cost of care for these enrollees.

**Medically needy other**

The medically needy other group consists of persons up to 21 years of age who qualify for Medicaid assistance under the California optional eligibility provisions. In 1981, this group included non-AFDC foster care and adoption children, as well as children in poor families that did not meet the AFDC dependency requirements. This latter group are often referred to as "Ribicoff kids," because Senator Ribicoff sponsored the Medicaid legislation establishing such children as an optional Medicaid group. For purposes of this discussion, the medically needy other children are compared with AFDC children, a group of similar age.

There were 264,320 medically needy other children enrollees in 1981, 7.4 percent of all Medi-Cal enrollees (Table 41). Because of their short average duration of enrollment, however (5.9 months as compared with 8.5 months for AFDC children), they comprised only 5 percent of total enrollee person years. They were

Table 41
Total Medicaid enrollees, medically needy other, and AFDC children, by selected characteristics: California, 1981

| Characteristic                  | Total enrollees | Medically needy other | AFDC children |
|---------------------------------|-----------------|-----------------------|---------------|
| Number of persons ever enrolled | 3,586,036       | 264,320               | 1,576,543     |
| Number of person years          | 2,631,904       | 130,359               | 1,119,601     |
| Mean length of enrollment in months | 8.8         | 5.9                   | 8.5           |
| Percent under 6 years           | 16.8            | 38.6                  | 34.7          |
| Percent 6-17 years              | 26.1            | 35.9                  | 56.7          |
| Percent 18-20 years             | 5.4             | 20.5                  | 9.6           |
| Percent recipients              | 87.1            | 75.4                  | 83.9          |
| Percent institutionalized       | 4.0             | 0.3                   | 0.0           |

NOTE: AFDC is Aid to Families with Dependent Children.
somewhat older, on the average, than AFDC children, with comparatively more teenage children.

Three-fourths of the medically needy other children were recipients, compared with 83.9 percent of AFDC children and 87.1 percent of all enrollees; less than 1 percent were institutionalized. Utilization measures per enrollee for this group were higher than those for AFDC children (Table 42). They had nearly three times the number of acute hospital inpatient days and about 2.5 times the number of discharges; their average length of stay was, however, similar (4.9 versus 4.3 days). The medically needy other children also had higher long-term care utilization than AFDC children or all enrollees (483 days per 1,000 enrollees versus 52). On the other hand, physician services were utilized at only a slightly higher level than for AFDC children (3.6 and 3.4 visits per enrollee per year, respectively). For prescription drugs, the rates for medically needy other children were about the same as for AFDC children, (3.1 prescriptions per enrollee).

**Table 42**

| Utilization measure                          | Medically needy other | AFDC children |
|---------------------------------------------|-----------------------|---------------|
| Inpatient hospital days per 1,000 enrollees  | 1,362                 | 486           |
| Inpatient hospital discharges per 1,000 enrollees | 283                  | 112           |
| Average length of stay in days              | 4.9                   | 4.3           |
| Physician visits per enrollee               | 3.6                   | 3.4           |
| Long-term care days per 1,000 enrollees     | 483                   | 52            |

**NOTE:** AFDC is Aid to Families with Dependent Children.

Expenditures for the medically needy other children were about double those for AFDC children (Table 43). This is primarily the result of their relatively high expenditures for inpatient hospitalization ($706 per year compared with $241 for AFDC children). Long-term care expenditures and other expenditures were also higher than those for AFDC children. These higher utilization and expenditure patterns imply that medically needy other children have significantly greater health care needs than AFDC children.

**Other Federal and State-only enrollees**

Two groups of Medi-Cal enrollees do not fall under the provisions of the Title XIX Medicaid program. For analysis, these are referred to as "other Federal" and "State-only" enrollees. The "other Federal" group consists of low income refugees and Cuban and Haitian entrants who do not meet the categorical requirements of Medicaid. The Medi-Cal costs for these enrollees were paid entirely by the Federal Government in 1981, provided the enrollees had been in the United States for less than 36 months.

