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**MATHEMATICA**  
Policy Research, Inc.

**Medicaid Populations  
with Chronic and  
Disabling Conditions: A  
Compilation of Data on  
Their Characteristics,  
Health Conditions,  
Service Use, and  
Medicaid Payments**

*Final Report*

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## I. INTRODUCTION

Concern over the ability of Medicaid programs to meet the needs of enrollees with chronic and disabling conditions has intensified as more Medicaid recipients receive care through managed care organizations and as state fiscal constraints have focused attention on rising Medicaid costs. Although information about the health care utilization and Medicaid costs of people with special health care needs is limited, in part because of the difficulty of fully identifying this population in Medicaid claims and enrollment data, we know they typically use health care services more intensively and their services are more costly than those of other enrollees. In addition, they are a diverse population: they have a diversity of conditions that result in a diversity of needs, and they are served in a diversity of settings.

Definitions of the population with special health care needs vary. The nearly 13 million people who are blind or disabled and receive federal disability benefits through the Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) programs are typically defined as one such population (Social Security Administration 2005a, 2005b). These two programs provide cash benefits to people who are severely disabled. Applicants must show that their disabilities are total, will last at least 12 months or result in death, and prevent them from earning a living. But there are other groups with chronic and disabling conditions, and the Medicaid program serves numerous people with special health care needs who do not receive federal disability benefits.

The Centers for Medicare & Medicaid Services (CMS) contracted with Mathematica Policy Research, Inc. (MPR) to identify the general Medicaid population with special health care needs and examine their wide range of chronic and disabling conditions (CMS Contract Number 500-00-0047[01]). To accomplish this work, MPR obtained Medicaid eligibility and claims records

for all people enrolled at any point during calendar years 1999 and 2000. Using a combination of diagnosis and eligibility codes, we identified enrollees of all ages with chronic and disabling conditions. Then, we created a series of tabulations designed to describe the demographic characteristics, chronic conditions, service utilization, and Medicaid payments of Medicaid enrollees aged 0 through 64. These tabulations are presented in chapters III and IV.

For a sample of enrollees identified as having a chronic or disabling condition, we obtained administrative records from the SSI and SSDI programs and created a file of linked records. The linked records provide a rich source of data on the disabling conditions that qualified these people for federal disability benefits and chronic conditions for which they received treatment. We used this linked database to create additional tabulations to describe SSI and SSDI beneficiaries; these tabulations are presented in chapters V (young adult SSI recipients aged 18 through 21) and VI (working age SSI recipients and SSDI beneficiaries aged 21 through 64).

Because of resource limitations, we were not able to analyze these data. However, at the beginning of each chapter, we summarize key points.

## II. DATA AND METHODS

### A. DATA

#### 1. Medicaid Analytical Extract System

MPR used records from the Medicaid Analytical Extract System (MAX) to build a database appropriate for describing Medicaid enrollees with chronic and disabling conditions. We obtained all MAX records from all states for calendar years 1999 and 2000, the most recent data available at the time of data extraction.<sup>1</sup> MAX files are derived from the Medicaid Statistical Information System (MSIS), a uniform data system that includes eligibility and claims records for all Medicaid enrollees from all states. Since 1999, all states have been required to submit MSIS records quarterly. To create the MAX files, the quarterly MSIS files are transformed into calendar year person- and claim-level data files. The person summary file includes one eligibility record for each person enrolled during the year. Each record in the person summary file contains, among other things, demographic information, eligibility codes and managed care enrollment by month, and total payments for the year. Claims records are organized by date of service. Only fully adjudicated records are included, and claims are organized into four separate files: inpatient, long-term care, prescription drugs, and other services. MSIS and MAX data are subject to extensive data quality checks before they are released for research purposes.

#### 2. Social Security Administration Records

The data source for information about eligibility for SSI and SSDI benefits was the Ticket Research File (TRF), version 2, which MPR developed for its Social Security Administration (SSA)-funded project to evaluate the Ticket to Work and Self-Sufficiency program (SSA

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<sup>1</sup> As of April 2006, the most recent MAX data available were for calendar year 2002.

contract number 0600-03-60130). The Ticket to Work program was established in 1999 to help people with disabilities achieve economic self-sufficiency (Thornton et al. 2006). To evaluate this program, MPR created the TRF, which contains historical data on people between 18 and 64 years old who participated in the SSI or SSDI programs at any time between 1994 and 2003.<sup>2</sup> The data were culled from various SSA administrative data files. Data from the different files were combined into a single record for each person (Hildebrand et al. 2005). Because the TRF captures primarily federal disability program information for working age adults, tabulations of the linked SSA and MAX records are limited to adults aged 18 through 64.

## **B. METHODS**

### **1. Identification of Enrollees with Chronic and Disabling Conditions**

Because the purpose of this compilation of tabulations is to describe Medicaid enrollees with chronic and disabling conditions, the study population was restricted to enrollees who either had diagnostic codes that indicated the presence of a chronic or disabling condition or had Medicaid eligibility codes that indicated receipt of SSI benefits. We used the Chronic Illness and Disability Payment System (CDPS), developed by Kronick et al. (2000), to identify enrollees with diagnosis codes that suggested they had a chronic or disabling condition. The CDPS, is a risk adjustment system developed explicitly for states to use in adjusting capitated payments for Medicaid enrollees, uses diagnosis codes to classify enrollees into 20 different condition categories, 18 of which we used to designate someone as having a chronic or disabling condition.<sup>3</sup> We did not consider condition categories for infants or pregnancies as indicating the

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<sup>2</sup> In 1999 and 2000, these individuals would have been between 14 and 70 years old.

<sup>3</sup> The CDPS uses the first three digits of each diagnosis code to classify people into 20 major diagnostic categories. It excludes codes that are ill-defined and do not have a clear definition among clinicians or that represent symptoms not tied to a specific diagnosis. In addition, the CDPS does not include many diagnosis codes for low-cost, high-frequency conditions.

presence of a chronic or disabling condition. The CDPS further disaggregates condition categories by cost (extra high, very high, medium, low, very low, extra low, and extremely low). We excluded enrollees who had only conditions that the CDPS classified as very low, extra low, or extremely low cost. Appendix A includes a description of the 18 condition categories that we used, as well as some example diagnoses for each category.

Those enrollees who were not identified by the CDPS as having a chronic or disabling condition, but who Medicaid eligibility codes indicated were SSI recipients, were also included in the study population.<sup>4</sup> We excluded Medicaid enrollees who had neither a diagnosis code that linked to a CDPS condition category nor an eligibility code that indicated they were receiving SSI benefits. In addition, we excluded people who were enrolled for less than six months during 1999 and 2000, because of the limited amount of information available.

## **2. Identification Results**

The application of the selection criteria, and the exclusions to the entire population of Medicaid enrollees from calendar years 1999 and 2000, resulted in a study population of 16,306,810 enrollees.<sup>5</sup> Most, but not all, of these enrollees were eligible for Medicaid both years. Figure II.1 and Table II.1 present information on how these enrollees were distributed across the two years. Of the 16.3 million people identified, 11.9 million were enrolled for at least one month during 1999, and 12.7 million were enrolled during 2000. Enrollees identified each year as having a chronic and disabling condition represented about 28 percent of all Medicaid enrollees that year. For example, in 2000 Medicaid programs enrolled more than 45.0

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<sup>4</sup> These were enrollees who had Medicaid eligibility codes that indicated they were SSI recipients, including eligibility codes 11 and 12.

<sup>5</sup> This number includes enrollees who were not eligible for full Medicaid benefits. In this population, the majority of enrollees not eligible for full Medicaid are 65 or older and dually eligible for Medicare and Medicaid.

million people, and we identified 12.7 million (28 percent) as having a chronic and disabling condition. By comparison, 7.5 million Medicaid enrollees in 2000 were eligible because they were designated as disabled or blind (CMS 2004).

At the state level, the proportion identified ranged from 16 percent in Michigan to 46 percent in Maine (data not shown). The state-level variation reflects differences in populations and state Medicaid programs. Because Medicaid is a state-administered program, states have considerable flexibility in designing eligibility rules for all groups, and some states have chosen to establish more generous programs that cover a greater proportion of people with chronic and disabling conditions.

FIGURE II.1

MEDICAID ENROLLEES IDENTIFIED AS HAVING CHRONIC AND DISABLING CONDITIONS  
CALENDAR YEARS 1999 AND 2000

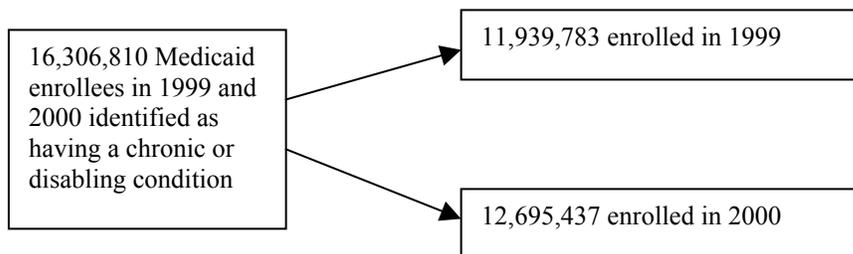


TABLE II.1

NUMBER OF MEDICAID ENROLLEES WITH CHRONIC AND DISABLING CONDITIONS AND  
PERCENTAGE IN FEE FOR SERVICE, OVERALL AND BY STATE  
CALENDAR YEARS 1999 AND 2000

State	All Medicaid Enrollees		Medicaid Enrollees with Chronic and Disabling Conditions			
	Number		Number		Percentage in Fee for Service	
	1999	2000	1999	2000	1999	2000
Total	42,551,405	45,036,700	11,939,783	12,695,437	9,024,186	9,598,176
Alabama	657,495	735,226	248,618	255,080	94.0	98.8
Alaska	103,789	113,081	27,490	29,830	100.0	100.0
Arizona	491,245	515,600	152,232	165,401	26.1	27.4
Arkansas	648,016	696,768	149,789	156,430	100.0	100.0
California	7,288,627	8,265,680	1,508,507	1,760,894	63.6	60.5
Colorado	357,814	383,614	87,216	86,543	78.8	79.0
Connecticut	417,767	424,254	78,332	79,308	86.6	92.6
Delaware	116,454	126,327	35,867	33,610	28.5	32.4
District of Columbia	146,668	150,931	31,336	30,999	83.1	84.9
Florida	2,104,306	2,290,964	539,627	558,937	83.5	85.8
Georgia	1,249,063	1,246,523	294,665	320,369	98.5	100.0
Hawaii	199,173	189,159	31,847	56,623	84.5	44.3
Idaho	134,065	157,816	42,859	48,606	100.0	99.7
Illinois	1,712,826	1,758,424	540,353	564,495	95.1	95.2
Indiana	694,508	769,556	240,700	259,403	87.5	87.5
Iowa	313,720	319,664	91,417	92,809	81.8	82.2
Kansas	256,690	269,952	87,010	88,688	82.2	77.9
Kentucky	687,437	732,387	242,089	270,537	80.0	75.8
Louisiana	786,601	831,107	291,909	302,257	100.0	100.0
Maine	204,329	213,514	94,646	95,674	97.2	99.2
Maryland	686,834	680,710	199,667	213,153	32.7	30.9
Massachusetts	1,060,289	1,112,044	310,145	322,428	94.5	95.3
Michigan	1,339,452	1,371,840	210,045	214,723	60.4	62.4
Minnesota	591,427	620,132	186,656	189,939	51.0	50.7
Mississippi	552,951	609,441	199,213	214,386	97.3	99.8
Missouri	898,028	1,005,428	289,258	314,177	79.3	77.1
Montana	96,453	98,761	33,932	35,893	96.3	97.4
Nebraska	227,395	239,078	69,687	80,245	87.7	84.0
Nevada	139,700	155,526	34,662	44,532	84.6	82.8
New Hampshire	106,887	109,323	34,911	35,016	99.1	98.5
New Jersey	869,612	921,476	267,555	271,566	72.2	70.6
New Mexico	378,433	409,453	68,634	87,080	19.4	20.2
New York	3,403,171	3,421,325	1,256,176	1,275,667	74.6	82.3
North Carolina	1,209,799	1,258,959	445,757	463,377	97.7	97.5
North Dakota	61,806	62,446	20,870	20,098	98.5	96.6
Ohio	1,386,016	1,453,427	428,240	461,202	90.8	93.6
Oklahoma	533,438	590,753	146,154	157,146	79.8	74.8
Oregon	543,964	564,366	170,747	179,513	19.3	24.3
Pennsylvania	1,694,804	1,678,739	338,816	300,058	73.2	80.5
Rhode Island	169,491	185,243	62,249	70,275	56.1	46.8
South Carolina	757,964	805,296	260,342	276,548	99.2	97.4
South Dakota	95,437	102,256	20,457	21,664	100.0	95.6

State	All Medicaid Enrollees		Medicaid Enrollees with Chronic and Disabling Conditions			
	Number		Number		Percentage in Fee for Service	
	1999	2000	1999	2000	1999	2000
Tennessee	1,541,222	1,534,357	517,993	525,657	0.5	0.0
Texas	2,710,200	2,783,521	756,978	772,973	90.8	90.0
Utah	202,235	205,778	38,849	36,770	61.9	52.9
Vermont	142,051	148,181	45,962	50,513	48.7	79.5
Virginia	696,419	701,500	235,315	237,036	78.3	76.5
Washington	899,702	981,017	169,846	192,665	72.0	68.9
West Virginia	358,317	353,052	130,508	140,689	90.5	89.9
Wisconsin	575,138	629,170	157,897	217,842	91.6	69.6
Wyoming	52,177	53,555	15,753	16,113	100.0	99.7

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Validation Tables and system files.

Note: The number of all Medicaid enrollees represents the number ever enrolled during the year. Enrollees with chronic and disabling conditions were identified either by the Chronic Illness and Disability Payment System (CDPS) or by eligibility codes that indicated that the enrollee was designated as disabled and receiving cash assistance. Enrollees in fee for service were never enrolled in a comprehensive managed care plan during the year.

States also vary in their design of the Medicaid service delivery system, and many states have elected to provide care through managed care plans for at least some Medicaid enrollees. For the tabulations, we excluded enrollees who had ever been enrolled in a comprehensive managed care plan as reported in the MAX eligibility record.<sup>6</sup> Typically, the claims for managed care enrollees are not complete and not comparable to those of enrollees who obtain care through the fee-for-service system. Our methods identified managed care enrollees for several reasons. Some managed care enrollees receive services on a fee-for-service basis either because they are in the fee-for-service system for part of the year or because some services are carved out and paid on a fee-for-service basis. Some states submit encounter claims for their enrollees in managed care, and these claims may or may not include diagnosis codes. In addition, we know that some plans reported as comprehensive managed care plans by the states do not receive risk-

<sup>6</sup> Managed care enrollment is reported on a monthly basis. We excluded from the tabulations any enrollee in a comprehensive managed care plan at any point during the year.

based payments, and services are paid on a fee-for-service basis. Essentially, these plans represent a form of managed fee for service.

Those enrollees not excluded because they are in a comprehensive managed care plan are noted in the tables as fee-for-service enrollees, although this group also includes enrollees who obtained services through primary care case management. Enrollees in primary care case management systems continue to receive most services on a fee-for-service basis while their primary care provider receives a small monthly payment to coordinate services.

Table II.1 presents the results of the selection criteria and restrictions overall and by state. Overall, about 76 percent of the original population drawn obtained care through their state's fee-for-service system. The managed care exclusion had the largest impact on children (enrollees aged 0 through 20): about 64 percent of children identified in each year were in fee for service (data not shown). Among working age adults, 76 percent of those identified as having chronic and disabling conditions were in fee for service. About 91 percent of the identified elderly were in fee for service.

The impact of the managed care restriction also varies at the state level because state Medicaid programs vary in how they implement managed care and whether they enroll participants with chronic illnesses and disabilities in managed care plans. In 19 states, 90 percent or more of the enrollees identified as having a chronic or disabling condition obtained care through the fee-for-service system and are included in the tabulations. In 22 states, between 60 and 90 percent were in fee for service. Only in three states were fewer than 25 percent of enrollees with chronic and disabling conditions in fee for service. Tennessee is notable because its Section 1115 demonstration waiver program, known as TennCare, enrolled almost everyone with a chronic or disabling condition into managed care, which resulted in the exclusion from the tabulations of almost all Medicaid enrollees from Tennessee.

The data in Table II.1 show some year-to-year variations. Some variations are due to the natural growth of the Medicaid program or state efforts either to expand Medicaid coverage or to restrain program growth. Because the identification methods relied on claims information, variations can also occur when a state's Medicaid managed care system changes significantly. For example, in Vermont two managed care plans left the Medicaid program during 2000, and enrollees in these plans were transitioned into the state's primary care case management program (CMS 2005). As a result, the proportion of enrollees identified and in fee for service increased from 49 percent in 1999 to 80 percent in 2000. Year-to-year variations can also arise when claims-reporting patterns for managed care enrollees change, although actual managed care enrollment might not change. This appears to explain the large increases in the number of enrollees identified as having a chronic and disabling condition in Hawaii and Wisconsin. Once the managed care restriction was applied, the number with chronic or disabling conditions in fee for service actually decreased in Hawaii by 7 percent (from 26,923 to 25,111 enrollees) and increased by only 5 percent (from 144,674 to 151,637 enrollees) in Wisconsin.

### **3. Tabulations**

In chapters III and IV, tabulations are arranged by age group: children through 20 years of age and working age adults 21 through 64 years of age. Age was measured at the end of each calendar year.

Within each age group the tabulations are grouped by topic: demographic characteristics and Medicaid enrollment, health status, service utilization, and Medicaid payments. Data are tabulated by year, and separate tabulations are presented for the subgroup observed to be enrolled all 24 months. These people were enrolled throughout 1999 and 2000 and are a proxy for enrollees with more needs and in poorer health.

**Demographic Characteristics and Medicaid Eligibility.** The demographic information presented is limited to what is reported in MAX data and includes age, gender, and race/ethnicity. Several states submit large numbers of eligibility records with missing race/ethnicity information, and the tabulations reveal this reporting pattern. For example, 21 percent of eligibility records reported by New York in 1999 and 2000 had missing race/ethnicity information (CMS 2004).