In 1981, there were 74,370 other Federal enrollees on Medi-Cal. Data for the other Federal group are provided in Table 44. These enrollees had few group members over 65 years of age; they were predominantly male, and they were almost exclusively noninstitutionalized. They were less likely than the average Medi-Cal enrollee to use inpatient hospitals, to have long-term care, or to purchase prescription drugs. However, other Federal enrollees did use more physician visits, on the average, than all Medi-Cal enrollees. Other Federal enrollees had lower expenditures, on the average, for hospital visits, prescription drugs, and long-term care than the total Medi-Cal enrollees. However, other Federal enrollees averaged higher levels of expenditures for physician visits and dental visits. For total per capita expenditures, they were a lower cost group than the Medi-Cal enrollees.

The State-only Medi-Cal group in 1981 consisted of various low-income persons who did not meet Medicaid eligibility requirements. California opted to extend Medi-Cal benefits to them even though Federal matching monies were not available for their direct service costs. However, the Federal Government does share in the administrative cost for State-only enrollees.

In 1981, State-only Medi-Cal enrollees numbered 580,653. State-only enrollees were almost all under 65 years of age and noninstitutionalized (Table 45). There was a greater percent of males in the State-only population than in the total Medi-Cal population, although both groups were predominantly female. There were few crossovers in the State-only population.

State-only enrollees had 1.8 times more inpatient hospital days and discharges per year than the average Medi-Cal enrollee. They also had 2.7 times more physician visits. Thus, the State-only population consumed significantly more ambulatory care and hospital services per enrollee than the total Medi-Cal population. However, State-only enrollees used almost no long-term care services and fewer prescription drugs than the total Medi-Cal population.

The State-only population was also a high-cost population. As can be seen in Table 45, total expenditures were 1.7 times higher for State-only enrollees per year than for the average Medi-Cal enrollee. Inpatient hospital expenditures per year averaged 3.2
Table 44
Other Federal Medicaid enrollees and total enrollees, by selected demographic characteristics, service utilization, and expenditures: California, 1981

| Characteristic                  | Other Federal enrollees | Total Medicaid enrollees | Ratio of other Federal to total Medicaid enrollees |
|--------------------------------|-------------------------|--------------------------|--------------------------------------------------|
| Percent 65 years or over       | 7                       | 19                       | 0.4                                              |
| Percent female                 | 44                      | 61                       | 0.7                                              |
| Percent institutionalized      | 0                       | 4                        | 0.0                                              |
| **Service utilization**        |                         |                          |                                                  |
| Inpatient hospital days        | 630                     | 1,530                    | 0.4                                              |
| per 1,000 persons              |                         |                          |                                                  |
| Inpatient hospital discharges  | 130                     | 240                      | 0.5                                              |
| per 1,000 persons              |                         |                          |                                                  |
| Long-term care days            | 0.1                     | 10.9                     | 0.0                                              |
| per 1,000 persons              |                         |                          |                                                  |
| Ambulatory care days per person| 6.3                     | 5.3                      | 1.2                                              |
| Physician visits per person    | 4.7                     | 3.8                      | 1.2                                              |
| Prescription drug purchases    | 7.4                     | 8.9                      | 0.8                                              |
| per person                     |                         |                          |                                                  |
| **Expenditure**                |                         |                          |                                                  |
| Total expenditure per person   | $820                    | $1,447                   | 0.6                                              |
| Inpatient hospital expenditures| 339                     | 506                      | 0.7                                              |
| Long-term care expenditures    | 7                       | 455                      | 0.0                                              |
| per person                     |                         |                          |                                                  |
| Physician visit expenditures   | 125                     | 89                       | 1.4                                              |
| per person                     |                         |                          |                                                  |
| Dental visit expenditures      | 99                      | 44                       | 2.3                                              |
| per person                     |                         |                          |                                                  |
| Prescription drug expenditures | 50                      | 85                       | 0.6                                              |
| per person                     |                         |                          |                                                  |

sometimes higher for State-only enrollees than for the average Medi-Cal enrollee. State-only enrollees had higher expenditures per year, on the average, for physician services and for dental services than total Medi-Cal enrollees. However, expenditures for long-term care were much lower. Therefore, it is primarily their high expenditures for hospital care that determine their overall high expenditures pattern.