We also present tabulations that report the distribution of Medicaid eligibility categories for these enrollees. Eligibility is reported monthly in MAX records, and the tabulations use the category reported for the last month of eligibility during the year. We used the uniform eligibility codes available in MAX records and distinguished between enrollees designated as disabled for the purposes of eligibility and enrollees whose eligibility is based on being a child or an adult. As Table II.2 shows, every Medicaid enrollee in the data is identified by the basis of eligibility (disabled/not disabled) and eligibility category.

TABLE II.2  
MEDICAID ELIGIBILITY CATEGORIES

Category of Eligibility	Basis of Eligibility			
	Disabled <sup>a</sup>	Not Disabled		
		Child	Adult	Aged
Cash assistance	U	U	U	U
Medically needy	U	U	U	U
Poverty-related	U	U	U	U
Section 1115 demonstration waiver <sup>b</sup>	U	U	U	U
Other	U	U	U	U

<sup>a</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>b</sup>The section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

Enrollees designated as disabled essentially meet the disability criteria of the SSI program but may or may not meet the program's financial criteria. We also distinguished major Medicaid eligibility categories, which include cash assistance, medically needy, poverty-related, section 1115 demonstration waiver, and other. These categories are described in more detail below (adapted from Ellwood and Kell [2003]).

- **Cash Assistance.** The cash assistance category includes enrollees qualifying for Medicaid because they either receive SSI benefits or would have qualified under the pre-welfare reform Aid to Families with Dependent Children (AFDC) rules. Although the 1996 welfare reform legislation replaced AFDC with the Temporary Assistance to Needy Families (TANF) program, state Medicaid programs continue to use 1996 AFDC rules to determine eligibility for Medicaid. Some states have elected to use more generous eligibility rules for AFDC categories, which are referred to as the Section 1931 category, after the section of the Social Security Act providing the rules for Medicaid AFDC-related eligibility after welfare reform.
- **Medically Needy.** The medically needy category is an optional category. In 1999, 37 states extended Medicaid eligibility by implementing a medically needy category for some combination of children, adults, aged, and disabled. Medically needy programs have a higher income threshold than the AFDC cash assistance level. States must allow applicants with income above the medically needy thresholds to qualify for Medicaid by “spending down” or deducting incurred medical expenses from their income to determine financial eligibility for Medicaid.
- **Poverty-Related.** This category includes all enrollees who qualify for Medicaid through any of the poverty-related expansions enacted since 1988. States are required to extend limited Medicaid coverage related to some or all of Medicare cost-sharing requirements (premiums, copayments and deductibles) to Medicare-eligible aged and disabled enrollees with income below 100 to 175 percent of the federal poverty level (FPL). Included in the aged and disabled poverty-related categories are Qualified Medicare Beneficiaries (QMBs), Specified Low-Income Medicaid Beneficiaries (SLMBs), and Qualified Individuals (QI-I and II). States also have the option to extend full Medicaid benefits to all aged and disabled persons with income under 100 percent of the FPL. In 1999, 12 states elected this option. Providing coverage for children and adults in poverty-related eligibility categories is part mandatory, part optional. States must extend full Medicaid benefits to all children under 6 years of age and to all pregnant women with family income below 133 percent of the FPL. In addition, states are required to cover all children born after September 30, 1983, with family income below 100 percent of the FPL. At their option, most states have elected to use considerably higher income thresholds for their poverty-related child and adult coverage. In particular, many states have used the enhanced federal matching available through the State Child Health Insurance Program to establish higher poverty-related income thresholds in Medicaid for children.

- **Section 1115 Demonstration Waiver.** This category includes enrollees qualifying for Medicaid under a Section 1115 waiver demonstration that a state has implemented to test policy innovations. People in the Section 1115 groups may receive full Medicaid benefits or qualify only for limited Medicaid benefits. For example, some states provide only limited family-planning benefits to Section 1115 adults, while others provide only pharmaceutical benefits to Section 1115 aged and disabled enrollees.
- **Other.** The “other” eligibility category includes enrollees who qualify for Medicaid through a mixture of mandatory and optional categories, including many institutionalized aged and disabled persons, as well as those qualifying for Medicaid through hospice and home- and community-based care waivers. These groups also include special subgroups of aged and disabled people who lost SSI benefits because of increases in Old-Age, Survivors and Disability Insurance (OASDI) benefits or other changes. This category also includes children and adults qualifying for up to 12 months of transitional medical assistance because family earnings caused them to lose eligibility for the AFDC category (Section 1931). Enrollees covered by presumptive Medicaid eligibility or with a guarantee of continuous Medicaid eligibility may be included in this category as well, depending on the state. This category also includes immigrants eligible for emergency Medicaid benefits, including undocumented persons, who would otherwise qualify for Medicaid except for their immigrant status.

**Chronic Conditions.** The distribution of the 18 CDPS conditions provides a profile of the health needs of this population of Medicaid enrollees. The distributions of the CDPS conditions, which the tabulations report, reflect only enrollees with at least low-cost conditions in each category; they do not include enrollees with very low or extra low cost conditions. Because the CDPS condition categories are not mutually exclusive and enrollees can have multiple conditions, we also provide distributions of the number of chronic conditions as a measure of the level of comorbidities. Because these tabulations represent an important opportunity to describe the health care needs of Medicaid enrollees with chronic and disabling conditions, we include tabulations that present the distribution of the 18 CDPS condition categories and the number of chronic conditions by gender and age, by disability status, and by Medicaid eligibility category. We present this detailed information only for calendar year 2000, because there was little variation in the information across the two years.

**Service Use.** The tabulations on utilization of services present the percentage who received a service during the year by service type. The tabulations are organized by ambulatory services, inpatient discharges, and long-term care services. For each type of institution-based care, the tables include number of days of service and average length of stay.

**Medicaid Payments.** Tabulations of payments provide information about total and average annual payments, overall and by type of service. We also created tabulations of average monthly payments per enrollee, which include overall monthly Medicaid payments as well as monthly payments by demographic characteristic, Medicaid eligibility category, CDPS condition, and number of comorbidities. These tabulations provide information about the variability in payments across different subgroups of enrollees and can be used to identify high-cost groups.

## **C. DATA LIMITATIONS**

Despite the wealth of information available in Medicaid and SSA administrative records, our data have several limitations that affect our ability either to identify people with chronic or disabling conditions or to analyze their use of Medicaid services. As a result of these limitations, we have underidentified the number of Medicaid enrollees with chronic and disabling conditions, and our sample of enrollees receiving federal disability benefits does not capture the entire universe of SSI and SSDI participants. In addition, other limitations mean that not all preventive care and psychiatric services can be identified in Medicaid records.

### **1. Managed Care**

As mentioned previously, enrollees with chronic and disabling conditions receiving care through managed care systems are more difficult to identify when the identification methods rely on claims information. Managed care plans that receive risk-based payments may not submit any type of claims information for enrollees in the plan, which makes it extremely difficult for a

study like this one to identify enrollees with particular types of conditions. When Medicaid managed care plans submit claims records (known as encounter records) we cannot assume that these records are as complete as records for enrollees in fee for service. Therefore, our approach to identifying enrollees with chronic or disabling conditions most likely underidentifies Medicaid enrollees in managed care plans. As a result, the tabulations present information only for enrollees in fee for service.

## **2. Enrollees Dually Eligible for Medicare and Medicaid**

In 1999, slightly less than 88 percent of aged Medicaid enrollees and 37 percent of those designated as disabled (which can be enrollees of all ages) were dually eligible for Medicaid and Medicare (Ellwood and Kell 2003). Persons dually eligible for both programs are generally of two types. The first type is eligible for limited Medicaid benefits, and Medicaid covers primarily Medicare cost-sharing requirements, including Medicare premiums, copayments, and deductibles. The second type is eligible for full Medicaid benefits. For these people, Medicare is the primary payer for acute care services, and Medicaid covers Medicare cost-sharing requirements and long-term care services. Prior to 2006, Medicaid also covered the prescription care services of the dually eligible. As a result, Medicaid claims for the dually eligible reflect only part of their health care use, and Medicaid payments reflect primarily either Medicare cost sharing or long-term care services. Because the Medicaid data for enrollees aged 65 and older are not comparable to the data for children and working age adults, we did not include a series of tabulations for Medicaid enrollees aged 65 and older. However, these data are available upon request.

### **3. Preventive Care**

Identifying preventive care visits in Medicaid claims records is a challenge. The records do not carry a specific code that indicates visits of this type. We attempted to identify preventive care visits using procedure codes for preventive medicine services provided in a physician's office or an ambulatory facility such as an outpatient department or community health center.<sup>7</sup> Most likely our measures of preventive care underreport actual use and costs. Many enrollees will receive preventive care services during other types of visits. For example, enrollees may receive immunizations or weight-management counseling when they visit a physician for ongoing management of a chronic condition. Children also receive preventive care through the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program. States use a program code to indicate claims for EPSDT services, which makes them easy to identify in ambulatory records. Nevertheless, states do not use a standard definition for EPSDT services, and there are no standard reporting requirements for these services in Medicaid data systems. Therefore, the level of variation in the reporting of EPSDT services is substantial across states, which makes national estimates unreliable. For these reasons, the series of tabulations for children do not report EPSDT service use or costs.

### **4. Psychiatric Services**

Some state Medicaid programs also carve out behavioral health services and manage their use through separate behavioral health plans. In 1999, about 3.3 million Medicaid enrollees were enrolled in such plans (Ellwood and Kell 2003). As with managed care plans for all other services, services provided through behavioral health plans may be underreported in Medicaid

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<sup>7</sup> Preventive care visits were defined as ambulatory claims records that had procedure codes 99381 through 99387 (new patients), 99391 through 99397 (established patients), 99401 through 99404 (individual counseling),

claims information if the plans receive risk-based payments. When constructing the tabulations, we did not exclude enrollees who were enrolled in behavioral health plans. However, the tabulations on the use of services and Medicaid payments may underreport the use and costs of psychiatric services.

#### **D. MEDICAID ENROLLEES RECEIVING FEDERAL DISABILITY BENEFITS**

A key component of this study was to obtain SSA administrative records for recipients of SSI and SSDI benefits and link SSA and Medicaid records to obtain a fuller picture of Medicaid enrollees who receive federal disability benefits. As described above, the data source for the SSA administrative records was the TRF.

##### **1. Linking Medicaid and SSA Records**

Because a data file for 16.3 million people is cumbersome to manage, we elected to link records for only a sample of the study population. To create this sample, we first drew a random sample of the 16,306,810 Medicaid enrollees. We defined sampling strata by state, county code, and eligibility category (SSI recipient, other disability-related categories, and all other eligibility categories). We included the county code stratum to ensure a representative distribution across urban and rural areas within each state. Within the disability eligibility categories, half of the enrollees were selected for the sample. Among those eligible through all other categories, 30 percent were sampled. This strategy resulted in a sample of 6,489,834 records.<sup>8</sup>

MPR created a Finder's File that included the Social Security Number (SSN) of each sample member. In addition to the SSN, the Finder's File included the Medicaid identification number,

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99411 through 99412 (group counseling), 99420 (administration and interpretation of health risk assessment instrument), or 99429 (unlisted preventive medicine service).

date of birth (month and year only), gender, and state of residence. The Finder's File was submitted to the programming staff who constructed the TRF. Every SSN was validated using a process that mirrors the Enumeration Verification System, which SSA uses to validate all SSNs prior to extraction of records from any of its data files. When the Finder's File was compared with the TRF, all records that matched on SSN were further checked on date of birth and gender, and each record in the Finder's File was given a validation status. Those TRF records that matched on SSN, date of birth, and gender were appended to the Finder's File.

Of the sample represented in the Finder's File, 39 percent (2,591,779 records) matched to a record in the TRF. About 33,000 records matched on SSN but did not match on either date of birth or gender. We did not consider these records to be matches.

The data in Table II.3 show that of the working age enrollees in our sample, almost all who were identified as SSI recipients in the Medicaid eligibility records linked to a record in the TRF. In addition, at least three-quarters of adults aged 18 through 64 and eligible for Medicaid through other disability categories linked to a TRF record, and between 6 and 38 percent of working age enrollees, depending on the age group, in all other eligibility categories linked to a TRF record. Non-SSI recipients with linked records represent a combination of SSDI beneficiaries, recipients of federal disability benefits either before 1999 or after 2000, and SSI recipients who were not coded as such in the Medicaid data.

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<sup>8</sup> An additional 375 records matched, but date of birth was missing. These records were dropped from the study.

TABLE II.3

RESULTS OF THE MEDICAID-TICKET RESEARCH DATA FILE LINK,  
BY MEDICAID ELIGIBILITY CATEGORY AND AGE GROUP

Eligibility Category <sup>a</sup>	Age Group				
	Under 18	18 Through 20	21 Through 54	55 Through 64	65 and Over
Total <sup>b</sup>	1,955,657	162,043	2,243,396	663,292	1,465,446
	Total Number				
SSI	368,639	64,016	1,220,381	434,878	831,160
Other disabled	53,371	8,123	412,947	192,307	296,292
All others	1,533,647	89,904	610,068	36,107	337,994
	Percentage with Linked Medicaid-Ticket Research Records				
SSI	28.4	98.2	99.3	96.4	9.4
Other disabled	17.3	76.2	93.0	86.1	4.6
All others	1.0	5.9	14.7	37.7	3.6

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract files and Ticket to Work Research File (TRF), version 2.

Note: Medicaid eligibility category is the most recent eligibility code in the Medicaid eligibility records.

<sup>a</sup>The SSI category includes the aged and disabled, cash assistance groups (MAX eligibility codes 11 and 12). The “other disabled” category includes the medically needy disabled, poverty-related disabled, other disabled, and 1115 demonstration disabled eligibility groups (MAX eligibility codes 21, 22, 32, 42, and 52). All other eligibility categories are included in the “all others” category.

<sup>b</sup>Enrollees eligible in more than one state during calendar years 1999 and 2000 are double counted.

SSI = Supplemental Security Income.

Managed care and dual eligibility most likely affected the creation of the linked database and the sample of SSI recipients and SSDI beneficiaries eligible for Medicaid benefits. We drew our samples of federal disability benefit recipients from a population that underrepresented those who receive care through comprehensive managed care plans. To reduce the magnitude of this problem, we used the Medicaid eligibility code that indicates receipt of SSI benefits when we identified the population and then used eligibility codes in our sampling strategy when we created the linked database. Despite these efforts, our sample of working age adult SSI recipients appears to underestimate the size of the SSI population aged 21 through 64 by about

24 percent. Data reported by SSA indicate that in December 2000, about 3.5 million people aged 21 through 64 were determined to be disabled or blind and receiving SSI benefits (Table 7.E3 SSA 2001). When sampling weights are applied to our sample of working age SSI recipients, the data for 2000 represent only about 2.6 million SSI recipients, an underestimate of about 900,000 recipients. When we eliminate enrollees ever enrolled in a comprehensive managed care plan, the sample represents a population of about 2.3 million working age SSI recipients aged 21 through 64.

In addition to the issue of managed care and incomplete information in claims records, the construction of the sample of working age adult SSI recipients was affected by different eligibility rules between SSI and Medicaid programs. Because the sampling strategy relied on a population of Medicaid enrollees, the sample clearly does not include SSI recipients not enrolled in Medicaid. During the study period, 18 states did not automatically enroll SSI recipients into Medicaid. In seven states, known as SSI criteria states, SSI recipients had to submit a separate application for Medicaid coverage, although the eligibility criteria were the same between the two programs.<sup>9</sup> In the other 11 states, known as 209(b) states, SSI recipients were required to submit a separate application for Medicaid coverage and the state used eligibility criteria more restrictive than those of the SSI program.<sup>10</sup> As a result, some SSI recipients in these 18 states may not have applied for Medicaid coverage, or they may have applied but were found to be ineligible for Medicaid benefits. We are not aware of any published or unpublished data on the number of SSI recipients not enrolled in Medicaid and do not know what proportion of the SSI

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<sup>9</sup> The seven states were Alaska, Idaho, Kansas, Nebraska, Nevada, Oregon, and Utah.

<sup>10</sup> The 11 states were Connecticut, Hawaii, Illinois, Indiana, Minnesota, Missouri, New Hampshire, North Dakota, Ohio, Oklahoma, and Virginia. Amendments to the Social Security Act allow states to use their 1972 state assistance eligibility rules, which may be more restrictive than SSI rules, when determining Medicaid eligibility for

population are not represented in our data. The MAX 2000 State Anomalies report indicates that 8 of the 11 209(b) states and at least 1 of the SSI criteria states appear to have underreported the number of SSI recipients in their Medicaid eligibility records for 2000 (CMS 2005).

How we defined SSI recipients could also have affected how our final sample compares to the national data reported by SSA. For purposes of the tabulations, we defined SSI recipients as anyone who had a linked record in the Medicaid-Ticket Research Data File and SSI eligibility codes indicated either that the person had received a federal SSI benefit payment during at least one month during the year or that the person was eligible but did not receive a payment. The latter situation typically arises at the start of an eligibility period. The law specifies that the second month of eligibility is the earliest month someone can receive a federal SSI cash benefit. It is possible that our definition excludes some recipients that SSA includes in their reported data. The SSA data reports include SSI participants who received federal disability benefit payments, which includes some recipients who receive cash benefits on a temporary basis. The latter cases typically represent recipients whose benefit status is in transition.

## **2. Tabulations**

Chapters V and VI present tabulations for young adult SSI recipients aged 18 through 21 and working age adults receiving federal disability benefits.

**Young Adult SSI Recipients.** To describe young adult SSI recipients, we used the Linked Medicaid-Ticket Research Data File. We limited this series of tabulations to Medicaid enrollees aged 18 through 21 who had a linked record and received SSI benefits in 1999 or 2000. We chose 18 as the lower age limit because at that age, all recipients must be eligible under the

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SSI recipients. The law requires that these states deduct incurred medical care expenses when determining income eligibility for Medicaid (known as a spend-down provision).

disability criteria SSI uses for adults. In these tabulations, we provide information about long-term receipt of SSI benefits, primary disabling conditions, CDPS conditions, service use, and Medicaid payments. We also present tabulations on the correspondence between the primary disabling conditions that qualify these young adults for SSI benefits and CDPS condition categories. These tables are designed to describe subgroups of SSI recipients defined by the primary disabling condition reported in the TRF. For each disabling condition group, the tabulations describe the types of conditions for which they received treatment and the level of comorbidities. Because the results were similar across the two years, these tables present only the 2000 data.

**Working Age Adults Receiving SSI or SSDI Benefits.** The last series of tables provides information about three groups of working age adult Medicaid enrollees who receive (1) SSI benefits only, (2) SSDI benefits only, and (3) both. Like the series on young adults who receive SSI benefits, this series provides information on demographic characteristics, Medicaid eligibility categories, and primary disabling conditions. For those who receive SSI benefits, the tables provide information about CDPS conditions; number of comorbidities; the correspondence between the primary disabling conditions available from the TRF data and CDPS condition categories; service use; and annual Medicaid payments overall and by type of service. These last tabulations do not include SSDI beneficiaries who are not concurrently eligible for SSI benefits. We excluded these beneficiaries because about 20 percent had no identified CDPS condition and the majority were not eligible for full Medicaid benefits.

### III. CHILDREN WITH CHRONIC AND DISABLING CONDITIONS

The following tables present information about Medicaid enrollees aged 0 through 20 with chronic and disabling conditions. Tables III.1 and III.2 present information about their demographic characteristics and Medicaid eligibility status. These data show that in 2000, only 21 percent of children with chronic and disabling conditions were eligible for Medicaid on the basis of a disability; the other 79 percent were eligible because they met the criteria for low-income children (See Table III.2).

Tables III.3.1 through III.4.4 provide information about the types and numbers of conditions these children have reported in their claims records. The data in Table III.3.3 show that psychiatric and pulmonary conditions were common among all children. Among those children designated as disabled in 2000, 41 percent received treatment for nervous system conditions, 32 percent received care for psychiatric conditions, and 22 percent were treated for pulmonary conditions. Among those who qualified for coverage as low-income children, 37 percent received care for pulmonary conditions, 27 percent were treated for psychiatric conditions, and 19 percent obtained care for nervous system conditions. The rate of psychiatric conditions was high among low-income children because the majority of children in foster care were treated for psychiatric conditions (Table III.3.4).

Tables III.5 through III.7 provide information about use of services by type of service. These data show that in 2000, 82 percent of children with chronic and disabling conditions received physician services, 88 percent filled at least one prescription, 27 percent used durable medical equipment, and 4 percent received inpatient care services (Tables III.5 and III.6).

The data in Tables III.8 and III.9 show that overall Medicaid payments for these children totaled \$14.7 billion in 2000, or \$5,356 per child. In comparison, CMS data for all Medicaid

enrollees show that Medicaid payments in 2000 totaled \$26.8 billion for the nearly 22 million enrollees eligible as low-income children. For all Medicaid enrollees designated as disabled, which includes enrollees of all ages, total Medicaid payments in 2000 were \$72.7 billion (CMS 2004). Tables III.10 through III.13 present payments per month per enrollee, overall and by demographic characteristic, condition category, and number of conditions. These data show that in 2000 the most costly children were those designated as disabled (\$1,116 per month enrolled) or in foster care (\$774 per month enrolled), had a cerebrovascular condition (\$2,220 per month enrolled), or had four or more conditions (\$3,013 per month enrolled).

TABLE III.1

DEMOGRAPHIC CHARACTERISTICS OF MEDICAID CHILDREN WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE CALENDAR YEARS 1999 AND 2000

Characteristic	1999	2000	Enrolled Throughout 1999 and 2000
	Number		
Overall	2,594,461	2,738,183	903,018
<b>Age</b>			
Less than 1	174,603	147,814	0
1-5	815,890	849,053	203,442
6-12	900,218	963,015	399,091
13-14	211,445	232,675	102,083
15-18	363,397	403,973	157,057
19-20	128,908	141,653	41,345
<b>Gender</b>			
Male	1,453,046	1,528,980	541,946
Female	1,139,791	1,207,843	361,060
Unknown	1,624	1,360	12
<b>Race/Ethnicity</b>			
White	1,246,705	1,331,646	430,548
Black	697,175	729,712	250,645
American Indian	46,207	52,431	12,607
Asian	22,348	22,594	6,517
Hispanic	380,198	387,510	97,336
Other	4,887	7,131	1,882
Unknown	196,941	207,159	103,483
	Percent		
Overall	100.0	100.0	100.0
<b>Age</b>			
Less than 1	6.7	5.4	0.0
1-5	31.5	31.0	22.5
6-12	34.7	35.2	44.2
13-14	8.2	8.5	11.3
15-18	14.0	14.8	17.4
19-20	5.0	5.2	4.6
<b>Gender</b>			
Male	56.0	55.8	60.0
Female	43.9	44.1	40.0
Unknown	0.1	0.1	0.0
<b>Race/Ethnicity</b>			
White	48.1	48.6	47.7
Black	26.9	26.7	27.8
American Indian	1.8	1.9	1.4
Asian	0.9	0.8	0.7
Hispanic	14.7	14.2	10.8
Other	0.2	0.3	0.2
Unknown	7.6	7.6	11.5

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

TABLE III.2

MEDICAID ELIGIBILITY CATEGORIES OF MEDICAID CHILDREN WITH  
CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Medicaid Eligibility Category <sup>a</sup>	1999	2000	Enrolled Throughout 1999 and 2000
	Number		
Overall	2,594,461	2,738,183	903,018
<b>Basis of Eligibility<sup>b</sup></b>			
Disabled	566,404	575,003	346,013
Not disabled	2,028,057	2,163,180	557,005
<b>Maintenance Assistance</b>			
Cash	1,009,274	1,044,563	456,300
Medically needy	108,759	107,191	28,596
Poverty-related	1,015,242	1,093,095	250,634
Section 1115 demonstration waiver <sup>c</sup>	21,721	25,993	6,595
Foster care	187,751	204,161	93,857
Other	251,045	259,647	67,036
Unknown	669	3,533	0
	Percent		
Overall	100.0	100.0	100.0
<b>Basis of Eligibility<sup>b</sup></b>			
Disabled	21.8	21.0	38.3
Not disabled	78.2	79.0	61.7
<b>Maintenance Assistance</b>			
Cash	38.9	38.2	50.5
Medically needy	4.2	3.9	3.2
Poverty-related	39.1	39.9	27.8
Section 1115 demonstration waiver <sup>c</sup>	0.8	1.0	0.7
Foster care	7.2	7.5	10.4
Other	9.7	9.5	7.4
Unknown	0.0	0.1	0.0

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Eligibility category is based on the last month enrolled during the calendar year.

<sup>b</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>c</sup>The section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

TABLE III.3.1

CHRONIC CONDITIONS OF MEDICAID CHILDREN WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Chronic Condition Category <sup>a</sup>	1999	2000	Enrolled Throughout 1999 and 2000 <sup>b</sup>
Overall	2,594,461	2,738,183	903,018
	Percent		
<b>Mental Health Conditions</b>			
Developmental disability	3.86	4.00	10.13
Psychiatric	26.50	27.89	42.96
Substance abuse	1.01	1.03	1.32
<b>Physical Health Conditions</b>			
Infectious disease	5.86	5.56	5.02
Cancer	1.29	1.19	2.01
Metabolic	5.34	5.17	11.17
Diabetes	1.22	1.28	2.03
Hematological	2.31	2.32	3.67
Nervous system	22.73	23.29	40.54
Eye	0.64	0.63	1.39
Cardiovascular	5.90	5.68	9.61
Cerebrovascular	0.66	0.64	1.56
Pulmonary	34.57	33.62	40.82
Gastrointestinal	15.03	14.53	17.18
Genital	1.23	1.27	2.02
Renal	6.85	6.90	11.39
Skin	3.89	4.03	8.57
Skeletal and connective tissue	7.16	7.06	14.34

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

<sup>b</sup>Based on information from calendar year 2000.

TABLE III.3.2

CHRONIC CONDITIONS OF MEDICAID CHILDREN WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
BY CHRONIC CONDITION CATEGORY AND BY GENDER AND AGE GROUP  
CALENDAR YEAR 2000

Chronic Condition Category <sup>a</sup>							Females					
	Less than 1	1-5	6-12	13-14	15-18	19-20	Less than 1	1-5	6-12	13-14	15-18	19-20
Overall	79,664	478,073	580,559	135,859	202,287	52,538	67,198	370,594	382,444	96,814	201,679	89,114
<b>Mental Health Conditions</b>												
Developmental	0.71	2.16	4.27	5.22	7.00	13.87	0.83	2.08	4.25	5.24	4.97	6.30
Psychiatric	0.80	7.82	45.75	50.87	43.79	31.57	0.81	5.42	31.79	40.81	39.80	26.69
Substance abuse	0.14	0.09	0.17	1.11	5.09	5.38	0.14	0.08	0.13	1.27	3.56	3.04
<b>Physical Health Conditions</b>												
Infectious disease	30.67	6.68	1.91	1.40	1.47	1.88	33.54	8.65	3.48	2.19	2.46	3.76
Cancer	0.68	1.03	0.97	1.08	1.28	1.88	0.70	1.14	1.20	1.32	1.73	2.66
Metabolic	7.99	8.02	4.05	3.29	3.12	3.53	7.98	7.47	4.09	3.27	2.93	3.12
Diabetes	0.25	0.49	0.87	1.40	2.10	2.93	0.23	0.53	1.30	2.34	3.23	4.44
Hematological	2.94	2.75	1.68	1.71	1.91	2.56	3.09	2.93	2.03	1.97	2.45	3.56
Nervous system	9.80	26.40	26.09	22.07	21.67	26.04	9.22	22.27	24.92	22.04	20.35	20.43
Eye	1.18	0.78	0.44	0.48	0.54	0.74	1.20	0.86	0.50	0.49	0.52	0.58
Cardiovascular	11.25	5.32	3.86	4.73	6.35	8.27	11.89	6.03	4.50	4.97	6.88	9.92
Cerebrovascular	1.09	0.65	0.54	0.53	0.72	1.19	0.97	0.62	0.60	0.54	0.61	0.80
Pulmonary	36.03	51.09	27.76	22.94	21.10	16.38	29.18	47.96	30.04	26.06	23.45	21.06
Gastrointestinal	42.99	20.24	7.73	6.91	9.04	10.09	41.05	20.97	9.84	8.96	11.90	14.36
Genital	2.46	1.56	0.57	0.31	0.21	0.24	0.78	0.51	0.26	1.46	4.92	6.94
Renal	4.18	4.39	6.96	5.48	5.68	7.37	3.75	6.34	9.81	6.58	9.26	14.39
Skin	3.75	4.73	3.29	3.97	4.65	5.12	3.22	4.40	3.27	3.98	4.55	4.73
Skeletal	7.74	6.29	5.30	7.89	9.22	9.26	8.17	6.41	6.73	9.77	9.74	8.92

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

TABLE III.3.3

CHRONIC CONDITIONS OF MEDICAID CHILDREN WITH CHRONIC AND DISABLING  
CONDITIONS IN FEE FOR SERVICE, BY DISABILITY STATUS  
CALENDAR YEARS 1999 AND 2000

Chronic Condition Category <sup>b</sup>	1999		2000		Enrolled Throughout 1999 and 2000 <sup>a</sup>	
	Disabled <sup>c</sup>	Not Disabled	Disabled <sup>c</sup>	Not Disabled	Disabled <sup>c</sup>	Not Disabled
Overall	566,404	2,028,057	575,003	2,163,180	346,013	557,005
	Percent					
<b>Mental Health Conditions</b>						
Developmental	13.84	1.08	14.74	1.14	21.78	2.89
Psychiatric	30.65	25.34	32.41	26.69	40.53	44.47
Substance abuse	0.83	1.06	0.83	1.08	1.14	1.44
<b>Physical Health Conditions</b>						
Infectious disease	2.52	6.79	2.51	6.36	4.28	5.48
Cancer	2.45	0.96	2.39	0.87	3.20	1.27
Metabolic	11.21	3.70	11.39	3.51	18.59	6.56
Diabetes	1.39	1.18	1.52	1.22	2.24	1.90
Hematological	3.39	2.01	3.47	2.02	5.17	2.73
Nervous system	39.99	17.91	41.17	18.54	55.40	31.31
Eye	1.24	0.47	1.23	0.47	2.22	0.88
Cardiovascular	8.79	5.09	8.94	4.82	13.74	7.04
Cerebrovascular	1.71	0.37	1.75	0.35	3.12	0.59
Pulmonary	21.94	38.10	21.80	36.76	32.02	46.28
Gastrointestinal	10.42	16.32	10.66	15.56	17.18	17.18
Genital	1.11	1.27	1.16	1.30	2.08	1.99
Renal	8.72	6.33	9.09	6.32	14.51	9.45
Skin	4.23	3.80	4.46	3.92	9.15	8.22
Skeletal	12.01	5.80	12.03	5.74	20.98	10.22

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Based on information from calendar year 2000.

<sup>b</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

<sup>c</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

TABLE III.3.4

CHRONIC CONDITIONS OF MEDICAID CHILDREN WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
BY CHRONIC CONDITION CATEGORY AND BY MEDICAID ELIGIBILITY GROUP  
CALENDAR YEAR 2000

Chronic Condition Category <sup>a</sup>	b					Not Disabled						
	Cash	Medically Needy	Poverty-related	Section 1115 <sup>c</sup>	Other	Cash	Medically Needy	Poverty-related	Section 1115 <sup>c</sup>	Foster Care	Other	Unknown
Overall	489,303	20,870	14,678	1,634	48,518	555,260	86,321	1,078,417	24,359	204,161	211,129	3,533
<b>Mental Health Conditions</b>												
Developmental	14.19	16.72	14.65	4.35	19.86	0.72	0.86	0.93	0.89	3.46	1.26	0.62
Psychiatric	33.04	24.77	40.48	18.79	27.34	24.30	20.71	22.24	32.08	63.12	22.30	25.22
Substance abuse	0.85	1.03	0.86	0.31	0.55	0.78	2.60	0.67	1.55	3.24	1.17	0.59
<b>Physical Health Conditions</b>												
Infectious disease	2.67	2.66	1.02	0.92	1.36	6.47	6.07	6.44	3.40	2.32	10.18	1.64
Cancer	2.41	2.65	1.98	1.65	2.28	0.91	1.17	0.84	0.90	0.77	0.92	0.57
Metabolic	11.59	7.59	5.70	7.59	12.82	2.96	3.02	3.31	2.42	6.17	3.80	2.49
Diabetes	1.56	1.38	1.55	1.77	1.09	1.16	1.81	1.26	1.97	0.95	1.10	1.02
Hematological	3.79	1.96	1.40	0.98	1.59	1.94	2.10	2.15	2.09	1.37	2.10	1.16
Nervous system	41.21	36.26	27.78	40.21	47.02	17.61	17.45	18.76	17.53	22.69	16.41	17.69
Eye	1.28	0.81	0.75	0.43	1.02	0.39	0.48	0.48	0.37	0.65	0.52	0.17
Cardiovascular	9.39	6.95	5.31	3.79	6.48	4.45	5.75	4.87	5.47	4.34	5.59	2.94
Cerebrovascular	1.81	1.38	0.89	0.92	1.64	0.29	0.38	0.33	0.33	0.49	0.43	0.11
Pulmonary	23.12	18.51	11.51	9.91	13.38	40.50	38.49	38.34	29.98	18.56	36.56	30.85
Gastrointestinal	11.07	7.89	6.53	5.39	9.19	14.38	13.47	17.07	14.98	6.96	20.29	7.27
Genital	1.24	0.73	0.48	0.31	0.70	1.29	1.83	1.22	1.90	1.12	1.58	0.59
Renal	9.17	9.22	6.64	2.69	9.20	5.96	6.83	6.43	8.42	6.49	6.08	4.87
Skin	4.74	3.04	2.47	1.41	2.94	4.25	4.00	3.79	4.18	3.42	4.18	2.41
Skeletal	12.27	9.61	7.81	7.41	12.02	5.50	6.47	5.72	5.85	6.05	5.93	3.85

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract File.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

<sup>b</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>c</sup>The section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

TABLE III.4.1

COMORBIDITIES OF MEDICAID CHILDREN WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Level of Comorbidities	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
Overall	2,594,461	2,738,183	903,018
<b>Number of Chronic Conditions<sup>b</sup></b>			
One	64.0	63.6	54.6
Two	21.9	22.0	25.9
Three	6.8	6.9	10.2
Four or more	3.8	3.9	6.8
Missing	3.4	3.7	2.4
<b>Co-Occurring Mental and Physical Health Conditions</b>			
Yes	12.6	13.1	22.3

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Based on information from calendar year 2000.

<sup>b</sup>The number of chronic conditions is based on the count of 18 different CDPS conditions categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

TABLE III.4.2

COMORBIDITIES OF MEDICAID CHILDREN WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
BY GENDER AND AGE GROUP  
CALENDAR YEAR 2000

Level of Comorbidities	Males						Females					
	Less than 1	1-5	6-12	13-14	15-18	19-20	Less than 1	1-5	6-12	13-14	15-18	19-20
Overall	79,664	478,073	580,559	135,859	202,287	52,538	67,198	370,594	382,444	96,814	201,679	89,114
<b>Number of Chronic Conditions<sup>a</sup></b>												
One	56.90	63.65	65.96	62.84	58.27	44.40	60.38	67.15	69.01	62.84	58.36	55.98
Two	26.81	22.63	21.37	22.24	22.72	21.82	25.37	20.74	19.31	21.99	24.66	24.24
Three	9.27	7.13	6.29	6.56	7.51	9.23	8.09	6.13	5.52	6.68	8.45	8.82
Four or more	5.54	4.28	3.19	3.15	4.04	6.82	4.55	3.73	3.14	3.59	4.42	5.31
Missing	1.49	2.32	3.19	5.22	7.46	17.73	1.63	2.24	3.03	4.91	4.12	5.65
<b>Co-Occurring Mental and Physical Health Conditions</b>												
Yes	1.26	5.79	19.06	20.29	19.93	20.47	1.31	4.17	13.57	17.68	19.64	16.85

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The number of chronic conditions is based on the count of 18 different CDPS conditions categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

TABLE III.4.3

COMORBIDITIES OF MEDICAID CHILDREN WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Level of Comorbidities	1999		2000		Enrolled Throughout 1999 and 2000 <sup>a</sup>	
	Disabled <sup>b</sup>	Not Disabled	Disabled <sup>b</sup>	Not Disabled	Disabled <sup>b</sup>	Not Disabled
Overall	566,404	2,028,057	575,003	2,163,180	346,013	557,005
	Percent					
<b>Number of Chronic Conditions<sup>c</sup></b>						
One	39.4	70.9	39.8	69.9	38.2	64.8
Two	24.8	21.1	25.4	21.1	28.2	24.5
Three	12.4	5.2	12.8	5.3	15.3	7.1
Four or more	10.5	2.0	11.0	2.0	13.2	2.9
Missing	12.9	0.8	11.0	1.8	5.0	0.8
<b>Co-Occurring Mental and Physical Health Conditions</b>						
Yes	23.4	9.4	24.7	10.0	29.9	17.6

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Based on information from calendar year 2000.