**Conclusion**

This overview of 1981 Medi-Cal program experience highlights the diversity of the California Medicaid population and the resulting variation in utilization and expenditures patterns for the many groups falling under the umbrella of Medi-Cal. California has a more diverse Medicaid population than most States, resulting from its broad eligibility provisions that cover many optional groups and its inclusion of several "State-only" programs under its Medicaid administration.

Although the Medi-Cal program is relatively generous in eligibility provisions and in the number of services that are covered, there are several benefit restrictions (such as prior authorization requirements) that appear to limit somewhat the levels of service utilization experienced in 1981. In general, utilization rates for California were equal to or lower than those experienced in the Michigan and New York Medicaid programs in the same year. Other factors may obviously have been important in determining these differences, such as case-mix differences in the populations compared or differences in regional patterns of medical care.

Although utilization levels for California were lower, the same was not true of expenditure levels. This is because the cost of individual services was higher in California than in the other two States, except for long-term care services in New York. The result was that the per enrollee expenditures for California were higher than those for Michigan and about the same as those for New York, with the exception of long-term care services, which were much
### Table 45
State-only enrollees and total Medicaid enrollees, by selected demographic characteristics, service utilization, and expenditures: California, 1981

| Characteristic               | State-only enrollees | Total Medicaid enrollees | Ratio of State-only to total Medicaid enrollees |
|-----------------------------|----------------------|--------------------------|-----------------------------------------------|
| Characteristic              | Percent 65 years or over | 19                       | 0.1                                           |
|                             | Percent female        | 52                       | 61                                            | 0.9                                           |
|                             | Percent institutionalized | 1                       | 4                                             | 0.3                                           |
|                             | Percent crossovers     | 8                        | 26                                            | 0.3                                           |
| Service utilization         | Inpatient hospital days per 1,000 persons | 2,780 | 1,530 | 1.8 |
|                             | Inpatient hospital discharges per 1,000 persons | 420 | 240 | 1.8 |
|                             | Long-term care days per 1,000 persons | 0.7 | 10.9 | 0.0 |
|                             | Ambulatory care days per person | 9.2 | 5.31 | 1.7 |
|                             | Physician visits per person | 6.6 | 3.84 | 1.7 |
|                             | Prescription drug purchases per person | 8.2 | 8.94 | 0.9 |
| Expenditures                | Total expenditure per person | $2,408 | $1,447 | 1.7 |
|                             | Inpatient hospital expenditures per person | 1,603 | 506 | 3.2 |
|                             | Long-term care expenditures per person | 37 | 445 | 0.1 |
|                             | Physician visit expenditures per person | 164 | 89 | 1.8 |
|                             | Dental visit expenditures per person | 71 | 44 | 1.6 |
|                             | Prescription drug expenditures per person | 77 | 85 | 0.9 |

More expensive in New York. This shows the importance of controlling both utilization of services and costs per service when attempting to control overall program costs. The selective contracting program for hospital services that began in 1983 in California should have a dramatic impact on costs per day in California hospitals. It will be interesting to observe whether changes in utilization levels or in the mix of services will compensate, either fully or partially, for the reduced per day costs.

Another important factor in differences in program costs by State is the composition of the population being served. Because of the many eligibility options that it has chosen within its AFDC and State-only programs, California has a relatively young population, as has Michigan. New York has a much older population. In fact, in 1981, about one-half of the New York Medicaid expenditures were for the aged. In all three States, the disabled were a very expensive group; in California they were the most expensive and were responsible for the largest proportion of program costs (33 percent). A large portion of those costs were for institutional care for the mentally retarded. Initiatives within the State to deinstitutionalize the mentally retarded are likely to affect the relative mix of program expenditures for the disabled population in the future.

A variety of information for several special populations has been analyzed. Most of the higher-cost groups within Medi-Cal have high levels of utilization and expenditures for hospital and long-term care. The variations that have been observed point to the diversity within Medi-Cal, and the importance of analyzing these populations separately.

These results from California will provide a baseline for analyzing the many changes that have been implemented in Medi-Cal and in other State Medicaid programs throughout the 1980’s. The continuation of the Medicaid Tape-to-Tape Project for service dates through 1988 will facilitate those analyses.
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