<sup>b</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>c</sup>The number of chronic conditions is based on the count of 18 different CDPS conditions categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

TABLE III.4.4

COMORBIDITIES OF MEDICAID CHILDREN WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
BY MEDICAID ELIGIBILITY CATEGORY  
CALENDAR YEAR 2000

Level of Comorbidities	Disabled <sup>a</sup>					Not Disabled						
	Cash	Medically Needy	Poverty-related	Section 1115 <sup>b</sup>	Other	Cash	Medically Needy	Poverty-related	Section 1115 <sup>b</sup>	Foster Care	Other	Unknown
Overall	489,303	20,870	14,678	1,634	48,518	555,260	86,321	1,078,417	24,359	204,161	211,129	3,533
<b>Number of Chronic Conditions<sup>c</sup></b>												
One	39.8	11.5	44.2	49.9	38.6	69.5	69.0	72.3	73.1	61.4	67.7	58.8
Two	25.7	22.5	20.3	17.1	26.0	20.9	20.5	20.4	20.6	24.3	22.2	15.9
Three	13.1	10.4	8.6	4.7	12.5	5.1	5.1	4.8	4.4	7.8	6.0	3.1
Four or more	11.5	7.9	5.8	2.3	9.0	1.7	1.8	1.7	1.5	4.1	2.3	0.9
Missing	10.0	47.8	21.1	25.9	13.9	2.9	3.6	0.9	0.4	2.4	1.8	21.2
<b>Co-occurring Mental and Physical Health Conditions</b>												
Yes	25.1	20.9	19.1	9.9	25.1	9.2	8.4	8.0	11.3	24.4	8.7	7.6

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract File.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>b</sup>The section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

<sup>c</sup>The number of chronic conditions is based on the count of 18 different CDPS conditions categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

TABLE III.5

PRIMARY CARE, ACUTE CARE, AND SUPPORT AND REHABILITATIVE SERVICE USE BY MEDICAID  
CHILDREN WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Type of Service	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
Overall	2,594,461	2,738,183	903,018
	Percent		
Received at Least One:			
<b>Primary Care Service</b>			
Preventive care visit with a physician <sup>b</sup>	11.5	12.4	11.2
Dental service	29.1	31.7	39.8
Family planning service	2.6	2.8	2.8
<b>Acute Care Service</b>			
Physician service	83.6	82.2	82.0
Psychiatric service <sup>c</sup>	--	23.2	--
Outpatient hospital service	62.7	57.1	57.3
Lab or X-ray service <sup>d</sup>	--	68.3	--
Prescription medication	87.0	87.5	90.3
<b>Support and Rehabilitative Services</b>			
Targeted case management service	13.4	13.0	18.2
Rehabilitation service	7.5	5.9	8.9
Physical, occupational, or speech therapy service	7.1	7.0	11.1
Durable medical equipment	24.8	27.4	33.8

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The percentages in this column represent average annual rates of use.

<sup>b</sup>Preventive care visits were defined as ambulatory claims records that had procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429. Because preventive care services can be provided during other types of visits with providers, these data underreport preventive care services.

<sup>c</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>d</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

TABLE III.6

INPATIENT SERVICE USE BY MEDICAID CHILDREN WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Service Use Measure	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
Overall	2,594,461	2,738,183	903,018
<b>Inpatient Discharge<sup>b</sup></b>			
None	84.6	85.6	81.0
One	11.7	10.5	11.6
More than one	3.7	3.8	7.4
<b>Number of Inpatient Discharges<sup>b</sup></b>			
In total	559,372	574,849	335,815
Per enrollee	0.2	0.2	0.4
Per enrollee with at least one inpatient discharge	1.4	1.5	2.0
<b>Length of Stay</b>			
Total number of inpatient days	7,057,611	8,658,882	9,328,306
Average length of stay per discharge	12.6	15.1	27.8

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The data in this column represent average annual rates of use.

<sup>b</sup>Inpatient discharges include birth and delivery discharges.

TABLE III.7

LONG-TERM CARE SERVICE USE BY MEDICAID CHILDREN WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Type of Long-Term Care Service	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
Overall	2,594,461	2,738,183	903,018
Received at Least One:			
Home health service	3.0	3.7	6.7
Home- and community-based waiver service	1.6	1.8	4.2
Personal care service	1.0	1.0	2.4
Residential service	0.4	1.4	2.0
<b>Nursing Facility</b>			
At least one stay	0.1	0.1	0.3
Average number of covered days per user <sup>b</sup>	209.9	220.1	398.7
<b>Inpatient Psychiatric Facility</b>			
At least one stay	1.2	1.2	2.7
Average number of covered days per user	56.8	57.8	75.0
<b>Intermediate Care Facility for the Mentally Retarded</b>			
At least one stay	0.3	0.3	0.6
Average number of covered days per user <sup>b</sup>	309.3	312.7	320.1

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The data in this column represent average annual rates of use.

<sup>b</sup>Some states over report long-term care days because they include covered days on claims for supplemental services, as well as for bundled services which can include accommodations.

TABLE III.8

TOTAL ANNUAL MEDICAID PAYMENTS (IN THOUSANDS) FOR MEDICAID CHILDREN WITH  
CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Type of Service	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
	In Thousands		
Overall	\$13,114,157	\$14,666,307	\$7,484,864
<b>Primary Care Services</b>			
Preventive care visits with a physician <sup>b</sup>	\$23,787	\$27,642	\$6,527
Dental services	\$152,652	\$201,309	\$71,077
Family planning services	\$14,972	\$15,830	\$7,802
<b>Acute Care Services</b>			
Physician services	\$979,125	\$952,928	\$335,703
Psychiatric services <sup>c</sup>	--	\$1,142,847	--
Outpatient hospital services	\$883,450	\$792,377	\$377,611
Lab or X-ray services <sup>d</sup>	--	\$492,024	--
Prescription medications	\$1,312,407	\$1,578,374	\$868,574
<b>Support and Rehabilitative Services</b>			
Targeted case management services	\$296,170	\$334,423	\$193,245
Rehabilitation services	\$644,432	\$503,865	\$365,680
Physical therapy, occupational therapy, speech therapy services	\$155,130	\$179,567	\$113,274
Durable medical equipment	\$410,068	\$454,008	\$307,558
<b>Inpatient Discharges</b>			
Inpatient services <sup>e</sup>	\$2,887,167	\$2,934,050	\$974,733
<b>Long-Term Care Services</b>			
Home health	\$501,906	\$570,851	\$418,364
Home and community-based waiver services	\$564,299	\$716,619	\$509,443
Personal care services	\$174,947	\$181,154	\$142,918
Residential services	\$158,911	\$305,962	\$166,595
Nursing facility services	\$236,914	\$270,329	\$172,774
Inpatient psychiatric services	\$654,201	\$722,647	\$341,218
Intermediate care facility for the mentally retarded	\$514,850	\$537,511	\$423,329

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The data in this column represent average annual payments.

<sup>b</sup>Preventive care visits were defined as ambulatory claims records that had procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429. Because preventive care services can be provided during other types of visits with providers, these data underreport preventive care services.

TABLE III.8 (continued)

<sup>c</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>d</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

<sup>e</sup>Inpatient discharges include birth and delivery discharges.

TABLE III.9

AVERAGE ANNUAL MEDICAID PAYMENTS FOR MEDICAID CHILDREN WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Type of Service	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
	In Dollars		
Overall	5,055	\$5,356	\$8,289
<b>Primary Care Services</b>			
Preventive care visits with a physician <sup>b</sup>	9	10	7
Dental services	59	74	79
Family planning services	6	6	9
<b>Acute Care Services</b>			
Physician services	377	348	372
Psychiatric services <sup>c</sup>	--	417	--
Outpatient hospital services	341	289	418
Lab or X-ray services <sup>d</sup>	--	180	--
Prescription medications	506	576	962
<b>Support and Rehabilitative Services</b>			
Targeted case management services	114	122	214
Rehabilitation services	248	184	405
Physical therapy, occupational therapy, speech therapy services	60	66	125
Durable medical equipment	158	166	341
<b>Inpatient Discharges</b>			
Inpatient services <sup>c</sup>	1,113	1,072	1,079
<b>Long-Term Care Services</b>			
Home health	193	208	463
Home and community-based waiver services	218	262	564
Personal care services	67	66	158
Residential services	61	112	184
Nursing facility services	91	99	191
Inpatient psychiatric services	252	264	378
Intermediate care facility for the mentally retarded	198	196	524

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The data in this column represent average annual payments.

<sup>b</sup>Preventive care visits were defined as ambulatory claims records that had procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429.

TABLE III.9 (*continued*)

<sup>c</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>d</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

<sup>e</sup>Inpatient discharges include discharges for births.

TABLE III.10

AVERAGE MONTHLY MEDICAID PAYMENTS PER MEDICAID CHILD WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE, OVERALL AND  
BY DEMOGRAPHIC CHARACTERISTIC  
CALENDAR YEARS 1999 AND 2000

Characteristics	1999	2000	Enrolled Throughout 1999 and 2000
Number	2,594,461	2,738,183	903,018
	In Dollars		
Overall	487	492	691
<b>Age</b>			
Less than 1	1,070	858	--
1-5	332	354	568
6-12	383	410	585
13-14	554	567	736
15-18	653	678	922
19-20	824	830	1,320
<b>Gender</b>			
Male	503	508	698
Female	467	470	681
Unknown	254	271	126
<b>Race/Ethnicity</b>			
White	490	496	720
Black	400	402	526
American Indian	588	569	769
Asian	495	514	779
Hispanic	394	391	548
Other	644	543	777
Unknown	927	942	1,088

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

TABLE III.11

AVERAGE MONTHLY MEDICAID PAYMENTS PER MEDICAID CHILD WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE, BY MEDICAID ELIGIBILITY CATEGORY  
CALENDAR YEARS 1999 AND 2000

Medicaid Eligibility Category <sup>a</sup>	1999	2000	Enrolled Throughout 1999 and 2000
Overall	2,594,461	2,738,183	903,018
	In Dollars		
<b>Basis of Eligibility<sup>b</sup></b>			
Disabled	1,022	1,116	1,195
Not Disabled	337	325	377
<b>Maintenance Assistance</b>			
Cash	614	634	824
Medically needy	670	688	989
Poverty-related	273	269	295
Section 1115 demonstration waiver <sup>c</sup>	253	246	338
Foster care	725	774	851
Other	604	577	946
Unknown	806	703	--

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Eligibility category is based on the last month enrolled during the calendar year.

<sup>b</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>c</sup>The Section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

TABLE III.12

AVERAGE MONTHLY MEDICAID PAYMENTS PER MEDICAID CHILD WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE, BY CHRONIC CONDITION CATEGORY  
CALENDAR YEARS 1999 AND 2000

Chronic Condition Category <sup>a</sup>	1999	2000	Enrolled Throughout 1999 and 2000
Overall	2,594,461	2,738,183	903,018
	In Dollars		
<b>Mental Health Conditions</b>			
Developmental disability	1,515	1,570	1,621
Psychiatric	526	549	647
Substance abuse	864	875	1,013
<b>Physical Health Conditions</b>			
Infectious disease	703	681	1,123
Cancer	1,056	1,190	1,275
Metabolic	1,382	1,425	1,456
Diabetes	613	652	881
Hematological	1,145	1,211	1,449
Nervous system	701	724	870
Eye	1,326	1,263	1,338
Cardiovascular	1,341	1,305	1,324
Cerebrovascular	2,283	2,220	1,848
Pulmonary	425	430	591
Gastrointestinal	677	679	1,004
Genital	675	704	870
Renal	726	757	1,044
Skin	735	769	956
Skeletal and connective tissue	1,019	1,057	1,246

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract File.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

TABLE III.13

AVERAGE MONTHLY MEDICAID PAYMENTS PER MEDICAID CHILD WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE, BY NUMBER OF COMORBIDITIES  
CALENDAR YEARS 1999 AND 2000

Level of Comorbidities	1999	2000	Enrolled Throughout 1999 and 2000
Overall	2,594,461	2,738,183	903,018
	In Dollars		
<b>Number of Chronic Conditions<sup>a</sup></b>			
One	270	269	369
Two	553	554	687
Three	1,071	1,071	1,177
Four or more	2,932	3,013	2,704
Missing	226	241	259
<b>Co-Occurring Mental and Physical Health Conditions</b>			
Yes	1,008	1,043	1,147

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Children are enrollees 0 through 20 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The number of chronic conditions is based on the count of 18 different CDPS condition categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

#### **IV. WORKING AGE ADULTS WITH CHRONIC AND DISABLING CONDITIONS**

The following tables present information about Medicaid enrollees ages 21 through 64 with chronic and disabling conditions. Tables IV.1 through IV.2 provide information about their demographic characteristics and Medicaid eligibility status. Most of adults in this population were eligible for Medicaid because they were designated as disabled, which means that most of these individuals met the disability criteria of the SSI and SSDI programs, but may or may not have met the financial criteria of the SSI program (see Table IV.2). The other 20 percent were eligible through other eligibility categories for adults.

Tables IV.3.1 through IV.4.4 provide information about the types and numbers of conditions these adults have. The data in Tables IV.3.1 through IV.3.4 show psychiatric conditions and comorbidities were common overall and among most subgroups of adults with chronic and disabling conditions. Overall, 32 percent of adults in this population received treatment for psychiatric conditions in 2000 (see Table IV.3.1). Among SSI recipients, enrollees designated as disabled and receiving cash assistance, 36 percent received care for psychiatric conditions and 36 percent were treated for cardiovascular conditions (see Table IV.3.4). Among adults with chronic and disabling conditions eligible through Section 1931 criteria, not disabled and receiving cash assistance, 32 percent received treatment for psychiatric conditions and 25 percent obtained care for pulmonary conditions. Overall, at least 60 percent had more than one condition and one-fifth of adults had four or more conditions (see Table 4.1).

Tables IV.5 through IV.7 provide information about use of services by type of service. The data in Table IV.5 indicate that 76 percent of adults with chronic and disabling conditions saw a physician during calendar year 2000, 85 percent filled a prescription, one-third used durable

medical equipment, 23 percent received inpatient care services, and 4 percent had a nursing home stay.

Tables IV.8 through IV.13 present information about Medicaid payments. In 2000, Medicaid payments for adults with chronic and disabling conditions were approximately \$50.6 billion (see Table IV.8). Prescription medications accounted for the largest proportion of this spending at 19 percent of the total; inpatient care services made up 16 percent of total spending. Payments per month enrolled indicate that adults with developmental disability, many who need long-term care services, were the most costly at \$3,874 per month enrolled (see Table IV.12). Enrollees with infectious disease conditions, a group dominated by individuals with HIV/AIDS, had monthly Medicaid payments of \$2,256.

TABLE IV.1

DEMOGRAPHIC CHARACTERISTICS OF MEDICAID WORKING AGE ADULTS WITH  
CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Characteristic	1999	2000	Enrolled Throughout 1999 and 2000
	Number		
Overall	3,854,840	4,090,459	2,197,918
<b>Age</b>			
21-24	246,810	267,252	94,283
25-34	713,134	736,619	325,426
35-44	1,017,937	1,066,760	567,605
45-54	947,648	1,033,290	608,268
55-64	929,311	986,538	602,336
<b>Gender</b>			
Male	1,593,026	1,672,038	933,870
Female	2,261,764	2,418,369	1,264,026
Unknown	50	52	22
<b>Race/Ethnicity</b>			
White	2,165,254	2,277,899	1,248,300
Black	879,965	936,128	491,547
American Indian	41,751	45,470	19,169
Asian	37,197	39,225	18,794
Hispanic	282,076	312,491	129,394
Other	9,989	11,024	5,693
Unknown	438,608	468,222	285,021
	Percent		
Overall	100.0	100.0	100.0
<b>Age</b>			
21-24	6.4	6.5	4.3
25-34	18.5	18.0	14.8
35-44	26.4	26.1	25.8
45-54	24.6	25.3	27.7
55-64	24.1	24.1	27.4
<b>Gender</b>			
Male	41.3	40.9	42.5
Female	58.7	59.1	57.5
Unknown	0.0	0.0	0.0
<b>Race/Ethnicity</b>			
White	56.2	55.7	56.8
Black	22.8	22.9	22.4
American Indian	1.1	1.1	0.9
Asian	1.0	1.0	0.9
Hispanic	7.3	7.6	5.9
Other	0.3	0.3	0.3
Unknown	11.4	11.5	13.0

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

TABLE IV.2

MEDICAID ELIGIBILITY CATEGORIES OF MEDICAID WORKING AGE ADULTS WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Medicaid Eligibility Category <sup>a</sup>	1999	2000	Enrolled Throughout 1999 and 2000
	Number		
Overall	3,854,840	4,090,459	2,197,918
<b>Basis of Eligibility<sup>b</sup></b>			
Disabled	3,118,743	3,275,757	2,039,687
Not disabled	736,097	814,702	158,231
<b>Maintenance Assistance</b>			
Cash	2,503,266	2,622,018	1,628,036
Medically needy	355,747	386,108	148,746
Poverty-related	397,480	430,731	168,708
Section 1115 demonstration waiver <sup>c</sup>	153,773	175,940	37,675
Other	443,937	474,855	214,640
Unknown	637	807	113
	Percent		
Overall	100.0	100.0	100.0
<b>Basis of Eligibility<sup>b</sup></b>			
Disabled	80.9	80.1	92.8
Not disabled	19.1	19.9	7.2
<b>Maintenance Assistance</b>			
Cash	64.9	64.1	74.1
Medically needy	9.2	9.4	6.8
Poverty-related	10.3	10.5	7.7
Section 1115 demonstration waiver <sup>c</sup>	4.0	4.3	1.7
Other	11.5	11.6	9.8
Unknown	0.0	0.0	0.0

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Eligibility category is based on the last month enrolled during the calendar year.

<sup>b</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>c</sup>The section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

TABLE IV.3.1

CHRONIC CONDITIONS OF MEDICAID WORKING AGE ADULTS WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Chronic Condition Category <sup>a</sup>	1999	2000	Enrolled Throughout 1999 and 2000 <sup>b</sup>
Overall	3,854,840	4,090,459	2,197,918
	Percent		
<b>Mental Health Conditions</b>			
Developmental disability	6.99	6.81	12.37
Psychiatric	31.87	32.49	43.87
Substance abuse	7.25	7.40	9.22
<b>Physical Health Conditions</b>			
Infectious disease	5.15	5.36	7.49
Cancer	5.09	5.15	6.60
Metabolic	4.30	4.40	8.20
Diabetes	15.99	16.56	22.49
Hematological	2.69	2.78	4.47
Nervous system	22.05	22.20	34.65
Eye	5.16	5.27	10.28
Cardiovascular	31.33	32.12	45.48
Cerebrovascular	4.13	4.02	6.92
Pulmonary	23.34	23.39	33.93
Gastrointestinal	18.23	18.82	29.45
Genital	4.15	4.16	7.31
Renal	11.50	11.88	18.39
Skin	8.58	8.74	16.76
Skeletal and connective tissue	19.19	19.76	32.76

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

<sup>b</sup>Based on information from calendar year 2000.

TABLE IV.3.2

CHRONIC CONDITIONS OF MEDICAID WORKING AGE ADULTS WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
 BY CONDITION CATEGORY AND BY GENDER AND AGE GROUP  
 CALENDAR YEAR 2000

Chronic Condition Category <sup>a</sup>	Males					Females				
	21-24	25-34	34-44	45-54	55-64	21-24	25-34	34-44	45-54	55-64
Overall	90,629	277,546	470,599	446,231	387,033	176,621	459,064	596,149	587,040	599,495
<b>Mental Health Conditions</b>										
Developmental	16.94	14.33	9.87	7.62	4.45	6.84	6.80	6.26	4.97	2.67
Psychiatric	32.25	35.05	36.17	29.95	19.09	28.26	35.47	40.57	37.01	25.54
Substance abuse	6.76	9.79	12.99	11.31	6.25	3.97	6.91	8.97	5.20	1.81
<b>Physical Health Conditions</b>										
Infectious disease	2.50	5.52	8.85	7.24	4.62	3.97	4.60	5.35	4.61	3.82
Cancer	1.98	2.15	2.90	4.85	8.74	2.87	3.12	4.09	6.38	8.74
Metabolic	3.19	3.25	3.83	4.84	5.60	2.65	3.16	4.02	5.01	5.69
Diabetes	3.30	5.81	9.80	16.71	23.75	5.33	8.11	12.75	22.29	32.04
Hematological	2.72	2.50	2.47	2.85	2.82	3.42	2.77	2.64	2.85	2.95
Nervous system	26.72	25.38	22.48	21.33	19.46	21.40	23.35	23.92	22.93	19.18
Eye	1.03	1.58	2.54	5.02	10.00	0.76	1.24	2.43	6.10	13.33
Cardiovascular	10.21	14.62	22.39	35.47	50.11	11.10	14.77	24.75	41.13	55.07
Male Cardiovascular	1.38	1.59	2.35	4.66	8.97	0.87	1.19	2.22	4.49	7.63
Pulmonary	13.68	14.02	16.64	21.85	29.53	20.67	21.21	23.93	27.14	29.91
Gastrointestinal	10.65	13.38	16.73	19.80	20.52	14.63	16.24	19.34	21.68	22.26
Genital	0.23	0.29	0.75	2.42	5.93	7.98	8.11	6.61	4.27	2.70
Renal	8.59	9.51	9.74	11.60	14.02	13.43	11.32	10.92	12.66	14.16
Skin	6.19	7.39	8.42	9.87	10.21	5.26	6.71	8.44	9.83	10.06
Skeletal	9.43	10.70	14.09	17.53	20.01	9.51	13.33	20.15	27.52	31.43

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

TABLE IV.3.3

CHRONIC CONDITIONS OF MEDICAID WORKING AGE ADULTS WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE, BY DISABILITY STATUS  
CALENDAR YEARS 1999 AND 2000

Chronic Condition Category <sup>b</sup>	1999		2000		Enrolled Throughout 1999 and 2000 <sup>a</sup>	
	Disabled <sup>c</sup>	Not Disabled	Disabled <sup>c</sup>	Not Disabled	Disabled <sup>c</sup>	Not Disabled
Overall	3,118,743	736,097	3,275,757	814,702	2,039,687	156,231
	Percent					
<b>Mental Health Conditions</b>						
Developmental	8.38	1.14	8.25	1.04	13.01	4.20
Psychiatric	32.98	27.18	33.49	28.51	43.98	42.38
Substance abuse	6.23	11.56	6.34	11.65	8.79	14.78
<b>Physical Health Conditions</b>						
Infectious disease	5.24	4.77	5.47	4.94	7.41	8.51
Cancer	5.22	4.55	5.34	4.38	6.57	7.03
Metabolic	4.70	2.61	4.85	2.58	8.40	5.63
Diabetes	16.95	11.92	17.75	11.76	22.76	18.98
Hematological	2.77	2.37	2.89	2.31	4.55	3.55
Nervous system	23.23	17.02	23.56	16.73	35.00	30.12
Eye	5.95	1.78	6.15	1.74	10.74	4.34
Cardiovascular	33.39	22.58	34.56	22.33	46.04	38.26
Cerebrovascular	4.74	1.55	4.70	1.32	7.23	2.88
Pulmonary	23.05	24.55	23.32	23.65	33.53	39.04
Gastrointestinal	17.78	20.13	18.51	20.06	29.12	33.68
Genital	3.44	7.15	3.40	7.20	6.73	14.81
Renal	11.68	10.75	12.18	10.70	18.46	17.42
Skin	9.17	6.08	9.39	6.14	16.95	14.39
Skeletal	20.13	15.18	20.86	15.35	32.83	31.85

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Based on information from calendar year 2000.

<sup>a</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

<sup>c</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

TABLE IV.3.4

CHRONIC CONDITIONS OF MEDICAID WORKING AGE ADULTS WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
BY CHRONIC CONDITION CATEGORY AND BY MEDICAID ELIGIBILITY GROUP  
CALENDAR YEAR 2000

Chronic Condition Category <sup>A</sup>	B					Not Disabled					
	Cash	Medically Needy	Poverty-related	Section 1115 <sup>C</sup>	Other	Cash	Medically Needy	Poverty-related	Section 1115 <sup>C</sup>	Other	Unknown
Overall	2,305,722	272,725	369,406	7,355	320,549	316,296	113,383	61,325	168,585	154,306	807
<b>Mental Health Conditions</b>											
Developmental	7.52	11.02	2.45	0.90	17.95	0.20	0.18	0.88	0.20	4.36	6.57
Psychiatric	35.89	32.84	21.74	36.15	30.24	31.50	27.18	15.09	25.99	31.38	41.14
Substance abuse	7.06	6.09	3.92	6.02	4.19	8.98	6.32	3.38	28.59	5.85	9.42
<b>Physical Health Conditions</b>											
Infectious disease	5.47	7.55	3.50	4.54	5.97	4.48	3.64	4.45	8.23	3.44	4.21
Cancer	5.19	7.23	4.45	7.10	5.80	3.78	5.03	3.04	6.39	3.48	4.09
Metabolic	5.07	4.59	3.29	3.24	5.37	2.64	2.63	2.00	2.66	2.54	2.35
Diabetes	18.69	15.90	14.45	13.13	16.51	11.59	13.09	11.80	12.36	10.50	7.06
Hematological	3.03	3.14	1.92	2.54	2.82	2.19	2.40	4.13	2.00	2.08	1.86
Nervous system	23.49	25.85	14.40	17.40	32.83	18.16	16.12	13.23	13.33	19.35	16.60
Eye	6.16	6.62	4.77	4.60	7.27	1.54	1.81	0.60	2.80	1.39	0.74
Cardiovascular	36.39	32.72	26.70	25.64	32.20	22.09	23.78	15.85	26.78	19.52	14.62
Cerebrovascular	4.31	6.21	3.47	3.41	7.67	1.29	1.52	0.69	1.41	1.37	0.99
Pulmonary	24.77	21.41	16.51	16.67	22.53	25.16	24.48	17.32	23.89	22.23	18.84
Gastrointestinal	19.75	16.22	13.43	14.59	17.49	20.64	20.25	16.04	20.37	20.03	11.52
Genital	3.92	2.44	1.87	2.71	2.28	8.59	7.48	5.70	4.58	7.64	4.34
Renal	12.21	13.34	8.81	9.65	14.88	10.79	10.91	15.76	8.03	11.30	6.94
Skin	9.57	10.24	5.94	7.51	11.41	6.54	5.76	3.03	6.84	6.05	5.82
Skeletal	22.26	17.65	15.27	15.66	20.05	17.71	15.00	6.41	14.45	15.32	11.28

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

<sup>b</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs. <sup>c</sup>The section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

TABLE IV.4.1

COMORBIDITIES OF MEDICAID WORKING AGE ADULTS WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Level of Comorbidities	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
Overall	3,854,840	4,090,459	2,197,918
<b>Number of Chronic Conditions<sup>b</sup></b>			
One	28.7	27.5	23.0
Two	24.1	23.7	24.0
Three	15.9	16.2	18.7
Four or more	20.2	21.3	26.9
Missing	11.0	11.3	7.4
<b>Co-Occurring Mental and Physical Health Conditions</b>			
Yes	27.5	28.4	35.0

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Based on information from calendar year 2000.

<sup>b</sup>The number of chronic conditions is based on the count of 18 different CDPS conditions categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

TABLE IV.4.2

COMORBIDITIES OF MEDICAID WORKING AGE ADULTS WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
BY GENDER AND AGE GROUP  
CALENDAR YEAR 2000

Level of Comorbidities	Males					Females				
	21-24	25-34	35-44	45-54	55-64	21-24	25-34	35-44	45-54	55-64
Overall	90,629	277,546	470,599	446,231	387,033	176,621	459,064	596,149	587,040	599,495
<b>Number of Chronic Conditions<sup>a</sup></b>										
One	38.16	36.04	30.76	23.33	16.54	52.79	42.78	30.52	20.47	14.43
Two	22.59	24.02	23.87	22.72	21.20	25.06	26.26	25.72	23.64	21.92
Three	10.77	12.49	14.59	16.41	17.72	9.75	13.05	16.50	19.01	20.17
Four or more	8.75	11.33	16.20	22.87	29.16	6.50	11.17	19.29	27.78	33.05
Missing	19.73	16.12	14.58	14.68	15.39	5.89	6.75	7.96	9.09	10.42
<b>Co-Occurring Mental and Physical Health Conditions</b>										
Yes	23.60	27.03	30.81	30.43	22.32	18.91	26.25	33.71	33.62	24.48

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The number of chronic conditions is based on the count of 18 different CDPS conditions categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

TABLE IV.4.3

COMORBIDITIES OF MEDICAID WORKING AGE ADULTS WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Level of Comorbidities	1999		2000		Enrolled Throughout 1999 and 2000 <sup>a</sup>	
	Disabled <sup>b</sup>	Not Disabled	Disabled <sup>b</sup>	Not Disabled	Disabled <sup>b</sup>	Not Disabled
Overall	3,118,743	736,097	3,275,757	814,702	2,039,687	158,231
	Percent					
<b>Number of Chronic Conditions<sup>c</sup></b>						
One	24.5	46.9	23.2	45.1	22.4	31.3
Two	23.1	28.5	22.7	28.1	23.6	29.7
Three	16.5	13.5	16.8	13.7	18.6	19.1
Four or more	22.5	10.3	23.9	10.7	27.5	18.6
Missing	13.4	0.9	13.5	2.5	7.9	1.4
<b>Co-Occurring Mental and Physical Health Conditions</b>						
Yes	28.9	21.3	29.9	22.5	35.3	31.9

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Based on information from calendar year 2000.

<sup>b</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>c</sup>The number of chronic conditions is based on the count of 18 different CDPS conditions categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

TABLE IV.4.4

COMORBIDITIES OF MEDICAID WORKING AGE ADULTS WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
BY MEDICAID ELIGIBILITY CATEGORY  
CALENDAR YEAR 2000

Level of Comorbidities	Disabled <sup>a</sup>					Not Disabled					
	Cash	Medically Needy	Poverty-related	Section 1115 <sup>b</sup>	Other	Cash	Medically Needy	Poverty-related	Section 1115 <sup>b</sup>	Other	Unknown
Overall	2,305,722	272,725	369,406	7,355	320,549	316,296	113,383	61,325	168,585	154,306	807
<b>Number of Chronic Conditions<sup>c</sup></b>											
One	23.19	25.86	19.61	24.05	24.64	41.65	46.16	68.44	40.88	46.61	54.77
Two	23.44	22.82	17.90	21.02	22.46	28.58	28.43	21.88	29.07	28.29	22.18
Three	17.66	16.33	12.29	13.28	16.74	14.61	13.16	5.57	15.59	13.18	11.28
Four or more	25.05	23.43	15.00	17.21	26.33	11.75	9.59	2.32	13.35	9.65	6.94
Missing	10.66	11.56	35.20	24.44	9.83	3.41	2.66	1.79	1.11	2.27	4.83
<b>Co-occurring Mental and Physical Health Conditions</b>											
Yes	31.64	30.28	16.81	25.57	32.27	23.61	18.21	7.47	28.77	22.39	18.34

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>b</sup>The section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

<sup>c</sup>The number of chronic conditions is based on the count of 18 different CDPS conditions categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

TABLE IV.5

PRIMARY CARE, ACUTE CARE, AND SUPPORT AND REHABILITATIVE SERVICE USE BY  
MEDICAID WORKING AGE ADULTS WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Type of Service	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
Overall	3,854,840	4,090,459	2,197,918
	Percent		
Received at Least One:			
<b>Primary Care Service</b>			
Preventive care visit with a physician <sup>b</sup>	1.9	2.4	2.5
Dental service	17.2	18.7	20.7
Family planning service	4.0	4.4	3.2
<b>Acute Care Service</b>			
Physician service	76.2	75.7	78.7
Psychiatric service <sup>c</sup>	--	25.9	--
Outpatient hospital service	64.1	59.1	59.9
Lab or X-ray service <sup>d</sup>	--	66.2	--
Prescription medication	84.0	85.3	89.4
<b>Support and Rehabilitative Service</b>			
Targeted case management service	6.0	5.5	7.8
Rehabilitation service	7.1	4.0	5.0
Physical, occupational, or speech therapy service	1.8	1.7	2.2
Durable medical equipment	30.4	33.2	37.2

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The percentages in this column represent average annual rates of use.

<sup>b</sup>Preventive care visits were defined as ambulatory claims records that had procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429. Because preventive care services can be provided during other types of visits with providers, these data underreport preventive care services.

<sup>c</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>d</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

TABLE IV.6

INPATIENT SERVICE USE BY MEDICAID WORKING AGE ADULTS WITH  
CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Service Use Measure	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
Overall	3,854,840	4,090,459	2,197,918
<b>Inpatient Discharge<sup>b</sup></b>			
None	77.5	77.3	68.5
One	14.6	13.7	15.8
More than one	8.0	9.0	15.7
<b>Number of Inpatient Discharges<sup>b</sup></b>			
In total	1,519,945	1,763,107	1,709,654
Per enrollee	0.4	0.4	0.8
Per enrollee with at least one inpatient discharge	1.8	1.9	2.5
<b>Length of Stay</b>			
Total number of inpatient days	32,996,219	54,379,930	76,204,910
Average length of stay per discharge	21.7	30.8	44.6

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The percentages in this column represent average annual rates of use.

<sup>b</sup>Inpatient discharges include birth and delivery discharges.

TABLE IV.7

LONG-TERM CARE SERVICE USE BY MEDICAID WORKING AGE ADULTS WITH CHRONIC AND  
DISABLING CONDITIONS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000

Type of Long-Term Care Service	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
Overall	3,854,840	4,090,459	2,197,918
Received at Least One:			
Home health service	5.8	5.7	9.8
Home and community-based waiver service	6.2	6.4	9.9
Personal care service	3.8	3.9	6.1
Residential service	1.4	2.0	3.3
<b>Nursing Facility</b>			
At least one stay	3.9	4.0	5.4
Average number of covered days per user <sup>b</sup>	246.8	247.7	482.9
<b>Intermediate Care Facility for the Mentally Retarded</b>			
At least one stay	2.2	2.0	3.4
Average number of covered days per user <sup>b</sup>	344.8	353.4	348.7

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The data in this column represent average annual rates of use.

<sup>b</sup>Some states over report long-term care days because they include covered days on claims for supplemental services, as well as for bundled services which can include accommodations.

TABLE IV.8

TOTAL ANNUAL MEDICAID PAYMENTS (IN THOUSANDS) FOR MEDICAID WORKING AGE ADULTS  
WITH CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
CALENDAR YEARS 1999 AND 2000

Type of Service	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
	In Thousands		
Overall	\$44,986,696	\$50,575,191	\$34,459,998
<b>Primary Care Services</b>			
Preventive care visits with a physician <sup>b</sup>	\$3,805	\$5,100	\$2,591
Dental services	\$172,511	\$237,335	\$122,531
Family planning services	\$96,785	\$116,761	\$84,372
<b>Acute Care Services</b>			
Physician services	\$1,972,310	\$1,929,312	\$1,074,521
Psychiatric services <sup>c</sup>	--	\$2,011,083	--
Outpatient hospital services	\$2,650,712	\$2,181,191	\$1,436,075
Lab or X-ray services <sup>d</sup>	--	\$1,328,004	--
Prescription medications	\$7,662,384	\$9,435,786	\$6,234,408
<b>Support and Rehabilitative Services</b>			
Targeted case management services	\$283,948	\$304,964	\$248,905
Rehabilitation services	\$968,209	\$788,322	\$735,185
Physical therapy, occupational therapy, speech therapy services	\$31,351	\$32,430	\$25,591
Durable medical equipment	\$607,052	\$727,308	\$490,486
<b>Inpatient Discharges</b>			
Inpatient services <sup>e</sup>	\$7,525,285	\$8,400,452	\$3,728,522
<b>Long-Term Care Services</b>			
Home health	\$836,828	\$916,079	\$691,564
Home and community-based waiver services	\$5,586,662	\$6,557,595	\$5,466,371
Personal care services	\$1,048,868	\$1,171,457	\$926,478
Residential services	\$1,342,614	\$2,614,721	\$1,806,015
Nursing facility services	\$4,203,804	\$4,839,337	\$3,340,224
Intermediate care facility for the mentally retarded	\$6,153,032	\$6,416,997	\$5,658,072

Source: The 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic and Disabilities Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The data in this column represent average annual payments.

<sup>b</sup>Preventive care visits were defined as ambulatory claims records that had procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429. Because preventive care services can be provided during other types of visits with providers, these data underreport preventive care services.

TABLE IV.8 (*continued*)

<sup>c</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>d</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

<sup>e</sup>Inpatient discharges include birth and delivery discharges.

TABLE IV.9

AVERAGE ANNUAL MEDICAID PAYMENTS FOR MEDICAID WORKING AGE ADULTS WITH CHRONIC  
AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
CALENDAR YEARS 1999 AND 2000

Type of Service	1999	2000	Enrolled Throughout 1999 and 2000 <sup>a</sup>
	In Dollars		
Overall	11,670	12,364	15,678
<b>Primary Care Services</b>			
Preventive care visits with a physician <sup>b</sup>	1	1	1
Dental services	45	58	56
Family planning services	25	29	38
<b>Acute Care Services</b>			
Physician services	512	472	489
Psychiatric services <sup>c</sup>	--	734	--
Outpatient hospital services	688	533	653
Lab or X-ray services <sup>d</sup>	--	325	--
Prescription medications	1,988	2,307	2,837
<b>Support and Rehabilitative Services</b>			
Targeted case management services	99	75	113
Rehabilitation services	251	193	334
Physical therapy, occupational therapy, speech therapy services	8	8	12
Durable medical equipment	157	178	223
<b>Inpatient Discharges</b>			
Inpatient services <sup>e</sup>	2,901	3,068	4,129
<b>Long-Term Care Services</b>			
Home health	217	224	315
Home and community-based waiver services	1,449	1,603	2,487
Personal care services	272	286	422
Residential services	517	955	2,000
Nursing facility services	1,620	1,767	3,699
Intermediate care facility for the mentally retarded	2,372	2,344	6,266

Source: The 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The data in this column represent average annual payments.

<sup>b</sup>Preventive care visits were defined as ambulatory claims records that had procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429. Because preventive care services can be provided during other types of visits with providers, these data underreport preventive care services.

TABLE IV.9 (*continued*)

<sup>c</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>d</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

<sup>e</sup>Inpatient discharges include birth and delivery discharges.

TABLE IV.10

AVERAGE MONTHLY MEDICAID PAYMENTS PER MEDICAID WORKING AGE ADULT WITH  
CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE, OVERALL AND  
BY DEMOGRAPHIC CHARACTERISTIC  
CALENDAR YEARS 1999 AND 2000

Characteristics	1999	2000	Enrolled Throughout 1999 and 2000
Number	3,854,840	4,090,459	2,197,918
	In Dollars		
Overall	1,064	1,119	1,307
<b>Age</b>			
21-24	876	906	1,363
25-34	994	1,017	1,425
35-44	1,108	1,151	1,407
45-54	1,144	1,214	1,329
55-64	1,037	1,118	1,117
<b>Gender</b>			
Male	1,260	1,314	1,512
Female	926	984	1,155
Unknown	435	1,216	706
<b>Race/Ethnicity</b>			
White	1,132	1,190	1,439
Black	959	1,024	1,115
American Indian	977	1,030	1,190
Asian	813	844	898
Hispanic	898	931	1,084
Other	977	999	1,097
Unknown	1,076	1,122	1,199

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

TABLE IV.11

AVERAGE MONTHLY MEDICAID PAYMENTS PER MEDICAID WORKING AGE ADULT WITH  
CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
BY MEDICAID ELIGIBILITY CATEGORY  
CALENDAR YEARS 1999 AND 2000

Medicaid Eligibility Category <sup>a</sup>	1999	2000	Enrolled Throughout 1999 and 2000
Overall	3,854,840	4,090,459	2,197,918
	In Dollars		
<b>Basis of Eligibility<sup>b</sup></b>			
Disabled	1,174	1,249	1,357
Not Disabled	595	593	655
<b>Maintenance Assistance</b>			
Cash	967	1,041	1,136
Medically needy	1,770	1,777	2,554
Poverty-related	538	555	677
Section 1115 demonstration waiver <sup>c</sup>	818	789	754
Other	1,604	1,649	2,326
Unknown	1,913	1,594	2,905

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Eligibility category is based on the last month enrolled during the calendar year.

<sup>b</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance programs.

<sup>c</sup>The Section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

TABLE IV.12

AVERAGE MONTHLY MEDICAID PAYMENTS PER MEDICAID WORKING AGE ADULT WITH  
CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE,  
BY CHRONIC CONDITION CATEGORY  
CALENDAR YEARS 1999 AND 2000

Chronic Condition Category <sup>a</sup>	1999	2000	Enrolled Throughout 1999 and 2000
Overall	3,854,840	4,090,459	2,197,918
	In Dollars		
<b>Mental Health Conditions</b>			
Developmental disability	3,665	3,874	3,790
Psychiatric	1,025	1,091	1,204
Substance abuse	1,127	1,178	1,172
<b>Physical Health Conditions</b>			
Infectious disease	2,117	2,256	1,977
Cancer	1,504	1,611	1,293
Metabolic	1,981	2,094	1,788
Diabetes	970	1,054	1,027
Hematological	2,088	2,225	1,918
Nervous system	1,577	1,670	1,702
Eye	1,445	1,556	1,574
Cardiovascular	1,145	1,221	1,158
Cerebrovascular	1,958	2,045	1,711
Pulmonary	1,208	1,300	1,226
Gastrointestinal	1,181	1,248	1,253
Genital	865	891	980
Renal	1,496	1,603	1,567
Skin	1,661	1,750	1,635
Skeletal and connective tissue	1,149	1,219	1,237

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>Diagnosis codes in inpatient and ambulatory care claims records were used to identify chronic conditions. The groups represent the CDPS condition categories, which are not mutually exclusive and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

TABLE IV.13

AVERAGE MONTHLY MEDICAID PAYMENTS PER MEDICAID WORKING AGE ADULT WITH  
CHRONIC AND DISABLING CONDITIONS IN FEE FOR SERVICE, BY NUMBER OF  
COMORBIDITIES  
CALENDAR YEARS 1999 AND 2000

Level of Comorbidities	1999	2000	Enrolled Throughout 1999 and 2000
Overall	3,854,840	4,090,459	2,197,918
	In Dollars		
<b>Number of Chronic Conditions<sup>a</sup></b>			
One	746	759	1,070
Two	963	988	1,189
Three	1,232	1,273	1,373
Four or more	2,005	2,119	1,882
Missing	144	167	173
<b>Co-Occurring Mental and Physical Health Conditions</b>			
Yes	1,693	1,775	1,892

Source: MPR analysis of the 1999 and 2000 Medicaid Analytical Extract Files.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. Enrollees with chronic and disabling conditions were identified by either the Chronic Illness and Disability Payment System (CDPS) or eligibility codes that indicated the enrollee was designated as disabled and receiving cash assistance.

<sup>a</sup>The number of chronic conditions is based on the count of 18 different CDPS condition categories, which were identified using diagnosis codes in inpatient and ambulatory care claims records.

## **V. YOUNG ADULT RECIPIENTS OF SUPPLEMENTAL SECURITY INCOME BENEFITS**

Tables V.1 through V.11 present information about SSI recipients ages 18 through 21. The data for these tables are from the Linked Medicaid-Ticket Research Data File and are weighted to account for the differential sampling methods used to construct this data file.

Tables V.1 through V.2 provide some information about the receipt of SSI benefits. Nearly one-third of these young adults were relatively new recipients having become eligible for SSI benefits after their 18<sup>th</sup> birthday (see Table V.1). This birthday marks when recipients must qualify for SSI benefits as an adult and demonstrate an inability to earn above the substantial gainful activity level, which was \$700 a month in 2000. Of the two-thirds who were eligible before their 18<sup>th</sup> birthday, two-thirds were long-term recipients who had been receiving benefits for at least four years prior to turning 18.

Tables V.3 through V.7 provide information about the disabling conditions reported in SSA administrative files and conditions reported in Medicaid claims records. The data together indicate that most received treatment related to their disabling condition, but comorbidities were common. Approximately 39 percent of these young adults were disabled by mental retardation and 11 percent had a disabling nervous system condition (see Table V.3). Among those with mental retardation, 35 percent received care for developmental disabilities, 32 percent received treatment for a nervous system condition, and 30 percent received care for a psychiatric condition (see Table V.6). Of the young adults disabled by nervous system conditions, 82 percent received treatment for a nervous system condition, 23 percent received care for a developmental disability, 17 percent received care for a renal condition, and 14 percent were treated for a pulmonary condition (see Table V.7).

Tables V.8 through V.10 provide information about the use of services and Table V.11 summarizes their annual per person Medicaid payments overall and by type of service. These data indicate that 68 percent receive physician services in 2000, 33 percent received psychiatric services, 79 percent filled a prescription, 32 percent used durable medical equipment, 16 percent had an inpatient discharge, and 11 percent used home- and community-based waiver services (see Tables V.8 through V.10). Their average annual Medicaid payments were nearly \$15,000. The most costly service was home- and community-based waiver services at an average annual payment of \$2,496, but services at intermediate care facilities for the mentally retarded were nearly as costly at \$2,484 per person. Inpatient services (at \$2,154 per person) and prescription medications (at \$1,610 per person) were the next two most costly services for these enrollees.

TABLE V.1  
 SUPPLEMENTAL SECURITY INCOME (SSI) RECIPIENTS  
 18 THROUGH 21 YEARS OF AGE IN FEE FOR SERVICE  
 CALENDAR YEARS 1999 AND 2000  
 (WEIGHTED)

SSI Program Participation	1999	2000
Weighted Sample Size	109,379	110,943
<b>SSI Benefits<sup>a</sup></b>		
Began before reaching age 18	67.1	67.5
Began after reaching age 18	32.9	32.5
<b>Length of Enrollment in SSI Prior to Reaching Age 18<sup>b</sup></b>		
Less than 1 year	6.9	6.9
1 – 3 years	11.9	10.4
4 – 12 years	31.4	33.7
13 – 18 years	12.9	14.2
Unknown	4.0	2.3
<b>Average Monthly Benefit Amount</b>		
Total	\$550	\$562
Federal payments only	\$519	\$530
State supplementation payments only	\$109	\$115

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling.

<sup>a</sup>When recipients reach their 18<sup>th</sup> birthday, they must reestablish eligibility for SSI benefits based in adult criteria.

<sup>b</sup>Length of enrollment is based on the start date of the most recent eligibility period to the birthday.

TABLE V.2

SUPPLEMENTAL SECURITY INCOME (SSI) RECIPIENTS 18 THROUGH 21 YEARS OF AGE  
IN FEE FOR SERVICE , BY GENDER  
CALENDAR YEARS 1999 AND 2000  
(WEIGHTED)

SSI Program Participation	1999		2000	
	Male	Female	Male	Female
Weighted Sample Size	64,747	44,630	65,066	45,876
<b>Start of SSI Benefits<sup>a</sup></b>				
Began before reaching age 18	67.5	66.7	68.1	66.6
Began after reaching age 18	32.7	33.3	31.8	33.3
<b>Length of Enrollment in SSI Prior to Reaching Age 18<sup>b</sup></b>				
Less than 1 year	6.4	7.6	6.4	7.6
1 – 3 years	11.5	12.6	10.1	10.9
4 – 12 years	32.5	29.8	35.0	31.9
13 – 18 years	13.0	12.9	14.1	14.2
Unknown	4.1	3.8	2.5	2.0
<b>Average Monthly Benefit Amount</b>				
Total	\$549	\$551	\$560	\$565
Federal payments only	\$518	\$520	\$528	\$532
State supplemental payments only	\$107	\$112	\$115	\$115

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling.

<sup>a</sup>When recipients reach their 18<sup>th</sup> birthday, they must reestablish eligibility for SSI benefits based in adult criteria.

<sup>b</sup>Length of enrollment is based on the start date of the most recent eligibility period to the birthday.

TABLE V.3  
 PRIMARY DISABLING CONDITIONS OF SSI RECIPIENTS  
 18 THROUGH 21 YEARS OF AGE IN FEE FOR SERVICE  
 CALENDAR YEARS 1999 AND 2000  
 (WEIGHTED)

SSI Primary Disabling Condition	1999	2000
Weighted Sample Size	109,379	110,943
<b>Mental Health Conditions</b>		
Major affective disorders	7.0	7.3
Schizophrenia and psychoses	5.9	5.6
Anxiety and neurotic disorders	3.2	3.1
Other mental health disorders	8.3	9.1
Mental retardation	38.8	39.4
<b>Physical Health Conditions</b>		
Back disorders	0.2	0.2
Musculoskeletal system	1.1	1.2
Infectious and parasitic diseases	0.1	0.1
HIV/AIDS	0.2	0.2
Neoplasms	1.4	1.3
Endocrine and nutritional disorders	1.1	1.0
Blood and blood-forming diseases	1.6	1.7
Severe visual impairment	1.9	2.0
Severe hearing or speech impairment	1.6	1.6
Nervous system condition	10.6	11.1
Circulatory system condition	0.8	0.8
Respiratory system condition	0.8	0.9
Digestive system condition	0.4	0.3
Genitourinary system condition	1.2	1.1
Skin or subcutaneous tissue condition	0.1	0.1
Congenital anomalies	1.8	2.0
Injuries	2.1	2.1
Other	8.9	7.8
Missing	1.0	0.2

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling. The categorization of primary disabling conditions is similar to, but not identical to, the categorization used in the national evaluation of the Ticket to Work program.

SSI = Supplemental Security Income; HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome.

TABLE V.4

CHRONIC CONDITIONS OF SSI RECIPIENTS 18 THROUGH 21 YEARS OF AGE IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000  
(WEIGHTED)

Chronic Condition Category <sup>a</sup>	1999	2000
Weighted Sample Size	109,379	110,943
<b>Mental Health Conditions</b>		
Developmental disability	19.6	20.6
Psychiatric	31.7	33.9
Substance abuse	2.8	2.9
<b>Physical Health Conditions</b>		
Infectious disease	2.3	2.2
Cancer	2.4	2.4
Metabolic	4.8	5.2
Diabetes	3.0	3.2
Hematological	3.4	3.5
Nervous system	32.7	33.8
Eye	1.1	1.0
Cardiovascular	8.9	9.3
Cerebrovascular	1.6	1.6
Pulmonary	15.2	15.1
Gastrointestinal	9.4	9.6
Genital	2.0	2.1
Renal	9.3	9.9
Skin	5.8	6.0
Skeletal and connective tissue	11.5	11.6

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling.

<sup>a</sup>The Chronic Illness and Disability Payment System (CDPS) was used to identify chronic conditions. The CDPS uses diagnoses from inpatient and ambulatory care claims to identify the 18 different chronic condition categories. CDPS groups are not mutually exclusive, and enrollees with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

SSI = Supplemental Security Income.

TABLE V.5  
 COMORBIDITIES OF SSI RECIPIENTS 18 THROUGH 21 YEARS OF AGE IN FEE FOR SERVICE  
 CALENDAR YEARS 1999 AND 2000  
 (WEIGHTED)

Level of Comorbidities	1999	2000
Weighted Sample Size	109,379	110,943
<b>Number of Chronic Conditions<sup>a</sup></b>		
One	38.1	38.2
Two	23.9	24.3
Three	11.8	12.5
Four or more	9.6	10.3
Missing	16.6	14.7
<b>Co-Occurring Mental and Physical Health Conditions</b>		
Yes	25.3	27.2

Source: MPR analysis of the Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling.

<sup>a</sup>The number of chronic conditions is based on the Chronic Illness and Disability Payment System (CDPS) condition categories identified. The CDPS uses diagnoses from inpatient and ambulatory care claims to identify 18 different chronic condition categories.

SSI = Supplemental Security Income.

TABLE V.6

CHRONIC CONDITIONS OF SSI RECIPIENTS 18 THROUGH 21 YEARS OF AGE IN FEE FOR SERVICE,  
BY PRIMARY DISABLING MENTAL HEALTH CONDITION CALENDAR YEAR 2000  
(WEIGHTED)

Chronic Condition Category <sup>a</sup>	Primary Disabling Mental Health Condition				
	Major Affective Disorders	Schizophrenia and Psychoses	Anxiety and Neurotic Disorders	Other Mental Disorders	Mental Retardation
Weighted Sample Size	8,057	6,195	3,413	10,113	43,684
<b>Mental Health Conditions</b>					
Developmental disability	3.2	4.2	5.5	13.9	34.8
Psychiatric	74.4	83.0	64.5	48.7	29.5
Substance abuse	9.0	9.1	7.9	3.3	1.5
<b>Physical Health Conditions</b>					
Infectious disease	1.3	0.8	1.3	1.5	1.4
Cancer	1.2	0.5	0.9	1.4	0.9
Metabolic	2.6	2.1	2.2	3.3	4.4
Diabetes	4.4	2.5	2.6	2.1	2.9
Hematological	1.3	0.7	1.2	1.3	1.5
Nervous system	14.3	10.9	15.0	25.8	31.9
Eye	0.5	0.4	0.2	0.5	1.0
Cardiovascular	7.3	6.7	6.1	6.5	7.4
Cerebrovascular	0.6	0.6	0.4	1.5	0.9
Pulmonary	17.0	8.9	15.7	13.3	12.3
Gastrointestinal	9.8	6.7	9.1	7.5	8.2
Genital	4.6	1.8	3.9	1.9	1.6
Renal	5.1	3.4	5.6	5.4	7.3
Skin	6.8	4.2	6.1	4.4	4.9
Skeletal and connective tissue	7.9	4.5	7.5	8.4	8.9

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling. The categorization of primary disabling conditions is similar to, but not identical to, the categorization used in the national evaluation of the Ticket to Work program.

<sup>a</sup>The Chronic Illness and Disability Payment System (CDPS) was used to identify chronic conditions. The CDPS uses diagnoses from inpatient and ambulatory care claims to identify the 18 different chronic condition categories. CDPS groups are not mutually exclusive, and recipients with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

SSI = Supplemental Security Income; HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome.

TABLE V.7

CHRONIC CONDITIONS OF SSI RECIPIENTS 18 THROUGH 21 YEARS OF AGE IN FEE FOR SERVICE, BY PRIMARY DISABLING PHYSICAL HEALTH CONDITION  
CALENDAR YEAR 2000  
(WEIGHTED)

Chronic Condition Category <sup>a</sup>	Primary Disabling Physical Health Condition															
	Musculo-skeletal System	Infectious Diseases	Neoplasms	Endocrine	Blood	Severe Visual Impairment	Severe Hearing and Speech Impairment	Nervous System	Circulatory System	Respiratory System	Digestive System	Genito-urinary System	Congenital Anomalies	Injury	Other	Missing
Weighted Sample Size	1,459	288	1,390	1,119	1,886	2,206	1,791	12,289	848	963	387	1,223	2,232	2,313	8,820	267
<b>Mental Health Conditions</b>																
Developmental	3.3	5.3	1.7	1.1	0.8	18.2	10.3	22.8	10.0	1.2	3.6	0.7	28.0	5.6	12.3	13.5
Psychiatric	13.2	14.6	10.2	15.6	8.7	15.9	22.5	10.4	15.6	10.4	10.7	8.3	8.2	16.2	30.2	39.7
Substance abuse	2.2	0.7	3.0	2.0	1.9	0.5	1.5	0.5	2.0	1.5	3.1	1.1	0.7	3.0	3.3	2.2
<b>Physical Health Conditions</b>																
Infectious disease	2.7	68.5	9.5	6.4	7.8	1.8	1.5	1.8	3.1	1.9	5.7	11.3	1.9	4.8	2.3	1.5
Cancer	3.8	3.2	78.5	2.5	4.1	3.5	1.9	1.3	3.5	1.0	3.6	2.0	0.7	3.1	2.6	0.0
Metabolic	5.9	19.9	9.0	19.8	10.4	11.0	4.4	7.4	7.9	4.9	14.5	22.2	4.9	5.8	5.0	6.0
Diabetes	3.0	1.4	3.9	35.9	1.3	3.1	2.0	1.7	4.2	3.7	5.7	4.7	2.3	1.4	3.9	3.7
Hematological	4.1	12.5	16.5	3.0	90.6	1.5	1.0	1.2	6.1	2.5	9.8	7.7	1.9	2.6	3.2	2.2
Nervous System	23.0	29.9	21.8	11.3	8.5	41.2	23.4	81.5	46.3	10.5	9.3	16.5	54.6	69.3	29.6	32.7
Eye	2.7	3.2	0.9	1.3	0.5	7.9	1.6	0.9	1.9	0.6	1.5	2.3	1.4	0.7	1.1	1.5
Cardiovascular	14.0	14.8	17.8	21.7	27.0	7.6	4.6	7.7	38.3	10.3	19.4	47.0	21.0	13.4	10.1	10.2
Cerebrovascular	1.2	7.9	5.1	0.9	4.4	1.9	1.2	3.0	18.4	0.2	0.0	2.2	1.3	9.1	1.2	1.5
Pulmonary	17.2	25.7	23.0	52.6	28.9	12.6	11.8	13.6	18.7	79.1	16.2	19.3	12.7	20.6	19.0	15.7
Gastrointestinal	11.3	14.1	11.1	19.1	8.8	9.6	6.7	11.6	11.6	8.9	76.2	17.2	11.5	14.9	10.7	11.2
Genital	2.3	3.5	2.3	4.1	2.8	2.1	2.2	1.1	1.6	2.9	3.6	3.5	1.2	0.8	2.9	2.2
Renal	14.3	10.4	9.3	10.5	9.3	11.3	6.2	16.6	12.8	4.2	15.5	85.4	28.8	28.0	9.4	15.0
Skin	10.1	10.2	6.9	9.1	6.0	5.1	3.8	6.9	8.8	2.5	6.5	8.0	15.5	18.8	5.9	9.0
Skeletal	61.4	16.2	12.9	11.4	13.8	13.1	7.4	18.1	16.0	11.1	14.3	16.8	20.2	29.7	13.2	9.0

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling. The categorization of primary disabling conditions is similar to, but not identical to, the categorization used in the national evaluation of the Ticket to Work program.

<sup>a</sup>The Chronic Illness and Disability Payment System (CDPS) was used to identify chronic conditions. The CDPS uses diagnoses from inpatient and ambulatory care claims to identify the 18 different chronic condition categories. CDPS groups are not mutually exclusive, and recipients with multiple conditions may appear in more than one group. Appendix A presents representative diagnoses for each condition category.

SSI = Supplemental Security Income.

TABLE V.8

PRIMARY CARE, ACUTE CARE, AND SUPPORT AND REHABILITATIVE SERVICE USE BY SSI  
RECIPIENTS 18 THROUGH 21 YEARS OF AGE IN FEE FOR SERVICE, BY TYPE OF SERVICE  
CALENDAR YEARS 1999 AND 2000  
(WEIGHTED)

Type of Service	1999	2000
Weighted Sample Size	109,379	110,943
Received at Least One:		
<b>Primary Care Service</b>		
Preventive care visit with a physician <sup>a</sup>	3.9	4.5
Dental service	23.0	24.5
Family planning service	6.1	6.5
<b>Acute Care Service</b>		
Physician service	67.5	67.6
Psychiatric service <sup>b</sup>	--	32.5
Outpatient hospital service	55.9	51.1
Lab or X-ray service <sup>c</sup>	--	61.1
Prescription medication	76.3	78.6
<b>Support and Rehabilitative Service</b>		
Targeted case management service	17.6	18.7
Rehabilitation service	12.2	9.3
Physical, occupational, or speech therapy service	4.6	4.6
Durable medical equipment	29.5	32.2

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Preventive care visits were defined as ambulatory claims records that had procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429. Because preventive care services can be provided during other types of visits with providers, these data underreport preventive care services.

<sup>b</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>c</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

SSI = Supplemental Security Income.

TABLE V.9

INPATIENT SERVICE USE BY SSI RECIPIENTS 18 THROUGH 21 YEARS OF AGE IN FEE FOR SERVICE  
 CALENDAR YEARS 1999 AND 2000  
 (WEIGHTED)

Inpatient Service Use	1999	2000
Weighted Sample Size	109,379	110,943
<b>Inpatient Discharge<sup>a</sup></b>		
None	84.6	84.6
One	9.5	9.0
More than one	5.9	6.5
<b>Number of Inpatient Discharges<sup>a</sup></b>		
In total	32,204	34,528
Per enrollee	0.3	0.3
Per enrollee with at least one inpatient discharge	1.9	2.0
<b>Length of Stay</b>		
Total number of inpatient days	253,538	265,821
Average length of stay per discharge	7.9	7.7

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Inpatient discharges include birth and delivery discharges.

SSI = Supplemental Security Income.

TABLE V.10

LONG-TERM CARE SERVICE USE BY SSI RECIPIENTS 18 THROUGH 21 YEARS OF AGE  
IN FEE FOR SERVICE, BY TYPE OF SERVICE  
CALENDAR YEARS 1999 AND 2000  
(WEIGHTED)

Type of Long-Term Care Service	1999	2000
Weighted Sample Size	109,379	110,943
Received at Least One:		
Home health service	5.2	5.8
Home- and community-based waiver service	9.7	11.4
Personal care service	4.5	4.6
Residential service	2.7	4.0
<b>Nursing Facility</b>		
At least one stay	1.0	1.1
Average number of covered days per user <sup>b</sup>	197.9	212.8
<b>Inpatient Psychiatric Facility</b>		
At least one stay	2.5	2.5
Average number of covered days per user	51.8	51.9
<b>Intermediate Care Facility for the Mentally Retarded</b>		
At least one stay	3.5	3.3
Average number of covered days per user <sup>b</sup>	310.5	322.3

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling.

<sup>b</sup>Some states over report long-term care days because they include covered days on claims for supplemental services, as well as for bundled services which can include accommodations.

SSI = Supplemental Security Income.

TABLE V.11

ANNUAL MEDICAID PAYMENTS PER SSI RECIPIENT 18 THROUGH 21 YEARS OF AGE IN FEE FOR  
SERVICE, OVERALL AND BY TYPE OF SERVICE  
CALENDAR YEARS 1999 AND 2000  
(WEIGHTED)

Type of Service	1999	2000
	In Dollars	
Overall	13,356	14,819
<b>Primary Care Services</b>		
Preventive care visits with a physician <sup>a</sup>	49	54
Dental services	53	65
Family planning services	545	578
<b>Acute Care Services</b>		
Physician services	373	349
Psychiatric services <sup>b</sup>	--	678
Outpatient hospital services	517	427
Lab or X-ray services <sup>c</sup>	--	296
Prescription medications	1,376	1,610
<b>Support and Rehabilitative Services</b>		
Targeted case management services	246	291
Rehabilitation services	559	429
Physical therapy, occupational therapy, speech therapy services	37	37
Durable medical equipment	404	448
<b>Inpatient Discharges</b>		
Inpatient services <sup>d</sup>	2,048	2,154
<b>Long-Term Care Services</b>		
Home health	374	442
Home- and community-based waiver services	1,925	2,496
Personal care services	350	381
Residential services	568	945
Nursing facility services	637	679
Inpatient psychiatric services	507	534
Intermediate care facility for the mentally retarded services	2,294	2,484

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Preventive care visits were defined as ambulatory claims records that had procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429. Because preventive care services can be provided during other types of visits with providers, these data underreport preventive care services.

<sup>b</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>c</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

<sup>d</sup>Inpatient discharges include birth and delivery discharges.

SSI = Supplemental Security Income.

## **VI. WORKING AGE ADULT SSI RECIPIENTS AND SSDI BENEFICIARIES**

Tables VI.1 through VI.13 provide information about adult SSI recipients and SSDI beneficiaries. Similar to the sample young adult SSI recipients, the data for these tables are from the Linked Medicaid-Ticket Research Data File and the data are weighted to account for the differential sampling methods used to construct this data file. As the data in Table VI.2 indicate, our sample of adult SSI recipients in 2000 represent more than 2.2 million individuals and the sample of SSDI beneficiaries represents nearly 1.1 million individuals. Table VI.4 suggests that 87 percent of beneficiaries who only received SSDI benefits in 2000 established Medicaid eligibility through medically needy, poverty, and other types of programs.

Tables VI.5 through VI.9 present information about their disabling conditions, the types of conditions that appeared in their Medicaid records, and the level of comorbidities. The data in Table VI.5 indicate that these adults have high rates of disabling mental illness. Among those who only received SSI benefits, 57 percent had mental health conditions that were disabling, while 42 percent of those only eligible for SSDI benefits and 52 percent concurrently eligible for SSI and SSDI benefits had disabling mental health conditions. Other types of disabling conditions included circulatory system conditions (9 percent of SSDI only and 7 percent of concurrently eligible beneficiaries), back conditions (6 to 7 percent of SSDI only and concurrently eligible beneficiaries), and musculoskeletal system conditions (about 5 percent of all three groups of beneficiaries). Approximately 16 percent of SSI only recipients had other types of disabling conditions.

Among SSI recipients, the most common disabling mental illness was major affective disorders, which includes mood disorders. Table VI.8 indicates that two-thirds of recipients disabled by major affective disorders received care for psychiatric conditions in 2000. In

addition, one-quarter received care for pulmonary conditions, and 24 percent received care for skeletal and connective tissue conditions. Those disabled by an infectious disease, a group dominated by people with HIV/AIDS, 63 percent received treatment for an infectious disease, 28 percent received care for a pulmonary condition, and at least one-fifth received care for psychiatric, nervous system, and gastrointestinal conditions.

Tables VI.10 through VI.13 present information about service use and Medicaid payments of working age adult SSI recipients. In 2000, 78 percent of these enrollees received physician services, 90 percent filled a prescription, and 36 percent used durable medical equipment (see Table VI.10). Approximately 23 percent received inpatient services in 2000 (see Table VI.11). Average annual Medicaid payments for these enrollees were about \$14,000, which was approximately 13 percent higher than the average annual payments for all working age adults with chronic and disabling conditions (see Tables VI.13 and IV.9).

TABLE VI.1

PARTICIPATION IN FEDERAL DISABILITY PROGRAMS BY MEDICAID WORKING AGE ADULTS WITH  
 CHRONIC OR DISABLING CONDITIONS IN FEE FOR SERVICE  
 CALENDAR YEARS 1999 AND 2000  
 (WEIGHTED)

Program Participation	1999	2000
Weighted Sample Size	2,696,939	2,802,415
SSI recipients <sup>a</sup>	63.6	61.5
SSDI beneficiaries <sup>b</sup>	17.6	19.4
Concurrently receiving SSI and SSDI	18.8	19.1

Source: MPR analysis of the Linked Medicaid-Ticket Research File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>These individuals received SSI cash benefits at some point during the year.

<sup>b</sup>These individuals received SSDI cash benefits at some point during the year.

SSI = Supplemental Security Income; SSDI = Social Security Disability Insurance.

TABLE VI.2

PROGRAM PARTICIPATION CHARACTERISTICS OF MEDICAID WORKING AGE SSI AND SSDI  
ENROLLEES IN FEE FOR SERVICE, BY FEDERAL DISABILITY BENEFIT PROGRAM  
CALENDAR YEAR 2000  
(WEIGHTED)

Program Participation	SSI Only Recipients	SSDI Only Beneficiaries	Concurrently Eligible <sup>a</sup>
Weighted Sample Size	1,723,226	543,347	535,842
<b>Length of Enrollment in SSI<sup>b</sup></b>			
Less than 2 years	10.3	na	13.0
2 – 5 years	23.3	na	25.7
6 – 10 years	27.5	na	25.3
11 – 15 years	14.0	na	11.3
16 years or more	20.9	na	8.5
<b>Length of Enrollment in SSDI<sup>b</sup></b>			
Less than 2 years	na	9.5	19.1
2 – 5 years	na	31.0	27.9
6 – 10 years	na	31.2	28.2
11 – 15 years	na	13.9	13.6
16 years or more	na	14.0	10.9
<b>Average Monthly Benefit Amount</b>			
Total SSI benefit	\$498	na	\$649
Federal payments only	\$456	na	\$246
State supplemental payments only	\$140	na	\$223
Total SSDI benefit	na	\$675	\$129
<b>Engaged in Work at Some Point During the Year<sup>c</sup></b>			
Yes	8.9	na	15.4

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Received both SSI and SSDI benefits during the year.

<sup>b</sup>Length of enrollment is measured by the start date of the most recent eligibility period to the last month of eligibility during the calendar year.

<sup>c</sup>Based on reported earnings.

SSI = Supplemental Security Income; SSDI = Social Security Disability Insurance; na = Not applicable or not available.

TABLE VI.3

DEMOGRAPHIC CHARACTERISTICS OF MEDICAID WORKING AGE SSI AND SSDI ENROLLEES IN FEE  
FOR SERVICE, BY FEDERAL DISABILITY BENEFIT PROGRAM  
CALENDAR YEAR 2000  
(WEIGHTED)

Characteristic	SSI Only Recipients	SSDI Only Beneficiaries	Concurrently Eligible <sup>a</sup>
Represented Number	1,723,226	543,347	535,842
<b>Age</b>			
21-24	6.0	0.6	3.1
25-34	14.9	9.2	15.8
35-44	22.7	28.6	30.7
45-54	26.0	36.2	31.1
55-64	30.4	25.3	19.3
<b>Gender</b>			
Female	57.2	43.4	52.0
Male	42.8	56.6	48.0
Unknown	0.0	0.0	0.0
<b>Race/Ethnicity</b>			
White	52.6	65.5	58.4
Black	23.9	20.8	21.4
American Indian	1.0	0.7	0.7
Asian	1.0	0.6	0.6
Hispanic	5.4	5.9	4.3
Other	0.2	0.2	0.1
Unknown	15.9	6.3	14.4

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Received both SSI and SSDI benefits during the year.

SSI = Supplemental Security Income; SSDI = Social Security Disability Insurance.

TABLE VI.4

MEDICAID ELIGIBILITY OF MEDICAID WORKING AGE SSI AND SSDI ENROLLEES IN FEE FOR  
SERVICE, BY FEDERAL DISABILITY BENEFIT PROGRAM  
CALENDAR YEAR 2000  
(WEIGHTED)

Medicaid Eligibility Category <sup>a</sup>	SSI Only Recipients	SSDI Only Beneficiaries	Concurrently Eligible <sup>b</sup>
Represented Number	1,723,226	543,347	535,842
<b>Basis of Eligibility<sup>c</sup></b>			
Disabled	98.5	96.0	97.2
Not disabled	1.5	4.0	2.8
<b>Maintenance Assistance</b>			
Cash	93.1	12.9	85.1
Medically needy	2.5	20.9	5.4
Poverty-related	0.7	43.0	3.7
Section 1115 demonstration waiver <sup>d</sup>	0.2	1.7	0.5
Other	3.5	21.4	5.3
Unknown	0.0	0.0	0.0

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at of the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Eligibility category is based on the last month enrolled during the calendar year.

<sup>b</sup>Received both SSI and SSDI benefits during the year.

<sup>c</sup>Most enrollees designated as disabled meet the disability requirements of the federal disability benefit programs, the Supplemental Security Income and Social Security Disability Insurance program.

<sup>d</sup>The section 1115 demonstration waiver category represents eligibility categories established by a demonstration designed to test policy innovations.

SSI = Supplemental Security Income; SSDI = Social Security Disability Insurance.

TABLE VI.5

PRIMARY DISABLING CONDITIONS OF MEDICAID WORKING AGE SSI AND SSDI ENROLLEES IN FEE  
FOR SERVICE, BY FEDERAL DISABILITY BENEFIT PROGRAM  
CALENDAR YEAR 2000  
(WEIGHTED)

Primary Disabling Conditions <sup>a</sup>	SSI Only Recipients	SSDI Only Beneficiaries	Concurrently Eligible <sup>b</sup>
Represented Number	1,723,226	543,347	535,842
<b>Mental Health Conditions</b>			
Major affective disorders	11.8	15.1	17.3
Schizophrenia and psychoses	10.0	12.0	14.5
Anxiety and neurotic disorders	3.2	3.1	3.7
Other mental health disorders	4.2	4.6	4.5
Mental retardation	17.3	7.2	11.5
<b>Physical Health Conditions</b>			
Back	3.5	6.8	6.1
Musculoskeletal system	4.5	5.4	5.3
Infectious and parasitic diseases	0.4	0.4	0.3
HIV/AIDS	2.3	3.5	2.9
Neoplasms	1.4	2.4	2.3
Endocrine/Nutritional	4.5	5.5	4.9
Blood/Blood-forming disease	0.4	0.3	0.4
Severe visual impairment	1.7	2.0	2.1
Severe hearing and speech impairment	0.6	0.6	0.6
Nervous system	4.6	6.7	4.5
Circulatory system	5.9	9.0	6.5
Respiratory system	2.6	3.0	2.8
Digestive system	0.9	1.5	1.4
Genitourinary system	1.3	3.2	2.1
Skin/Subcutaneous tissue	0.1	0.2	0.2
Congenital anomalies	0.4	0.2	0.2
Injuries	2.2	4.5	3.5
Other	15.6	2.0	2.3
Missing	0.6	0.8	0.1

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>The categorization of primary disabling conditions is similar to, but not identical to, the categorization used in the national evaluation of the Ticket to Work program.

<sup>b</sup>Received both SSI and SSDI benefits during the year.

SSI = Supplemental Security Income; SSDI = Social Security Disability Insurance; HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome.

TABLE VI.6

CHRONIC CONDITIONS OF WORKING AGE SSI RECIPIENTS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000  
(WEIGHTED)

Chronic Condition Category <sup>a</sup>	1999	2000
Represented Number	2,223,539	2,259,068
<b>Mental Health Conditions</b>		
Developmental disability	8.5	8.5
Psychiatric	35.3	36.2
Substance abuse	6.9	7.2
<b>Physical Health Conditions</b>		
Infectious disease	5.4	5.6
Cancer	5.3	5.4
Metabolic	5.0	5.2
Diabetes	17.8	18.7
Hematological	2.9	3.1
Nervous system	23.9	24.4
Eye	6.2	6.3
Cardiovascular	35.5	36.8
Cerebrovascular	4.6	4.6
Pulmonary	24.5	24.8
Gastrointestinal	19.1	19.9
Genital	3.8	3.8
Renal	11.9	12.4
Skin	9.5	9.7
Skeletal and connective tissue	21.7	22.6

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>The Chronic Illness and Disability Payment System (CDPS) was used to identify chronic conditions. The CDPS uses diagnoses from inpatient and ambulatory care claims to identify the 18 different chronic condition categories. CDPS groups are not mutually exclusive, and enrollees with multiple conditions may appear in more than one group.

SSI = Supplemental Security Income.

TABLE VI.7  
 COMORBIDITIES OF WORKING AGE SSI RECIPIENTS IN FEE FOR SERVICE  
 CALENDAR YEARS 1999 AND 2000  
 (WEIGHTED)

Level of Comorbidities	1999	2000
Represented Number	2,223,539	2,259,068
<b>Number of Chronic Conditions<sup>a</sup></b>		
One	24.5	23.1
Two	23.8	23.5
Three	17.5	17.9
Four or more	24.2	25.8
Missing	10.0	9.5
<b>Co-Occurring Mental and Physical Health Conditions</b>		
Yes	31.3	32.5

Source: MPR analysis of the Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>The number of chronic conditions is based on the Chronic Illness and Disability Payment System (CDPS) condition categories identified. The CDPS uses diagnoses from inpatient and ambulatory care claims to identify 18 different chronic condition categories.

SSI = Supplemental Security Income.

TABLE VI.8

CHRONIC CONDITIONS OF WORKING AGE SSI RECIPIENTS IN FEE FOR SERVICE,  
BY PRIMARY DISABLING MENTAL HEALTH CONDITION  
CALENDAR YEAR 2000  
(WEIGHTED)

Chronic Condition Category <sup>b</sup>	Primary Disabling Mental Health Condition <sup>a</sup>				
	Major Affective Disorders	Schizophrenia and Psychoses	Anxiety and Neurotic Disorders	Other Mental Disorders	Mental Retardation
Represented Number	286,860	243,425	74,649	94,145	352,923
<b>Mental Health Conditions</b>					
Developmental disability	0.5	1.9	1.0	5.0	29.4
Psychiatric	65.6	81.3	55.3	35.4	28.6
Substance abuse	11.2	10.2	11.1	12.3	4.5
<b>Physical Health Conditions</b>					
Infectious disease	4.1	2.5	3.4	4.7	2.5
Cancer	4.1	2.4	3.8	4.2	2.3
Metabolic	4.0	2.8	3.5	4.9	3.6
Diabetes	16.0	12.2	13.3	13.9	12.1
Hematological	2.0	1.7	1.8	2.5	1.9
Nervous system	19.0	12.4	18.5	33.7	27.8
Eye	4.9	3.6	4.1	4.9	4.1
Cardiovascular	33.8	24.5	29.7	31.6	23.5
Cerebrovascular	2.7	1.5	2.2	7.5	2.0
Pulmonary	24.7	17.4	24.1	22.4	17.1
Gastrointestinal	21.8	13.1	21.5	19.3	15.2
Genital	5.4	2.7	4.9	3.4	2.8
Renal	9.5	6.1	8.4	9.2	8.6
Skin	8.0	7.2	7.7	8.6	7.7
Skeletal and connective tissue	24.4	11.8	21.2	18.5	14.0

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

TABLE IV.8 (*continued*)

<sup>a</sup>The categorization of primary disabling conditions is similar to, but not identical to, the categorization used in the national evaluation of the Ticket to Work program.

<sup>b</sup>The Chronic Illness and Disability Payment System (CDPS) was used to identify chronic conditions. CDPS condition categories are not mutually exclusive, and recipients with multiple conditions may appear in more than one chronic condition category.

SSI = Supplemental Security Income; HIV/AIDS = Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome.

TABLE VI.9  
 CHRONIC CONDITIONS OF WORKING AGE SSI RECIPIENTS IN FEE FOR SERVICE, BY PRIMARY DISABLING PHYSICAL HEALTH CONDITION  
 CALENDAR YEAR 2000  
 (WEIGHTED)

Chronic Condition Category <sup>b</sup>	Primary Disabling Physical Health Condition <sup>A</sup>															
	Musculo-skeletal System	Infectious Diseases	Neoplasms	Endocrine	Blood	Severe Visual Impairment	Severe Hearing and Speech Impairment	Nervous System	Circulatory System	Respiratory System	Digestive System	Genito-urinary System	Congenital Anomalies	Injuries	Other	Missing
Represented Number	190,779	60,916	35,552	101,378	8,003	38,616	13,447	101,294	132,674	58,003	23,189	33,701	8,112	55,585	334,962	10,854
<b>Mental Health Conditions</b>																
Developmental	0.2	9.3	0.5	0.2	0.6	6.3	5.9	10.6	0.4	0.1	0.1	0.3	22.5	1.6	15.1	15.5
Psychiatric	19.2	21.7	12.3	16.8	11.2	16.5	19.7	17.7	13.5	14.4	19.4	9.5	13.1	18.9	31.8	35.8
Substance abuse	5.3	14.9	4.3	2.8	6.8	4.2	4.3	3.6	4.4	6.3	18.4	3.4	1.7	8.2	5.9	4.9
<b>Physical Health Conditions</b>																
Infectious disease	3.2	62.7	8.2	4.8	11.5	4.4	3.3	3.9	4.3	4.8	7.6	13.2	3.4	5.7	4.9	4.3
Cancer	5.9	6.6	78.9	5.0	7.2	4.6	4.9	3.4	5.7	7.0	7.3	4.6	2.2	4.2	5.1	4.0
Metabolic	5.0	9.5	7.5	8.6	12.6	7.3	3.3	4.7	7.2	6.9	11.3	22.6	4.3	4.9	4.9	4.7
Diabetes	23.0	8.2	11.4	60.1	6.6	33.3	12.0	11.7	33.7	19.6	17.9	26.0	7.3	14.1	18.6	19.0
Hematological	2.6	5.5	10.9	3.2	77.4	2.4	1.9	2.1	4.5	2.8	12.5	8.1	2.4	2.6	2.9	2.2
Nervous system	18.0	21.0	17.0	19.2	13.7	22.6	16.2	71.7	20.1	13.9	17.5	14.9	42.0	43.8	27.2	26.1
Eye	8.5	6.1	4.9	11.3	3.4	22.0	4.1	4.7	9.9	8.7	5.6	8.4	4.1	4.5	7.5	7.3
Cardiovascular	47.4	25.0	35.0	63.8	40.8	39.2	22.2	25.1	77.1	50.1	38.7	63.5	31.2	32.4	37.3	35.0
Cerebrovascular	4.0	3.2	4.8	5.0	4.0	5.4	2.5	4.9	20.5	3.9	3.7	6.2	1.9	8.4	4.6	3.8
Pulmonary	28.1	27.6	34.7	33.6	35.9	19.9	18.6	17.8	29.9	83.0	29.6	26.4	17.5	23.0	24.0	21.2
Gastrointestinal	25.6	20.1	24.9	22.4	20.5	18.1	15.7	16.3	20.5	22.8	76.3	24.3	16.2	20.9	19.9	18.2
Genital	4.9	2.8	3.8	4.1	3.4	3.5	3.0	3.0	4.1	4.1	4.3	3.1	2.5	2.9	3.8	2.9
Renal	12.0	11.2	12.6	16.5	11.2	17.5	7.9	17.0	14.9	9.0	17.0	89.2	25.9	21.5	12.6	12.2
Skin	9.7	9.2	8.2	18.7	11.3	10.8	5.7	12.3	11.8	7.6	11.6	13.3	16.3	19.9	10.1	9.2
Skeletal	49.1	13.5	18.4	32.4	23.4	19.0	12.1	21.0	23.1	24.0	22.3	18.6	19.6	33.3	23.2	21.2

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>The categorization of primary disabling conditions is similar to, but not identical to, the categorization used in the national evaluation of the Ticket to Work program.

<sup>b</sup>The Chronic Illness and Disability Payment System (CDPS) was used to identify chronic conditions. The CDPS uses diagnoses from inpatient and ambulatory care claims to identify the 18 different chronic condition categories. CDPS condition categories are not mutually exclusive, and recipients with multiple conditions may appear in more than one category.

SSI = Supplemental Security Income.

TABLE VI.10

PRIMARY CARE, ACUTE CARE, AND SUPPORT AND REHABILITATIVE SERVICE USE BY WORKING  
AGE SSI RECIPIENTS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000  
(WEIGHTED)

Type of Service	1999	2000
Represented Number	2,223,539	2,259,068
Received at Least One:		
<b>Primary Care Service</b>		
Preventive care visit with a physician <sup>a</sup>	1.8	2.1
Dental service	16.6	18.0
Family planning service	2.4	2.6
<b>Acute Care Service</b>		
Physician service	78.0	77.9
Psychiatric service <sup>b</sup>	--	30.3
Outpatient hospital service	65.0	59.9
Lab or X-ray service <sup>c</sup>	--	68.6
Prescription medication	88.0	89.6
<b>Support and Rehabilitative Service</b>		
Targeted case management service	7.4	7.0
Rehabilitation service	8.9	4.7
Physical, occupational, or speech therapy service	2.0	1.9
Durable medical equipment	33.5	36.3

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Preventive care visits were defined as ambulatory claims records that had using procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429. Because preventive care services can be provided during other types of visits with providers, these data underreport preventive care services.

<sup>b</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>c</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

SSI = Supplemental Security Income.

TABLE VI.11

INPATIENT SERVICE USE BY WORKING AGE SSI RECIPIENTS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000  
(WEIGHTED)

Inpatient Service Use	1999	2000
Represented Number	2,223,539	2,259,068
<b>Inpatient Discharge<sup>a</sup></b>		
None	77.7	77.4
One	13.5	12.9
More than one	8.7	9.7
<b>Number of Inpatient Discharges<sup>a</sup></b>		
In total	933,326	1,028,671
Per enrollee	0.4	0.5
Per enrollee with at least one inpatient discharge	1.9	2.0
<b>Length of Stay</b>		
Total number of inpatient days	6,471,159	7,342,143
Average length of stay per discharge	6.9	7.1

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Inpatient discharges include birth and delivery discharges.

SSI = Supplemental Security Income.

TABLE VI.12

LONG-TERM CARE SERVICE USE BY WORKING AGE SSI RECIPIENTS IN FEE FOR SERVICE  
CALENDAR YEARS 1999 AND 2000  
(WEIGHTED)

Type of Long-Term Care Service	1999	2000
Represented Number	2,223,539	2,259,068
Received at Least One:		
Home health service	6.8	6.8
Home and community-based waiver service	7.1	7.6
Personal care service	4.9	5.1
Residential service	1.7	2.5
<b>Nursing Facility</b>		
At least one stay	3.5	3.7
Average number of covered days per user <sup>a</sup>	230.8	229.3
<b>Intermediate Care Facility for the Mentally Retarded</b>		
At least one stay	2.1	2.0
Average number of covered days per user <sup>a</sup>	341.7	351.7

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Some states over report long-term care days because they include covered days on claims for supplemental services, as well as for bundled services which can include accommodations.

SSI = Supplemental Security Income.

TABLE VI.13

ANNUAL MEDICAID PAYMENTS PER WORKING AGE SSI RECIPIENT IN FEE FOR SERVICE,  
OVERALL AND BY TYPE OF SERVICE  
CALENDAR YEARS 1999 AND 2000

Type of Service	1999	2000
Represented Number	2,223,539	2,259,068
	In Dollars	
Overall	12,950	14,004
<b>Primary Care Services</b>		
Preventive care visits with a physician <sup>a</sup>	50	51
Dental services	44	56
Family planning services	1,030	1,098
<b>Acute Care Services</b>		
Physician services	563	521
Psychiatric services <sup>b</sup>	329	620
Outpatient hospital services	750	589
Lab or X-ray services <sup>c</sup>	-- <sup>a</sup>	382
Prescription medications	2,310	2,731
<b>Support and Rehabilitative Services</b>		
Targeted case management services	96	102
Rehabilitation services	309	229
Physical therapy, occupational therapy, speech therapy services	10	10
Durable medical equipment	194	223
<b>Inpatient Discharges</b>		
Inpatient services <sup>d</sup>	2,242	2,394
<b>Long-Term Care Services</b>		
Home health	246	256
Home- and community-based waiver services	1,676	1,914
Personal care services	339	361
Residential services	415	771
Nursing facility services	1,000	1,103
Intermediate care facility for the mentally retarded services	1,538	1,544

Source: MPR analysis of the Linked Medicaid-Ticket Research Data File.

Note: Working age adults are enrollees 21 through 64 years of age at the end of the calendar year. All statistics are weighted to adjust for differential sampling.

<sup>a</sup>Preventive care visits were defined as ambulatory claims records that had procedure codes 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99411, 99412, 99420, or 99429. Because preventive care services can be provided during other types of visits with providers, these data underreport preventive care services.

<sup>b</sup>Psychiatric services were underreported in 1999. In addition, the data for 2000 may underrepresent service use because some enrollees obtained these services through risk-based behavioral health plans.

<sup>c</sup>Lab and X-ray services were reported differently in 1999 and are not comparable to the data reported in 2000 and later years.

<sup>d</sup>Inpatient discharges include birth and delivery discharges.

SSI = Supplemental Security Income.

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**APPENDIX A**

**CHRONIC ILLNESS AND DISABILITY PAYMENT SYSTEM SAMPLE DIAGNOSES  
BY CONDITION CATEGORY**

TABLE A.1

CHRONIC ILLNESS AND DISABILITY PAYMENT SYSTEM SAMPLE DIAGNOSES BY  
CONDITION CATEGORY

CDPS Condition Category	Sample Diagnoses
<b>Mental Health Condition</b>	
Developmental disability	Mild to profound mental retardation; Down's syndrome
Psychiatric	Schizophrenia; bipolar disorder; depression; panic disorder
Substance abuse	Abuse or dependence on opioids, barbiturates, cocaine, amphetamines; drug psychoses
<b>Physical Health Condition</b>	
Infectious disease	AIDS and asymptomatic HIV infection; pneumocystis pneumonia; pseudomonas and other septicemia; cytomegaloviral disease; pulmonary or disseminated candida; herpes zoster
Cancer	Cancer of the lung, ovaries, mouth, breast, brain, colon, cervical, or prostate; secondary malignant neoplasms; leukemia; multiple myeloma
Metabolic	Pituitary dwarfism; non-HIV immunity deficiencies; Kwashiorkor; parathyroid; adrenal gland disorders
Diabetes	Types 1 and 2 diabetes with and without renal manifestations and other complications
Hematological	Congenital factor VIII; factor IX coagulation defects; hemoglobin-S sickle-cell disease; aplastic anemia
Nervous system	Amyotrophic lateral sclerosis; muscular dystrophy; multiple sclerosis; Parkinson's disease; cerebral palsy; quadriplegia and paraplegia
Eye	Retinal detachment, defects, or hemorrhage; choroidal disorders; vitreous hemorrhage; cornea transplant
Cardiovascular	Congestive heart failure; cardiomyopathy; endocardial disease; myocardial infarction; dysrhythmias
Cerebrovascular	Intracerebral hemorrhage; precerebral occlusion; hemiplegia; cerebrovascular accident
Pulmonary	Cystic fibrosis; respirator dependence; respiratory arrest or failure; selected bacterial pneumonias; chronic obstructive asthma; chronic bronchitis; asthma; COPD; emphysema
Gastrointestinal	Peritonitis; regional enteritis and ulcerative colitis; chronic liver disease and cirrhosis; intestinal infectious disease
Genital	Endometriosis; hyperplasia of prostate
Renal	Chronic or acute renal failure; chronic nephritis; urinary incontinence; kidney infection; bladder disorders
Skin	Skin transplants; decubitus ulcer; other chronic ulcer of skin
Skeletal and connective tissue	Chronic osteomyelitis; rheumatoid arthritis; systemic lupus; amputation of foot or leg; aseptic necrosis of bone

Source: Adapted from Kronick et al. (2000).

AIDS = acquired immunodeficiency syndrome; HIV = human immunodeficiency virus; COPD = chronic obstructive pulmonary disease.